USAID
FROM THE AMERICAN PEOPLE

AgCLIR
Agribusiness Commercial Legal & Institutional Reform Diagnostic

AgCLIR: ZAMBIA

Legal and Institutional Reform in Zambia's Agricultural Sector

February 2011

Legal and Institutional Reform in Zambia's Agricultural Sector

This report was produced by Fintrac, under subcontract with Michigan State University's, Food Security Research Project, funded by USAID/Zambia.

DISCLAIMER

The views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

CONTENTS

EXECUTIVE SUMMARY 1

LIST OF ACRONYMS 3

INTRODUCTION 5

KEY FINDINGS 10

DEALING WITH LICENSES 21

GETTING CREDIT 34

COMPETING FAIRLY 51

ACCESSING MARKETING INFRASTRUCTURE 61

TRADING ACROSS BORDERS 77

APPENDIX A: KEY PROVISIONS OF ZAMBIA'S COMPETITION LAW 102

APPENDIX B: MATRIX OF RECOMMENDATIONS 105

EXECUTIVE SUMMARY

In November 2010, USAID sponsored an Agribusiness Commercial Legal and Institutional Reform (AgCLIR) diagnostic in Zambia for the purpose of identifying key legal, regulatory, and institutional issues impacting productivity, efficiency, and opportunity in the agricultural sector. The diagnostic takes a cross-sector approach to determining the constraints within the enabling environment for agricultural enterprises. The resulting report lays out a path to reform through prioritized and practical recommendations for Zambia's government, private sector, and donor community. The AgCLIR recommendations are supplemented by a qualitative scorecard of the strengths and weaknesses in the country's agricultural sector.

KEY FINDINGS FROM AgCLIR: ZAMBIA

"TWO AGRICULTURAL ECONOMIES": VASTLY DIFFERENT CONSTRAINTS AND OPPORTUNITIES

The majority of Zambians in the agricultural sector—at least 75 percent—are smallholder farmers who grow staple foods for subsistence and sometimes, in modest quantities, for market. Zambia's smallholders are undercapitalized, make limited use of equipment, irrigation, improved seed, or appropriate fertilizer, and operate largely away from the nation's transport systems. A second economy consists of medium-sized and large commercial farms, ranches, and production concerns that are capital-intensive and enjoy relatively easy access to credit and other financial services. These two communities require different, appropriately adaptive approaches to reform. Namely, subsistence farmers require meaningful extension services that will help them diversify, access to appropriate financial products, and capacity-building in trading and processing activities. They would further benefit from more attention and resources devoted to public marketing infrastructure, specifically feeder roads, storage options, and market information. The priority reforms for Zambia's commercial farmers are far less government intrusion into agricultural markets, smoother systems of regional and international trade, and more effective and transparent public-private partnerships.

POLICY UNPREDICTABILITY

Overwhelmingly, stakeholders in Zambia perceive the government's agricultural policies, which include heavy involvement in the maize and fertilizer markets, as driven less by international best practices or thoughtful analysis of needs and priorities of different actors in the sector, and more by political concerns on the part of empowered interests. The government's frequently applied restrictions on a number of products exported and imported—trade bans—are particularly damaging, because they undermine long-term planning by farmers and discourage domestic and foreign investment. A lack of transparency in the process of how the government arrives at its decisions, and which constituents it consults along the way, compounds the problem of unpredictability.

TOO FEW OPPORTUNITIES ACCESSING FINANCIAL SERVICES

Although Zambia's community of commercial farmers has abundant access to financial services, including crop insurance, that

support their growth, there is a wide array of unexploited opportunities that would benefit the country's many smallholders, and open a new market for financial service providers. Underexploited areas include microfinance, secured lending on storage facilities and movable property, and leasing. In addition, policymakers should more closely examine the reasons behind the country's high rates of interest, which would likely be reduced by more policy predictability and better enforcement of loans.

PROBLEMS WITH ACCESS TO INFRASTRUCTURE TO MARKET AGRICULTURAL PRODUCTS

Three troubled marketing infrastructure components are fundamental to the reform of Zambia's agricultural sector: feeder roads, post-harvest storage, and price information systems. Feeder roads have been neglected to the extent that many are impassable, thus severely limiting the range and depth of participation in the agricultural sector, especially among smallholder farms. Post-harvest storage facilities, though likely adequate in quantity, do not meet the needs of small farmers in rural areas. Information about market prices is both poorly maintained and difficult to access, thus heightening the vulnerability of smallholders and their families.

ABSENCE OF A "COMPETITION CULTURE"

Although Zambia has a modern law on competition—one that guards against cartels and other unfair mechanisms for restricting participation in national markets—the country does not yet support a broader "culture of competition." That is, habitual acceptance of barriers to entry or productivity-usurping government interventions—particularly the work of the Food Reserve Agency and the Farm Input Support Program—has undermined public expectations for a truly free economy. An environment that more proactively defends the benefits of competition would foster a freer market for fertilizer and a more rational system of maize management. Moreover, a true culture of competition would not abide arbitrary bans on imports and exports of agricultural products.

LIST OF ACRONYMS

ADSP	Agricultural Development Support Programme
AgCLIR	Agribusiness Commercial Legal and Institutional Reform
AGRA	Alliance for a Green Revolution in Africa
AMIC	Agricultural Marketing Information Centre
ARIPO	African Regional Intellectual Property Organization
ASP	Agriculture Support Programme
BAZ	Bankers Association of Zambia
BoZ	Bank of Zambia
CAADP	Comprehensive Africa Agriculture Development Program
CACP	Customs Accredited Client Program
CBTA	Cross Border Trader Association
CIF	Cost Insurance and Freight
CPG	Cooperating Partners Group
CRN	Core Road Network
CSO	Central Statistics Office
CUTS	Consumer Unity & Trust Society
DACO	District Agricultural and Cooperatives Office
DANIDA	Danish International Development Agency
DBOT	Design, Build, Operate, and Transfer
DRC	Democratic Republic of the Congo
DTI	Direct Trader Input
DUS	Distinctiveness, Uniformity, and Stability
EAC	East African Community
ECZ	Environmental Council of Zambia
EIS	Environmental Impact Statement
EPA	Economic Partnership Agreement (EU)
EU	European Union
FEWS	Famine Early Warning System
FISP	Farmer Input Support Program
FNDP	Fifth National Development Plan
FRA	Food Reserve Agency
GMO	Genetically Modified Food
GRZ	Government of Republic of Zambia
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
ISTA	International Seed Testing Association
JICA	Japanese International Cooperation Agency
LOC	Letter of credit
MACO	Ministry of Agriculture and Cooperatives
MAZ	Millers Association of Zambia
MCC	Millennium Challenge Corporation
MCTI	Ministry of Commerce, Trade and Industry
MFI	Microfinance Institution
MIS	Market Information System
MLG	Ministry of Local Government

MSE	Micro and Small Enterprises
NAMBOARD	National Agricultural Marketing Board
NGO	Non-governmental organization
NISR	National Institute for Scientific and Industrial Research
NPFA	National Peasant Farmers Association
NPL	Non-Performing Loan
NRFA	National Road Fund Agency
OPRC	Output and Performance Based Road Contracting
OSBP	One-Stop Border Post
PACRA	Patents and Company Registration Agency
PIA	Pensions and Insurance Agency
PPIAF	Public-Private Sector Infrastructure Advisory Fund
PQPS	Plant Quarantine and Phytosanitary Services
RDA	Road Development Agency
RKC	Revised Kyoto Convention
RM	Risk Management
RSA	Republic of South Africa
RTSA	Road Transport and Safety Agency
SADC	Southern Africa Development Community
SAGIS	South African Grain Information Service
SCCI	Seed Certification and Control Institute
SIDA	Swedish International Development Cooperation Agency
SPS	Sanitary and Photosanitary Measures
STR	Special Trade Regime
STTA	Short Term Technical Assistance
TEVETA	Technical Education, Vocational and Entrepreneurship Training Authority
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UPOV	International Union for Protection of Plant Varieties
USAID	United States Agency for International Development
VAT	Value Added Tax
VCU	Value for Cultivation, and Use
WCO	World Customs Organization
WFP	World Food Programme
WHO	World Health Organization
WTO	World Trade Organization
ZABS	Zambian Bureau of Standards
ZACA	Zambian Agricultural Commodities Association
ZAMACE	Zambia's Commodities Exchange Board
ZARI	Zambian Agricultural Research Institute
ZAWA	Zambia Wildlife Authority
ZEGA	Zambia Export Growers Association
ZICA	Zambian Institute of Chartered Accountants
ZNFU	Zambia National Farmers Union
ZRA	Zambia Revenue Authority
ZSIC	Zambia State Insurance Corporation

INTRODUCTION

This Agribusiness Commercial Legal and Institutional Reform (AgCLIR) diagnostic report addresses the conditions and opportunities for doing business in Zambia's agricultural sector. Through close examination of the relevant laws, institutions, and social dynamics across five aspects of the sector, this report aims to inform the assistance decisions of the United States Agency for International Development (USAID) and other donors in the area of agricultural development, economic growth, and food security. This report also provides insights and recommendations for government officials, private sector representatives, and other stakeholders who are directly involved with the agricultural sector. Specific recommendations are set forth at the end of each chapter of this report.

ZAMBIA'S AGRICULTURAL ECONOMY: AN ABSENCE OF BALANCE

A fundamental question when examining an economy's environment for doing agribusiness concerns the ability of people with good ideas to launch and maintain an agricultural enterprise with reasonable prospects for success and have the support and space necessary to grow that business to the entrepreneurs' full potential. Moreover, will the entire system that regulates, services, and participates in agribusiness welcome and encourage the efforts of agribusinesses, or will the agribusiness system somehow limit the growth of individual business concerns? Given the sector's inherent challenges of weather, water, soil, and other natural dynamics, the political, legal, institutional, and social environments for supporting human enterprise become all the more critical.

In recent generations, Zambia has taken a number of approaches to agriculture, swinging from heavy state investment in maize marketing, cooperatives, and crop-depots in the 1970s and 1980s; to support for private sector–based efforts to build on the agricultural sector's potential in the 1990s; back to, over the past decade, acute intervention in the country's agricultural markets.[1] The national government's policy extremes are exemplified by the Food Reserve Agency's increasing dominance of the maize markets since 2002 and the Farmer Input Support Program's overwhelming influence over which private firms distribute key inputs. In addition, export bans and import quotas at the borders—typically imposed to protect perceived domestic interests—cause grave uncertainty among traders and missed opportunities for exporting maize without imposing major costs on the treasury. The impact of these actions on non-government players in the system—including farmers, private grower association, local buyers, producers, and regional and international traders—has proven severe and, in certain subsectors, nearly overwhelming. This "unbalanced" policy atmosphere is compounded by Zambia's overreliance on just a few products (namely, maize and copper) that can widely fluctuate in output and prices from year to year.

Despite these conditions, certain aspects of Zambia's business environment have significantly improved in recent years, changes that bode well for all enterprises, including agricultural-based businesses. For example, the government has strengthened its informational outreach to potential entrepreneurs and investors and streamlined the process for starting a business. In addition, access to credit, though still constrained by very high risks and interest rates, is considerably more

1 The 2009 report of the Food Security Research Project, *Fostering Agricultural Market Development in Zambia* (Working Paper No. 40), *available at* www.aec.msu.edu, sets forth the history and context of the Zambian government's agricultural policy, specifically detailing the actions and impact of the Food Reserve Agency (FRA), established in 1999, and the Fertilizer Support Program (FSP), launched in 2002. Although this AgCLIR report refers extensively to both of these programs, it endeavors to avoid duplication of FSRP's strong and straightforward description and analysis. Thus, *Fostering Agricultural Market Development in Zambia* is hereinafter incorporated by reference in the report and is a key analytical resource for future reforms.

viable in Zambia than in other regional economies. The country's relatively mature seed sector, including its licensing environment, provides a stronger foundation for successful commerce than found elsewhere in the region.

Acknowledging Zambia's efforts to strengthen its environment for launching and sustaining private enterprise, the World Bank named the country one of the world's 10 "best reformers" in its *Doing Business in 2011* report.[2] Much of this praise is well deserved, as evidenced by the fact that Zambia's annual growth rates in recent years (averaging around 6 percent since 2005) have been strong by world standards. However, growth has not been balanced, and poverty continues to run very deep, particularly in rural areas.

Zambia recognizes the need to bring more balance to its economy, including moving away from its traditional overdependence on copper. Indeed, the way of life for most of Zambia's 13 million people remains grounded in smallholder agriculture, where farmers overwhelmingly focus on maize, with a fair amount of cotton, tobacco, and livestock production. To a much lesser extent, smallholders also produce crops such as sorghum, rice, groundnuts, and sunflower seeds. More than four out of five members of Zambia's labor force of 5.4 million contribute to the production of agricultural goods, notwithstanding the fact that 55 percent of Zambians live in towns and cities—suggesting a strong connection between rural and urban well-being.[3] The economic impact of Zambia's agricultural workers is disproportionately weak, however, with agriculture comprising less than 20 percent of Zambia's GDP. Rural poverty remains especially high. This is attributable to a variety of factors, including low rates of literacy, particularly among women; poor access of smallholder farms to roads, storage facilities, and market information; and the devastating impact of diseases such as HIV-AIDS and malaria.

This report examines the legal and institutional environment for doing business in Zambia's agricultural sector, whether as a producer, processor, or trader. At numerous junctures, this report finds specific ways in which Zambia's agricultural sector has the potential to serve as a much stronger and more efficient source of food security and driver of economic growth. Ultimately, strengthening the conditions for people with good ideas to achieve their entrepreneurial objectives can diminish transaction costs, increase competition, improve quality and productivity, and, ultimately reduce poverty. In Zambia, this begins with consensus over the need to achieve better balance—that is, more predictability in policy, more variety among crops, better access to markets, and more trust in the laws of supply and demand.

AgCLIR: A TOOL FOR PRIORITIZING AGRICULTURAL REFORMS

This diagnostic endeavors to take key themes found in the World Bank's *Doing Business* initiative—which assists countries in targeting where their regulatory environments may favor or interfere with economic growth—and investigates how these same issues affect the agricultural sector in a given country.

For each of the 10 topics the *Doing Business* reports cover,[4] the World Bank considers key indicators of whether and how the environment for doing business is "working," measured by such means as the number of procedures involved in achieving a goal (e.g., enforcing a contract), the number of days it takes, and the costs of the procedures in relation to per-capita income. The World Bank gathers data from 183 countries and ranks each, thereby demonstrating how, to this limited degree, each country's respective regulatory environments compare to others throughout the world. This high-level analysis is useful in comparing meaningful aspects of a country's legal and regulatory environment. However, the *Doing Business* analysis does not examine key components of growth for many developing countries, including Zambia, most notably cases related to agriculture.

2 See World Bank, *Doing Business in 2011* (November 2010), and accompanying literature at www.DoingBusiness.org.

3 Unless identified otherwise, statistics cited in this report are drawn from a number of sources, including various United Nations and World Bank publications, the CIA's online *World Factbook* (2010), and the Economist's "Pocket World in Figures" (2010). Most of these statistics are themselves derived from Zambia's Bureau of Statistics, or, when compiled from many countries, from the domestic statistical services of various other countries. Given limitations in domestic information-gathering in most developing environments, most figures cannot be said to be exact, but they do represent best estimates as accepted by the international community.

4 Starting a Business, Dealing with Construction Permits, Employing Workers, Registering Property, Getting Credit, Protecting Investors, Paying Taxes, Trading Across Borders, Enforcing Contracts, and Closing a Business. In its most recent report, the World Bank has removed Employing Workers from its scored areas of inquiry, due to ongoing controversies over the issues it evaluates.

USAID's Feed the Future initiative, which prioritizes increased investment in agricultural and rural development as a lever for combating food insecurity and an engine for broader economic growth, prosperity, and stability, has reinforced USAID's focus on agriculture and food security.[5] It is within this context, and the ongoing Comprehensive Africa Agriculture Development Program (CAADP) compact process, that USAID commissioned this report. The goal of this report is to improve understanding of *why* key aspects of Zambia's agricultural sector function as they do; what policy changes could lead the sector to greater productivity, security, and growth; and who among Zambia's economic actors must lead or implement change.

Targeted to address key issues long noted as "sticking points" in Zambia's agricultural economy, this diagnostic analyzes 3 of the 10 areas of *Doing Business*—**Dealing with Licenses, Getting Credit,** and **Trading Across Borders**—and also examines two closely related issues—**Competing Fairly** and **Accessing Marketing Infrastructure.**

THE AgCLIR TEAM

Russell Brott
Fintrac (Team Lead, Trading Across Borders)

Daria Gage
Fintrac (Accessing Marketing Infrastructure)

Joanne Cornelison
Fintrac (Trading Across Borders)

Doug Muir
Fintrac (Dealing with Licenses, Getting Credit)

Steve Balster
U.S. Federal Trade Commission (Competing Fairly)

Mary Doman
Fintrac (Project Coordinator)

Nicholas Sitko
MSU/FSRP (Social and Market Dynamics)

Shadreck Saili
Mita Hills (Local Facilitator)

Louise Williams
Fintrac (Report Integration)

The AgCLIR diagnostic took place from November 8–22, 2010. A multidisciplinary team of consultants convened in Zambia and met with more than 150 key informants across the agricultural sector, including national, regional, and local officials; farmers and cooperatives; domestic and international traders; owners and managers of agricultural enterprises; business associations; NGOs; court representatives; lawyers; accountants; and many others. At USAID's request, interviews and observations took place in and near Mkushi, Ndola, Kasumbulesa, Chirundu, Livingstone, and Lusaka. The AgCLIR diagnostic culminated in a roundtable presentation and discussion on November 22, 2010, which was attended by approximately 50 stakeholders from the agricultural sector. At the roundtable, team members introduced their preliminary findings and recommendations, upon which participants elaborated and provided feedback. This input helped shape the team's final conclusions, which are found in this report.

THE AgCLIR STRUCTURE

Each AgCLIR chapter follows the same structure, which guides the inquiry for each issue area.

LEGAL FRAMEWORK

The chapters first examine Zambia's laws and regulations that serve as the structural basis for the country's ability to achieve and sustain market-based development in the agricultural sector. They discuss the following questions: How accessible is the law, not only to elite, well-informed groups, but also to less-sophisticated actors, rural constituencies, or foreign investors? How clear are the laws, and how closely do they reflect emerging global standards? How well do the laws respond to commercial realities faced by stakeholders in the agricultural sector? What inconsistencies or gaps are present in the legal framework? This section examines key laws and regulations that apply throughout the economy and additional laws and regulations underpinning the agricultural sector specifically.

5 For a full summary of the U.S. government's *Feed the Future initiative, see Feed the Future Guide: A Summary, available at* http://www.feedthefuture.gov/FTF_Guide_summary.pdf.

IMPLEMENTING INSTITUTIONS

Next, the chapters examine those institutions that hold primary responsibility for implementation and enforcement of the legal framework. These institutions include government ministries, authorities, and registries, and, in certain cases, private institutions such as banks and credit bureaus. The roles of municipal and district councils are of particular interest in Zambia's agricultural sector and are addressed in these sections. Again, the indicators seek to uncover how implementing institutions function not merely with respect to mainstream business interests in the capital but also in rural areas and agricultural-based communities.

SUPPORTING INSTITUTIONS

The chapters then look closely at those organizations, individuals, or activities without which the agricultural sector in Zambia cannot be fully developed. Examples include farmer associations, rural banks, professional associations, agricultural and law faculties, the media, and donors. The relative awareness of law and practice on the part of each institution is examined, along with the specific ways in which institutions increase public and professional awareness, work to improve the economic performance, and otherwise serve their constituencies.

SOCIAL DYNAMICS

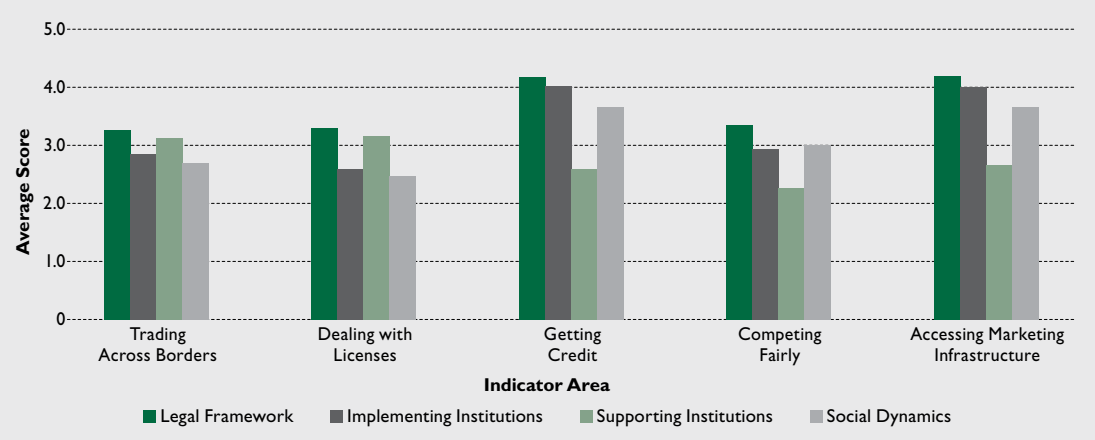
As the final point of analysis, the chapters discuss key issues that impact the environment for growth in the agricultural sector. Roadblocks to reform, in particular, are considered, including those entities that may be undermining change. This section also identifies significant opportunities for bolstering the environment for agricultural enterprise—such as champions of reform or regional initiatives—as well as matters of access to opportunity and formal institutions. Social dynamics also concern such important matters as gender, human capacity, and public health, each of which may have a significant bearing on how the business environment truly functions. Indeed, often a full understanding of legal and institutional issues cannot be achieved without a nuanced consideration of a country's social dynamics.

THE SCORE AWARDED TO *INDICATORS* FOR EACH CHAPTER ALIGNS WITH THE FOLLOWING CONCLUSIONS:
1 = strong negative
2 = moderate negative
3 = neutral (or having some negative and some positive qualities)
4 = moderate positive
5 = strong positive

RECOMMENDATIONS

Following this four-part analysis, each chapter sets forth a number of recommendations. These are drawn from the key findings in each chapter and reflect current reform capacities, opportunities, and evidence of will to reform. Some of

TABLE 1: ZAMBIA AgCLIR 2010: INDICATOR SCORES

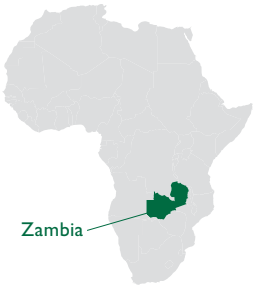


the recommendations within the chapters may overlap—that is, some may be consolidated into a single reform initiative covering two or more topics—and all turn on the priorities and preferences as enunciated by the Zambian government itself. The recommendations in this report are intended to serve, among other functions, as a threshold list for donor coordination of immediate initiatives and preparation of scopes of work.

AgCLIR SCORES

With respect to each area of inquiry, this diagnostic uses a process of reviewing and scoring key indicators to develop a thorough analysis. Once as much relevant information as possible is gathered—from written sources, meetings and interviews, and consultation among colleagues—each of the key indicators is scored, based on the assessor's best estimate of the issue at hand. To help an assessor determine a score, between 3 and 15 supporting questions accompany each key indicator. These questions themselves are not scored, but are intended to guide the assessor toward a consistent, fact-based judgment from which the key indicator score is then derived.

The scores are not intended to serve as a stand-alone, number-based pronouncement on the state of the agricultural sector in Zambia. Rather, they should be read in conjunction with this report's narrative as a means of understanding the status of certain key indicators of a healthy legal and institutional environment for agricultural enterprise and identifying priorities for reform. Table 1 on previous page shows that AgCLIR indicator scores for Zambia in 2010.



KEY FINDINGS

CHAPTER FINDINGS

The general findings of each of the five areas examined in this diagnostic are summarized below.

DEALING WITH LICENSES

With the exception of fertilizer, the various licensing systems that directly affect agriculture in Zambia are relatively well designed, maintained, and implemented. License costs can be high, and wait times can be long, but licensing is—at least in the agricultural sector—not a major impediment to development at the macro level. That said, the impact of licensing on Zambian agriculture is not distributed evenly. For many large producers, licenses are a relatively minimal constraint. Large commercial farms can afford new seeds, sprays, and other inputs, and have the administrative capacity to deal with applications and inspections. They can outsource much of the administrative burden to service providers (i.e., commercial sprayers who will deal with licensing and storage of chemicals). In contrast, small farmers are more deterred than burdened by licenses. The licensing fee for a new chemical may be modest, but it still adds to the retail price, and may make the input unaffordable for a small farmer. Applying for an import or export license involves filling in a simple form, but an illiterate farmer may not be able to do this or afford the small filing fee or the requisite travel to file the form.

One area where the impact of licenses is unusually significant is that pertaining to the import and export of agricultural goods. Where the Ministry of Agriculture and Cooperatives (MACO) decides to ban or otherwise curtail the trade of a certain product, it can quickly put that measure into effect by refusing to issue any more import or export licenses, a de facto ban requiring high-level political support. Anecdotal evidence suggests that this type of market intervention occurs regularly and haphazardly. Thus, from the government's point of view, the licensing system for trade in agricultural products is a convenient and effective policy tool. However, for traders, this approach fosters confusion and unpredictability, and can result in the spoilage or waste of viable agricultural products. In fact, the government does not seem to fully appreciate the negative outcomes of trade policy instability: private traders may be deterred from seeking a license even in times when the government would like to see more private sector imports (to relieve shortages) or exports (to relieve surpluses).

GETTING CREDIT

The World Bank's ranking of Getting Credit in Zambia for 2011 is an astonishing sixth place in the world—tied with the United States, and higher than Germany, Japan, or Switzerland. It is important to remember that this ranking is the result of the World Bank's particular methodology, and it does not necessarily reflect the actual ease of getting credit. Nevertheless, notwithstanding a stubbornly high median interest rate—around 20 percent—Zambia's financial sector is indeed vigorous, given the country's small population and overall level of development. Some of this vigor even extends to the agricultural sector; in contrast to most Sub-Saharan African countries where commercial banks virtually ignore the sector, agriculture makes up 15 percent of lending portfolios.

Of course, commercial lending and other financial services are concentrated in the country's small subsector of large commercial farmers and farm-service providers, such as millers. Zambia's financial sector and its large commercial agricultural concerns are quite closely linked; the larger players thrive because of easy access

to financial services, while at least part of the financial sector's growth and liquidity is due to the existence of the large farms. In contrast, most of Zambia's smallholder farmers have no contact whatsoever with banks or microfinance institutions (MFIs), either as borrowers or as depositors. Many of these producers are not only unbanked but are, at least for now, unbankable. Seizing opportunities for legal and institutional reform, including developing the microfinance sector, establishing a system of equipment and property leasing, and facilitating improved storage options for smallholders, could improve this current state of affairs.

COMPETING FAIRLY

Although Zambia has a modern law on competition—one that guards against cartels and other unfair mechanisms for restricting participation in national markets—the country does not yet support a broader "culture of competition." That is, habitual acceptance of barriers to entry or productivity-usurping government interventions—particularly the work of the Food Reserve Agency (FRA) and the Farmer Input Support Program (FISP)—has undermined public expectations for a truly free economy. An environment that more proactively defends the benefits of competition would foster a freer market for fertilizer, contribute to greater productivity of the agricultural sector, and lead to a more rational system of maize supply management. Moreover, a true culture of competition would not abide arbitrary bans on imports and exports of agricultural products. Zambia's Competition Commission would profit from support and capacity-building to help prioritize and implement reforms that would lead to a more competitive agricultural sector benefiting producers and consumers nationwide.

ACCESSING MARKETING INFRASTRUCTURE

During this diagnostic, three troubled areas of infrastructure emerged as particularly critical to Zambia's agricultural economy: feeder roads, post-harvest storage, and price information. Specifically, feeder roads have been neglected to the extent that many are impassable, thus severely limiting the geographic range and depth of participation in the agricultural sector, especially among smallholder farms. Post-harvest storage facilities, though likely adequate in quantity, do not meet the needs of farmers in rural areas. The overwhelming presence of the government in the country's maize markets creates disincentives to store surplus amounts; furthermore, limited on-farm storage options deprive smallholders of the full economic potential of their products. Last, public information about market prices is both poorly managed and difficult to access, thus heightening the vulnerability of those agribusinesses without connections to informal information channels.

Strengthening the laws and institutions that support each of these components would support agricultural enterprise in Zambia. Legal and institutional streamlining of agency roles and responsibilities should result in more effective efforts to improve the country's network of feeder roads. Efforts to improve storage resources in rural areas will require thoughtful rationalization of government-owned storage facilities and marketing policies. Market information requires improved capacity and coordination among agencies. Stakeholders must grasp and act upon the importance of a public, objective, consistent, and coordinated agricultural information system.

TRADING ACROSS BORDERS

Despite the progress in trade pacts and other policy initiatives, a lack of transparency and policy unpredictability are the defining characteristics of Zambia's trade regime. Trade policy decisions such as trade bans, quotas, and tariffs are made behind closed doors, with little public consultation, with short or no public notice, and usually with input from a very limited subset of private sector voices. These decisions have a profound impact on the perceived risk of agriculture in Zambia, as reflected in the high risks and costs associated with generally suboptimal

AGENDA FOR ACTION: KEY RECOMMENDATIONS*

PRIORITY

- Secure technical assistance and support to SCCI.
- Fix the finance leasing tax deduction.
- Support a gap analysis of agroprocessing, with a particular focus on capital-intensive agroprocessing.
- Work with the Competition Commission to study specific agricultural subsectors.
- Make annual financial reports of the FRA and FISP publicly available.
- Launch a multi-pronged campaign on the importance of rural road infrastructure and the role government must play.
- Refine the language in the draft Agriculture Marketing Act to include a clear mandate for AMIC.
- Improve the working relationship between associations, DACO staff, and the District Councils.
- Review ECZ's portfolio and needs with an eye towards capacity building.
- Investigate the possibility of opening a third agricultural laboratory.
- Provide a support package to the MFI sector.
- Combine advocacy efforts on topics of constraints to agribusiness competition with those of the Competition Commission.
- Strengthen PQPS to support current and future trade in perishable products.
- Improve the overall professional level of the Customs Clearance Sector.
- Develop a plan for interagency cooperation/integration of all border agencies.

- Investigate the possibility of creating a collateral registry.
- Encourage the government of Zambia to bolster the Competition Commission.
- Undertake a comprehensive review of Zambia's overall legal framework to determine its secondary impact on competition and consumer welfare.
- Benchmark fees and duties related to trade in agriculture.
- Increase the potential for the duty drawback program to become an effective, efficient export incentive scheme.
- Increase use of IT applications to facilitate regional trade.
- Support ongoing efforts by various donors and advocacy groups to improve the Decentralization and Local Government clauses in the new draft constitution.
- Investigate credit systems in agricultural supply chains, especially input supply chains, with an eye towards improving access to commercial credit
- Secure technical assistance to PACRA, and encourage the geographical extension of services.
- Provide technical assistance to the banking sector.
- Provide basic skills training to selected SMEs that are agribusinesses, particularly small processors and emergent farmers.
- Support a public-private partnership to improve chemical management.
- Customs clearance agents must employ modern business practices to be able to operate successfully.
- Help develop a fertilizer law.
- Coordinate and support a long-term capacity-building program for the Competition Commission.
- Review the Output and Performance Based Road Contracting (OPRC) system for district procurement of public works.

TIME

*Full Matrix of Recommendations in Appendix B.

performance across the agricultural sector. Moreover, regional trade relations are consistently weakened through frequent imposition of non-tariff barriers and a lack of formal free trade arrangements. A large gap exists between the average applied tariff rate of 13.4 percent and the bound rate of 105.7 percent, leaving the government free to raise tariffs at will. The vast majority (83 percent) of tariff lines are unbound (that is, they can be changed without discussion with trade partners).

Despite the stunting effects of Zambia's trade policy, the country has done a laudable job of prioritizing trade facilitation in its national agenda, recognizing the critical role trade facilitation plays in expanded economic growth and poverty reduction. The national government has focused most of its trade facilitation efforts on Customs modernization and border infrastructure im provements. Although this approach has shown results in terms of decreased border delays, reforms within and between the country's border agencies reportedly proceed at a slower pace. Ongoing infrastructure projects at major border crossings will offer reduced clearance times and thus even greater potential for improved trade facilitation, once completed. However, lack of capacity within both the private and public sector hinders projects from achieving more substantial gains, such as the creation of an IT-driven, seamless border process.

The Zambian government has demonstrated its commitment in both the modernization efforts of the Zambia Revenue Authority and its Customs division and the ongoing major infrastructure improvements at the borders. If these improvements are to be sustained and to realize their full potential, the capacity to absorb these changes in both the public and private sector will have to be upgraded, with more emphasis placed on improved public-private partnership. A quality public-private consultative process would resolve problems prior to implementation and speed cost and reduce time in border processing.

CROSSCUTTING THEMES

This diagnostic is organized so that various components of a healthy and prosperous environment for agricultural enterprise are considered both discretely and in relation to each other where appropriate. Certain issues and dynamics are so prevalent across this analysis that they warrant special mention before the chapter-specific analysis that comprises this diagnostic. These themes will be developed as they recur throughout the entire report.

SIGNIFICANT POTENTIAL FOR AGRICULTURAL-BASED DEVELOPMENT

Zambia's agricultural economy faces a plethora of legal and institutional challenges. Nonetheless, certain key strengths may serve as a foundation for progress. First of all, there is a burning platform for business environment reform. As one of the World Bank's "top 10 reformers" in the most recent *Doing Business* report, Zambia attracts the attention and increased confidence of outside observers, including donors, traders, and investors. Its three primary areas of improvement included Starting a Business, Trading Across Borders,

CROSSCUTTING THEMES
SIGNIFICANT POTENTIAL FOR AGRICULTURAL-BASED DEVELOPMENT
• There seems to be a "burning platform" for business environment reform.
• The market system for agricultural credit is strong.
• Thanks to recent liberalization, there is a strong and growing seed sector.
• Opportunutues in regional agricultural trade abound.
"TWO ECONOMIES": A FRACTURED AGRICULTURAL SECTOR WITH SUBGROUPS FACING VASTLY DIFFERENT CONSTRAINTS AND OPPORTUNITIES
• Farming subsectors present vast differences in scale, geography, and formality.
• Each group has different needs in terms of government provisions and services, credit, and public resources.
• Each group is impacted differently by policies and market dynamics.
EXISTING FINANCIAL SERVICES MUST BE ENCOURAGED TO MOVE DOWN-MARKET
• The banking sector and MFIs need technical support to better understand the risks and needs of small but commercially viable agribusiness.
• Select small processors and emergent farmers would benefit from the development of business skills.
• Value chain finance should be encouraged and finance leasing should be incentivized by fixing the tax code.
POLICY AND BUDGET UNPREDICTABILITY
• The government's market interventions bring uncertainty into the market and crowd out private sector activity.
• Import and export bans serve special interests and have unintended impacts on trade.
• Public sector spending is unpredictable, severely limiting government effectiveness and investment in public resources.

and Enforcing Contracts. In the *Doing Business* report, the World Bank ranks Zambia's environment for doing business the sixth strongest among the 16-member Southern Africa Development Community (SADC).

There is a surprisingly strong market for agricultural credit, including opportunities for growth. In most Sub-Saharan African countries, agriculture makes up less than 5 percent of the portfolio of commercial banks. In Zambia, the figure is approximately 15 percent. This fact indicates that the agricultural sector in Zambia is—by African standards—unusually well capitalized. While this capital is concentrated in a small number of large agribusinesses, at least these businesses are competitive regionally. This is a significant factor in Zambia's medium-term potential to become a net food exporter. These financial services are moving down-market (albeit slowly) to Zambia's subsector of "emergent" farmers, who are gradually assembling larger farms and ranches. This group makes relatively little use of financial services, but as it

steadily grows in importance, emergent farmers are likely to increase their use of credit and other financial products. In fact, the commercial farm market for several sorts of financial products is becoming saturated. (Almost every large commercial farm now has crop insurance, for example.) Thus, banks and insurance companies are beginning to look to smaller enterprises for new markets, and emergent farmers are increasingly poised to fill this role.

Zambia has a strong and growing seed sector. To a greater degree than most of its regional neighbors, Zambia has a large and well-developed formal seed sector meeting domestic and regional demand, especially for maize seed. Its primary institution for seed certification, the Seed Certification and Control Institute (SCCI), is accredited by the International Seed Testing Association and makes use of International Union for Protection of Plant Varieties guidelines on plant variety testing and registration. SCCI has a positive reputation among stakeholders and is considered honest and competent. This is particularly impressive, given its limited resources.

There are strong opportunities in regional and international trade. Landlocked and with a relatively small population, Zambia is mindful of the potential mutual benefits to be gained from engaging in international trade with neighboring countries. Despite pressure from some domestic constituencies, which advocate the use of various marketing, price, and trade policies to control fluctuations in the domestic supply (and price) of food commodi¬¬¬¬ties, Zambian authorities have ostensibly committed to a bold regional trade liberalization agenda by committing to the COMESA and SADC Free Trade Areas. Both of these regional trade agreements can, at times, run counter to the interests of domestic constituents advocating for the control of food prices and supplies. Recent interviews suggest that neither the Zambian private sector nor the government is wholly committed to this trade liberalization agenda, particularly for politically sensitive food crops such as maize and wheat. Yet, despite this resistance, discussions with key players in the trade debate suggest that given certain conditions, they would be willing to support this regional trade agenda more wholeheartedly.

The fact that Zambia has maintained relatively high levels of growth in recent years, despite the prolonged worldwide economic downturn, bolsters the country's profile as an "outperformer" in the region. With this interest comes an opportunity for Zambia to embrace reforms that outsiders have long advised it to implement, particularly in its agricultural sector.

"TWO ECONOMIES": A FRACTURED AGRICULTURAL SECTOR WITH SUBGROUPS FACING VASTLY DIFFERENT CONSTRAINTS AND OPPORTUNITIES

To a more pronounced extent than most of its neighbors, Zambia has two distinct farming economies. On the one hand, Zambia is home to a large and well-developed commercial farming sector. This commercial farming sector has contributed to the development of a host of ancillary agricultural industries and services that cater to its needs. These include input provision services, research and development, transport services, agricultural processing and trading, crop insurance, and other sophisticated risk-management and financial services that allow it to compete in the global food economy. On the other hand, Zambia, like other countries in the region, has a large poorly capitalized and relatively poor small-scale farming sector, with limited or no access to the industries and services enjoyed by commercial farmers. As a result, their productivity is low and they are unable to contribute much to Zambia's development. Among the smallholder population in Zambia there is inadequate utilization of improved farming inputs, virtually no access to farm credit and other financial services, and, aside from a few crops such as cotton and tobacco, poor

integration with large-scale agricultural processing and trading firms.

Zambia's agricultural economy is also fractured along geographic lines. The country's "line of rail" is indeed along the actual railway network, but the phrase more frequently refers to the slim north-south corridor along which all of the country's cities, good roads, mining, commercial farming, and milling are concentrated. Technically, the line of rail also includes a less-developed (but developing) arm of the road and rail network that runs northeast to the Tanzanian border. The difference between operating a business along the line of rail versus farther afield could not be more striking. For all the agricultural potential Zambia has—wide stretches of underpopulated lands, fertile soil, and ample groundwater—rural agribusinesses suffer from impassable feeder roads, poor district road networks, insufficient or inaccessible storage, and a general lack of connectivity to markets.

The small-scale farming sector in Zambia is far from homogenous. Within the smallholder sector there is also a high degree of duality, which is particularly evident when looking at the distribution of land-size holdings within the sector and the position of small-scale farmers with respect to staple food markets.[6] The small upper echelon of "emergent" farmers and processors hold enough resources to think strategically and long term about their business, though they are insufficiently supported by the business and credit services enjoyed by the larger commercial farmers. Thus, Zambia's agricultural sector cannot be neatly divided between the commercial and small-scale sectors, with each operating according to a different logic. Rather, Zambia's agricultural sector is deeply divided both between the small-scale and commercial farming sector as well as within the small-scale farming sector.

One of the most important manifestations of Zambia's fragmented agricultural economy is the degree to which the commercial sector and the more commercialized minority of the small-scale farming sector are able to shape important agricultural policy decisions to fit their interests through the advocacy work of the Zambia National Farmers Union (ZNFU). Of critical importance is the extent to which ZNFU has been able to successfully lobby for the continuation of a government-subsidized maize marketing system, which provides farmers with maize prices that far exceed export parity (and sometimes even import parity, as in 2010). While these elevated prices are a great financial benefit to the 2 percent of farmers who produce 50–70 percent of the national maize surplus, they push up the consumer price of maize, which is harmful to both urban consumers and the large number of poorer small-scale farmers who are net buyers of maize. As recent research from Michigan State University's Food Security Research Project makes clear, the impact of government maize policies varies significantly on different farming groups.[7]

If properly leveraged, the dual nature of Zambia's agricultural economy provides significant opportunities for addressing issues of poverty and under-production that exist within the smallholder sector. Of critical importance is the fact that many of the necessary industries, services, and regulatory frameworks needed for commercial agricultural production already function in Zambia as a result of its large commercial farming sector. Yet the challenge of linking small-scale farmers to this existing system remains.

Addressing the geographical disparity is a separate challenge, and this report offers a number of recommendations related to supporting decentralized decision-making, procurement, and service delivery, with a focus on meeting the needs of rural businesses. For instance, the chapters on Dealing with Licenses and Accessing Marketing Infrastructure both identify weaknesses in district- and municipal-level service delivery. This is not a revelation; there has been a decentralization movement in Zambia over the past decade, including the establishment of a Decentralization Secretariat and the

6 In Zambia, 80% of smallholders control less than 2 hectares of land, compared to the top 20%, which on average controls more than 4 hectares. Thus, the distribution of land within the sector is highly concentrated and uneven. In terms of a farmer's position in staple food markets, 2% of Zambian smallholders account for 50% of all the maize supplied by the smallholder sector, while more than a third of small-scale farmers are unable to meet their food needs through production and are actually net buyers of staple foods. Again, this suggests a high degree of concentration and heterogeneity within the smallholder sector.

7 Chewe Nkond et al., Who Gained and Who Lost from Zambia's 2010 Maize Marketing Policies (December 2010).

IMPROVEMENTS TO THE DRAFT AGRICULTURAL MARKETING ACT

A public-private coalition featuring influential industry associations, government advisors, and donors has developed a draft Agricultural Marketing Act that is currently circulating in the form of a concept note. It has received some high-level attention by the Ministry of Justice and is sure to make its way to Parliament in the near future. This draft piece of legislation is a noteworthy attempt to limit the government's ability to unilaterally intervene in the market and reduce policy unpredictability through a number of separate provisions; the draft act would adjust the legal mandate of the Food Reserve Agency, establish a Grain Marketing Advisory Board, legalize ZAMACE, and bolster the mandate of AMIC. This diagnostic has identified several concepts and language in this document that could be strengthened, which should be done as soon as possible before the draft document is finalized.

(1) The background and legal precedent of the draft act does not mention a 2005 amendment to the FRA Act, an important amendment that gives the Food Reserve Agency (FRA) an unambiguous mandate to perform its grain marketing activities. If this draft act is meant to supersede that legislation, it must be explicit on this point.

(2) The draft act would establish an Agricultural Marketing Council comprised of public and private sector representatives. Before creating statutory roles and responsibilities, it would be beneficial to assess the benefits and weaknesses of past crop boards and marketing boards, both in Zambia (cotton, tobacco, etc.) and other grain-focused marketing boards in the region.

(3) The concept note recommends that the Agricultural Marketing Information Centre (AMIC) be "mandated to coordinate and harmonize other marketing information systems managed by other players." This will be a challenge. AMIC's price collection activities are severely underfunded, its dissemination methods are antiquated and not demand-driven, and its data management formats are incompatible with those of the private sector.

(4) There is strong support from private agribusiness and consumer advocates for greater transparency in FRA marketing and the FISP. The annual financial reports for these programs should be made public, and this draft act may be the opportunity to mandate this disclosure.

passing of several pieces of legislation related to the rules and structure of local government. However, the success of such efforts has varied by ministry and sector. In the case of the road sector, there have been so many management and resource challenges in recent years (culminating in a top level audit of all implicated agencies in early 2010) that fiscal and administrative power seem to have been reined in, almost defensively so, and now rest in the hands of a few centralized players. This well-meaning retraction and retrenchment has a disproportionately negative impact on the maintenance of rural feeder roads, which is low priority on the national level. For any given rural, unpaved road, the number of users is relatively low, but the relative cost to grade such a road is also low, and the relative cost to a local agribusiness of an impassible road is high.

District councils must be receptive to input from local constituents on public works such as roads, and should be equipped to respond in a timely and efficient way. Ultimately, this is one of the many ways in which the rift between Zambia's large and small, centralized and rural agribusinesses continues to grow. Larger farmers near the line of rail have the political or financial resources to ensure regular grading of their feeder roads, whether they pull in favors from contacts at the Ministry of Works and Supply or whether they pay for the work themselves. Smaller, rural farmers do not have either option. If local government were more responsive to the needs of smaller, rural agribusinesses, this would

go a long way toward bridging the gap between Zambia's two agricultural economies.

FINANCIAL SERVICES EXIST, BUT MUST BE ENCOURAGED TO MOVE DOWN-MARKET TOWARD MORE COMMERCIALIZED SMALL AGRIBUSINESSES

One of the features of the fractured Zambian agricultural economy is that many business systems and services exist (particularly in the area of licensing and credit), but are inaccessible to anyone but a core group of commercial farmers. Though this points at one of the fundamental challenges facing the Zambian agricultural economy, it is not all bad news. The smallholder sector ranges from subsistence producers to more viable, commercialized small businesses who present lower risk; this latter type of Zambian smallholder ultimately has an advantage over counterparts in other countries because of the existence of these services and financial products, the near saturation of the upper echelon of the market, and the fact that top commercial banks are not averse to maintaining agricultural portfolios.

The question remains of how to steer these services "down-market." This report suggests a number of preliminary ideas about how to make emergent farmers more attractive to lenders, and how to tailor existing services to meet the needs of this group. In some cases, the focus must be on direct assistance to select small agribusinesses to make a better impression on lenders and clearly define their lower- risk profile. As described in more detail in this report's chapter on credit, this can be accomplished through business-skills training to individual businesses and cooperatives, or by proactively presenting lenders with comprehensive, supply chain–wide risk analysis.

More important, however, misperceptions in the financial sector must be remedied. Commercial banks certainly recognize the dual agricultural economy, but perhaps overgeneralize the division. On one end, they see a small group of productive, politically influential, commercial agribusinesses that are growing and hedging their own risk through horizontal integration. On the other, they see the masses of poor smallholders that receive much political rhetoric and government intervention, and they see the need for subsidy as proof of the high level of risk and vulnerability of this group. Developing a thorough risk profile of the emergent farmers group, and presenting this to top financial institutions, may be the first step in helping banks pay attention to the potential of this market. This analysis will be most compelling if the banks do it themselves, and this report makes recommendations about building banks' analytical capacity at the junior and mid-level.

Certain legal and regulatory adjustments may also support this effort, particularly in the case of the tax deduction for finance leasing; the tax code was changed to preclude deductions in 2007, and if it is not adjusted, it is sure to eliminate this important credit option for medium-scale farmers and agroprocessors.

Ultimately, though, there is no substitute for addressing actual risk in the sector. Viable but undercapitalized agribusinesses will only see a meaningful increase in their access to credit if productivity and prices are stabilized and government policy becomes more predictable.

Policy and budget unpredictability inhibits private sector activity. A common refrain throughout this diagnostic concerned the arbitrariness with which certain important government actions take place. Many interviewees complained about the lack of transparency in government policymaking throughout the agricultural sector. Overwhelmingly, stakeholders perceive agricultural policy as driven less by international best practices, or thoughtful analysis of needs and priorities of different actors in the sector, and more by political concerns on the part of empowered interests seeking to protect certain agricultural constituencies or businesses.

The gravest complaints centered on the government's frequently applied quantitative restrictions on a number of products. At the time of this diagnostic, the private sector confirmed complete quantitative restrictions (i.e., bans) on the import of wheat, milk, and all products of GMO origin and the export of wheat, wheat flour, soya, and maize. Ad hoc bans of exports or imports tend to occur in years of production surplus or production deficit as a way of dealing with price fluctuation, but generally result in increased uncertainty in the markets, where certainty is needed most. The unpredictable nature of these bans is widely reported as a principal barrier to the establishment of stronger commercial ties with neighboring countries, including the DRC and Zimbabwe.

This policy unpredictability and market distortion is at the heart of stagnant infrastructure development. The government's maize interventions—FRA marketing activities and the FISP—could be said to be in a vicious cycle with poor infrastructure. These programs have absorbed financial, human, and political capital that might otherwise have been invested in public goods, including infrastructure. The country's transport and storage capacity is overwhelmed by government demand from these programs. At the same time, the objectives of the programs themselves are not achieved, in part, because of infrastructure constraints. Moreover, these programs represent the unpredictable nature of government maize policy, which serves as a disincentive to both grain storage and investment in storage facilities.

FRA officials argue that these marketing and procurement activities are merely a transitional requirement, since so many farmers are "locationally disadvantaged," which they define as operating further than 50 kilometers from the line of rail. If proper transport infrastructure existed, FRA officials claim, then they would not need to be so involved in marketing smallholder maize. However, FRA sets up its depots and collection points in many areas along the line of rail, undermining its stated raison d'etre of serving the more remote areas. With FRA marketing activities losing $150–$236 per MT of maize, these are public funds that might otherwise be used for rural infrastructure (or other much needed public goods).

Ultimately, a lack of predictability interferes with private investment in such areas as storage infrastructure, financial services (especially for the poor), and on-farm upgrades. Although the government regularly consults certain empowered actors within the agricultural sector, it does not have a transparent process for showing how it arrives at its key decisions affecting the sector. Accordingly, the private sector does not perceive the public sector as a reliable partner in Zambia's development, a fact that severely diminishes the potential for large changes in the near future.

Unfortunately, there is no single set of prescriptions to effectively integrate smallholder famers into the formalized agricultural economy. Small-scale farmers differ greatly in their capacities, resources, education, and access to markets. For the better-capitalized segment of the smallholder population, with adequate resources to achieve greater economies of scale in both input and output markets, and control over assets that can be used as collateral to access financial services, greater policy predictability is of the utmost importance. The existing policy uncertainty creates risks that limit the financial sector's willingness to lend to this emergent class of small-scale farmers as well as the farmers' ability to repay loans. At the same time, policy unpredictability limits private sector investment in the agricultural sector, which in turn contributes to elevated transaction costs for both inputs and outputs. As described above, until this unpredictability is addressed, Zambia's ability to create wealth from agriculture will be limited to the commercial farming sector.

This report makes several specific recommendations related to trade policy predictability, and advises that the government take such

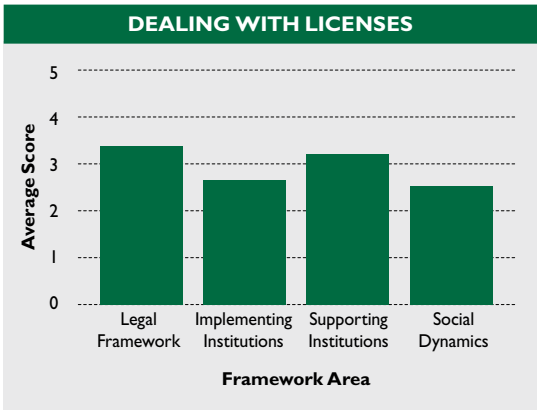
actions as benchmarking fees and duties, and be more transparent in its grain marketing and subsidy programs. Government programs and public works are not always properly funded, and the resulting decline in credibility has serious consequences when it comes to a producer's ability to trade in agricultural products in Zambia, regionally and further abroad. The research and advocacy mandate of the Food Security Research Project and its partners is more important than ever when it comes to proving the negative impact of unpredictability and effectively communicating this to public policymakers and private stakeholders.

DEALING WITH LICENSES

Licensing and permitting of various functions in the agricultural sector is a problem in many developing countries. In this regard, Zambia is relatively fortunate. There are a number of licensing systems that affect agriculture in Zambia, and most of them are relatively well designed. License costs can be high, and wait times can be long, but licensing issues do not strangle the sector's commercial enterprises (as in Ghana), nor are they used as an excuse for predatory corruption (as in the DRC). Dealing with licenses can be a problem in Zambia, but it is—at least in the agricultural sector—not a major impediment to development.

That said, the impact of licensing on Zambian agriculture is not distributed evenly. For many large producers, licenses are a relatively minimal constraint. Large commercial farms can afford new seeds, sprays, and other inputs, and have the administrative capacity to deal with applications and inspections. They can outsource much of the administrative burden to service providers (i.e., commercial sprayers who will deal with licensing and storage of chemicals). In contrast, small farmers are not so much burdened by licenses, as deterred. Applying for an import or export license involves filling in a simple form, but an illiterate farmer may not be able to do this or afford the small filing fee. Women farmers and processors, who have almost no cash resources and are less likely to be literate, are even more disadvantaged.

Onearea where the impact of licenses is unusually significant pertains to the import and export of agricultural goods. If MACO decides to ban or otherwise curtail the trade of a certain product, it can instantly put that measure into effect by refusing to issue any more import or export licenses. Thus, from the government's point of view, the licensing system is an effective policy tool, while for traders, this approach fosters confusion and unpredictability. The result is that long-term planning is difficult and the sector as a whole is prone to sudden policy-driven shocks. It also occasionally results in dramatic price changes (i.e., price crashes when imports are suddenly forbidden) and in the spoilage or waste of viable agricultural products.



LEGAL FRAMEWORK

Zambia's national laws relating to licensing of agricultural enterprises are generally clear and straightforward. The legal framework allows for competitive sourcing, certification of quality, and provisions for agricultural inputs and chemicals. Most of the laws have been reviewed and redrafted or expanded within the last decade. One notable exception is in the fertilizer subsector. The legal framework governing fertilizer is fragmented. There are various laws and regulations that affect the production and sale of fertilizer, but there is not a single overarching fertilizer law.

WHY ARE LICENSES (AND SIMILAR "UP-FRONT" REGULATORY ACTIVITIES) IMPORTANT?

Licenses, permits, and certifications play an important role in a country's business environment. They define which commercial activities are acceptable and which are not. Licenses are often earned only after the seeker has demonstrated his or her understanding of the conduct that must be observed in order to carry out the activity. Licenses further allow regulators to track critical data, such as how much of a certain product is getting used or how much of another product gets exported. Also, licenses generally provide for sanctions in the event of non-compliance—that is, they can be suspended or withdrawn in the event that their terms are violated.

Licensing, along with related tools of regulation, allows governments to keep unsafe food off the table, dangerous pesticides out of the field, and untested seed varieties out of retail outlets. Provided they do not unduly restrict access into a sector, and do not stifle innovation and investment by overregulation, licenses have a legitimate place in a country's regulatory system.

In the early years of its *Doing Business* initiative (2002–2007), the World Bank called its review of certain permitting processes "Dealing with Licenses." In *Doing Business 2008*, the World Bank changed the designation of the category to "Dealing with Construction Permits," a title that more accurately reflects the scope of its survey. For its part, AgCLIR has identified the key licenses in the agricultural sector to generally involve licensing of inputs—including seed, fertilizer, and pesticide—as well as licensing of other agricultural-related functions. This inquiry aims to help a country strike the appropriate balance between the necessary aspects of licensing and the need for enterprises to move forward without overwhelming or duplicative bureaucratic interference.

LICENSING OF AGRICULTURAL ENTERPRISES AND FACILITIES

Zambia's **Patents and Companies Registration Act (2010)** provides for business registration and for the registration of patents and trademarks. All these functions are carried out by the Patents and Company Registration Agency (PACRA). The law is generally consistent with international best practices. *Doing Business 2011* ranks Zambia relatively well for the region, listing the country as 57th in the world for Starting a Business, an impressive rise of 36 places from the previous year.[8]

Pursuant to their local authority, municipal councils issue **trading licenses,** which are distinct from the general business licenses issued by PACRA. Zambia is divided into 9 provinces—Eastern, Central, Luapula, Northern, North-Western, Copperbelt, Western, Southern, and Lusaka. Within these provinces, there are 72 local authorities or councils, namely, 4 city councils, 14 municipal councils, and 54 district councils.[9] (There are also 286 traditional leaders, whose authority tends to impact matters of property ownership and local disputes.)

Local licensing regimes can be simple, or they can include a variety of conditions relevant to safety and health. Municipal councils can and do license storage areas for agricultural chemicals. While they lack the technical expertise to license and inspect a specialized modern storage facility, they can set basic requirements such as ventilation and the presence of fire extinguishers.

City, municipal, and district councils license some agricultural warehouses as well, although this power is also claimed by Zambia's Commodities Exchange Board (ZAMACE).[10] This issue is expected to be clarified with the passage of the new **Agricultural Credit Act** (detailed in this report's chapter on Getting Credit), which will vest this power in a new Warehouse Licensing Board.

City, municipal, and district councils also have **zoning authority**, which can affect the sale of fertilizer and chemicals. (Example: "That's a

8 World Bank, *Doing Business 2011*, "Starting a Business."

9 Further information about the structure and administration of Zambia's local governance can be found at the website of the Ministry of Local Government, http://www.mlgh.gov.zm.

10 ZAMACE licenses according to standards for international management. Local councils may license warehouses, but not on the basis of ISO or other standards.

Class II poison; you can't sell or store that in a residential area.")

LICENSING OF INPUTS

As noted, Zambia does not have one explicit law governing the certification and distribution of fertilizer. Under various legal regimes, registration of fertilizer is handled by the Environmental Council of Zambia (ECZ), while quality assurance is the responsibility of the Zambian Agricultural Research Institute (ZARI). Packaging and labeling, meanwhile, is handled by the Zambian Bureau of Standards (ZABS). An overarching fertilizer law would link the research and safety standards, extension and outreach, and private sector market dynamics affecting production, cross-border trade, transport, and sale of fertilizer. A more comprehensive law would give the government greater oversight, while reducing the risk of unintentional market distortion. Issues with government procurement of fertilizer and the tendering process are addressed in more detail in this report's section on Competing Fairly.

In contrast to the legal confusion concerning fertilizer, Zambia has a clear legal framework for seed, which has resulted in a strong formal seed sector, especially for maize.[11] Nine different seed companies are registered in the country, and they all sell a wide variety of seeds. Zambia's **Plant Varieties and Seeds Act (1964)** provides for regulation and control of seed production; sale, import, and export of seed for sowing; and testing for germination and purity and seed certification. This law was supplemented in 2007 by the **Plant Breeders Rights Act (2007)**, which protects plant breeders' rights, including both ownership and use, and provides for registration of plant varieties. Together, the two laws appear to provide an adequate legal framework, consistent with international best practice, for the licensing of seeds and plant varieties. Seed licensing is the responsibility of SCCI, a division of the Ministry of Agriculture.

A draft law on **Traditional Knowledge, Genetic Resources and Folklore** is known to exist, although a copy of the draft could not be obtained during this diagnostic. This new law would, among other initiatives, give clear and strong rights to the genetic content of certain plants used in traditional medicines, and to medicines and formulations made from those plants. The law is supposed to be consistent with the International Traditional Knowledge Protocol, which was signed in 2010 in Namibia, and is undergoing review within the Ministry of Commerce.

KEY LAWS

- Patents and Companies Registration Act (2010)
- Local ordinances pertaining to licensing and zoning, authorized by Local Government Act (as amended, 1995)
- Plant Varieties and Seeds Act (1964)
- Plant Breeders Rights Act (2007)
- Traditional Knowledge, Genetic Resources and Folklore (draft)
- Export regulations

EXPORT LICENSES

Every shipment of agricultural products out of the country requires an export license from the Agribusiness and Marketing Department of the Ministry of Agriculture and Cooperatives. These licenses are normally quite easy to obtain. The necessary form is simple and can be downloaded online. The fee is modest: 35,000 kwacha or about $8 per shipment. The main purpose of this licensing system seems to be as an instrument of policy. However, as noted, if the ministry decides to ban the export of a certain product, it can instantly put the ban into effect by simply refusing to issue any more export licenses. The recent Food Security Research Project analysis characterizes these bans, which have been applied to maize grain and maize meal, as "haphazard" and contributing to an environment of uncertainty pertaining to international trade. Similar restrictions impact the

11 This contrasts with several neighboring countries. The DRC, for instance, barely has a formal seed sector at all.

movement of grain between districts.[12] This report's chapter on Trading Across Borders further addresses the business impact of import and export bans in Zambia.

IMPLEMENTING INSTITUTIONS

PATENTS AND COMPANY REGISTRATION AGENCY (PACRA)

PACRA is a new agency derived from an older one, created in 2010 when its predecessor, PACRO, was given an expansion of authority under the Patents and Companies Registration Act of 2010. PACRO dealt only with company and business registration; PACRA deals with these matters as well as with patents, trademarks, and industrial designs. (An exception is seed patents; these are kept in the Seed Registry, which is maintained by SCCI, discussed below.) Additionally, while PACRO was a ministerial department and subject to civil service regulations and budgeting, PACRA is an autonomous agency and entirely self-financing.

PACRA is based in Lusaka but has three satellite offices around the country, in Copperbelt, Livingstone, and Chipata. Since every new business and company in the country is required to register with PACRA, this geographical coverage is not sufficient. To make matters worse, trademarks and other IP matters are only handled at the Lusaka office. Lack of access to PACRA is particularly problematic for new agricultural enterprises, which are often located well away from these urban centers. PACRA plans to expand to at least three more cities within the next five years. It is also considering the introduction of online registration, but at the moment this is entirely speculative. In the meantime, PACRA occasionally opens temporary, mobile registration offices in some of Zambia's smaller cities.

PACRA is *not* a one-stop shop for starting a business. PACRA quite deliberately does not deal with other types of permits—environmental, safety, labor, etc. It may sometimes provide guidance to a new registrant, such as, "You'll need to visit ECZ (the Environmental Council of Zambia) for an environmental impact statement." This guidance is entirely at the discretion of PACRA's staff, however, and in no case extends to helping with an application to another agency.

PACRA does not combine or share information with other agencies, except upon request. (For example, it would not inform ECZ that a new chemical business had just been registered.) Again, this limitation is deliberate. PACRA's management wants to focus narrowly but deeply on the task at hand; it does not have the resources or the inclination to police new businesses on behalf of the licensing requirements of other agencies. This policy has brought some criticism upon PACRA, but it is not inconsistent with international best practices. PACRA allows the registration of charges against companies, and is thus a de facto registry of collateral; banks and lawyers occasionally contact PACRA to check whether a business has a charge registered against it, or to amend or update the status of an existing charge

SCCI AND GMOS

Formally, SCCI does not take a position on GMOs. As long as it is government policy not to allow GMOs, SCCI will not accept applications for GMO seeds.

Informally, SCCI staff expressed a desire for a "science-based" evaluation of GMO risks and rewards. "There are legitimate questions, like protection, monitoring, labeling. But we would like to see policy based on science. Given time and resources, we are competent to make this evaluation."

In short, while SCCI passively follows the government´s policy on GMOs, it is not itself a source of opposition. SCCI staff were well informed on GMO issues and, while hesitant to openly commit themselves, clearly were not driving or aggressively supporting the ban policy.

12 Food Security Research Project, *Fostering Agricultural Market Development in Zambia* (Working Paper No. 40) (2009), p. 9.

PACRA has primary responsibility for ensuring Zambia's compliance with the WTO's Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement. Under its current management plan, PACRA plans to bring Zambia into full compliance by 2013 or 2014. The agency is also responsible for maintaining Zambia's membership in the African Regional Intellectual Property Organization (ARIPO), and Zambia is quite active in ARIPO. Files at PACRA are open to the public and can be searched. This requires visiting the facility though, as no public records are online yet. PACRA does maintain a website, but it offers only basic information (fees, etc.) and forms that can be downloaded. PACRA's reputation among customers and other stakeholders is high. The agency is generally viewed as competent and efficient, and its fees are considered reasonable.

Banks require registration with PACRA before allowing businesses to open a commercial bank account or apply for a commercial loan. Many smaller businesses simply continue to use individual accounts, but this policy has put some pressure on small businesses to register. It also has some effect on access to credit (see the chapter on credit, below).

In the past, PACRA has received assistance from USAID (2006–2007, through the Millennium Challenge Account Threshold program[13]), from the World Intellectual Property Organization (training, equipment, and the digitization of patents), and from the International Development Law Organization, in cooperation with the World Trade Organization. It is not currently receiving donor support, though it receives an occasional visit from WIPO.

SEED CERTIFICATION AND CONTROL INSTITUTE (SCCI)

SCCI is Zambia's body for the licensing, inspection, and certification of seeds. Administratively it is a department within the Ministry of Agriculture, but historically SCCI has acted more like a semi-autonomous agency.[14] In particular, SCCI is allowed to keep its testing fees and apply them toward its expenses. This is something of a mixed blessing; interviewees suggested that the independent revenue stream discourages MACO from requesting additional funding for SCCI.

KEY IMPLEMENTING INSTITUTIONS

- Patents and Company Registration Agency (PACRA)
- Seed Certification and Control Institute (SCCI)
- Environmental Council of Zambia (ECZ)
- District and rural councils

SCCI is accredited to the International Seed Testing Association (ISTA). Accreditation requires that test procedures conform to internationally recognized standards. SCCI makes use of International Union for Protection of Plant Varieties (UPOV) guidelines on plant variety testing and registration. Although SCCI adheres to these guidelines, it is not a UPOV member. There are plans to seek membership, but they were not moving forward at the time of this diagnostic.[15]

SCCI has a range of responsibilities, including seed variety testing; seed licensing; seed certification; maintaining the National Seed Registry; and the inspection of seed multiplication sites and wholesale and retail seed sale sites. The agency has approximately 100 employees, although it is authorized to have about 150. Its ambit includes all types of seeds, including both food and nonfood crops and trees. As a practical matter, though, it focuses on a fairly short list of seed crops, namely, the country's major food and export crops. Nearly half of SCCI's work is with a single crop—maize.

Seed companies that wish to license a new seed variety must begin with a formal application to SCCI. SCCI will then begin testing. This normally takes two seasons, so that SCCI can collect two complete datasets. (Since SCCI's test sites are irrigated, two seasons can usually be harvested in a single year.) The registration fee

13 See http://www.usaid.gov/zm/millennium_challenge_account/millennium_challenge_account.htm.

14 SCCI has a website at http://www.scci.gov.zm. It is reasonably informative and up to date, and includes applications and other forms for downloading.

15 As of December 2010, UPOV has 68 active members. Most African countries are not members. (See http://www.upov.int/export/sites/upov/en/about/members/pdf/pub423.pdf for a membership list.) To become a member, a country must have an adequate breeder protection law—which Zambia does—but most also provide UPOV with fairly elaborate documentation, including a list of the plant genera and species protected, and a one-time payment (http://www.upov.int/export/sites/upov/en/publications/pdf/upov_inf_13_1.pdf).

for each new seed strain is $20, plus $125 per season per site. There are six trial sites—two in each of Zambia's agro-ecological regions.[16] Thus, for most new seeds, the total cost will be $1,520.[17] In a typical year, SCCI will receive about 120 new variety applications. 50–60 percent of these will be for maize. Of these 120, about 70–75 percent will fail their field tests within the first year. This is a high failure rate, but SCCI defends it by saying that companies generally do not perform their own trials for Zambian conditions in advance, and so are effectively paying SCCI to do their testing. A few of these rejections will be for DUS ("distinctiveness, uniformity and stability") issues, but more often they will be for failure to achieve the (VCU—"value for cultivation and use") growth and characteristics set out in their applications.

If the seed variety passes the field tests, it then goes to the Seed Committee for review. About 80 percent of the seeds that reach this stage are approved.[18] (Rejections, when they occur, are most commonly for failure to score high enough on disease resistance.) Thus, a typical year will see between 20 and 30 new approvals. About half will be maize, followed by tobacco, cotton, and beans. By way of example, the committee had approved as of October 18 new varieties for release in calendar year 2010, of which 8 were maize and 3 were tobacco.

SCCI also licenses, registers, and inspects all seed multipliers. It does not have enough staff to do this all across Zambia, so it trains and authorizes local part-time inspectors. These inspectors also serve to alert SCCI to local issues, such as an outbreak of disease or the appearance of fake seeds. SCCI and the seed dealers work together to provide public information and to investigate cases.

SCCI seems to have a generally positive reputation among stakeholders. Although there are some complaints about the speed of its licensing process, overall the agency is considered honest and competent. The one exception may be in the smallholder cotton sector, the only sector in which fake seeds seem to be a common occurrence. In these cases, SCCI is blamed for not enforcing seed integrity rules that have led to seed contamination, with a corresponding loss of yield potential. This weak enforcement capacity (for anything other than maize) is certainly linked to a lack of resources. Despite its ability to self-fund, SCCI is underfunded; it cannot fill all its employee slots. It has a laboratory, but it is small and lacks modern equipment. SCCI's headquarters is a collection of run-down buildings (the largest of which was condemned) at a site next to a cement factory in Chilanga, north of Lusaka; it needs to build and relocate to a new headquarters, but cannot afford to do so.

SCCI collaborates with a number of donors, including the Swedish International Development Cooperation Agency (SIDA) and the Alliance for a Green Revolution in Africa (AGRA). However, it does not receive direct financial or technical support from any donor. Additional discussion of SCCI's mandate is set forth in this report's chapter on Trading Across Borders. SCCI is aware that Zambia has the potential to be a significant regional seed exporter. However, it does not see as its role to educate seed multipliers or producers in how to produce exportable seed or how to obtain market information outside the country. SCCI views this as the private sector´s job. Part of this may be a mindset dating back to socialist times, when Zambian seed production was almost all for local consumption, part may simply be a realistic assessment based on the resources available.

ENVIRONMENTAL COUNCIL OF ZAMBIA (ECZ)

ECZ is Zambia's environmental regulator, established by the Environmental Protection and Pollution Control Act of 1990 (CAP 204).[19] It has a truly enormous mandate. ECZ is tasked with the regulation of air, water, and noise pollution, and solid waste and landfills; the review and approval of environmental impact statements; the certification and registration of new chemicals, including all agricultural chemicals;

16 This is consistent with international best practice. Two sites per region are desirable for redundancy, in case an accident—hail, fire, storms, or the like—damages one site. Occasionally an applicant will ask to be tested in only one or two regions; in that case, SCCI will certify the seed for limited release (i.e., "Region II only").

17 There are some exceptions. For instance, ZARI occasionally provides new varieties for SCCI to test; this is done for free.

18 Failed applicants can ask for retests or appeal directly to the minister. This latter step is quite rare.

19 See http://www.necz.org.zm/. ECZ's website includes recent press releases, requests for comments, and forms (such as license applications) for download.

the inspection and approval of chemical storage facilities; and the drafting and implementing of new regulations on all the foregoing; and enforcement and prosecution.[20]

Fundamentally, ECZ lacks the staff and resources to carry out these multiple missions. ECZ's Inspectorate, for example, has just 20 inspectors, most based in Lusaka, to inspect facilities from fertilizer warehouses to solid waste dumps and to carry out investigations of violations from the illegal dumping of mine tailings to the introduction of invasive species.[21] ECZ further lacks laboratory facilities, and has only a handful of vehicles with which to cover vast areas of the country. It has three lawyers to write regulations, correspond with applicants, review Environmental Impact Assessments EIAs and applications for legal sufficiency, and carry out all lawsuits and prosecutions.

The underlying problem is that ECZ is supported through combined funding from the central government and its own fees. The central government does not contribute nearly enough money, so ECZ must charge substantial fees. This generates a great deal of resentment and complaint from industries that are affected, such as the agrochemical and fertilizer industries. In the case of chemicals, ECZ charges a fee of several hundred dollars per molecule, per importer, per year.[22] This is not only well in excess of ECZ's actual administrative costs but also imposes a disproportionate burden on smaller importers.

Stakeholders also complain about ECZ's timeliness in approving new licenses, especially for new chemicals. If a chemical importer has complete documentation, and the chemical is not new—for example, if it has been used elsewhere in the world for at least three years—then ECZ is supposed to grant approval within 90 days. Stakeholders claim that the process almost always takes longer, sometimes up to a year.

ECZ does attempt to communicate with stakeholders. It has a number of subcommittees that include stakeholder representatives, and it tries to take their views into account when drafting new regulations. However, the agency simply cannot reduce its fees, since these are what keep the agency functioning. Another complaint sometimes levied against ECZ is that it is duplicative, since some ministries have environmental divisions. While at least two ministries do have environmental divisions, however, the amount of work to be done is so vast that it is not clear whether duplication of efforts is really an issue. In addition to its licensing role, ECZ reviews and approves environmental impact statements (EIS). These are only required for certain large projects. Stakeholders say that the EIS review process is generally carried out in a competent and transparent manner, but there is discontent about the speed and, especially, the fees.

ECZ has worked with various donors on a range of activities. However, no donor appears to be offering direct financial or technical support to ECZ at this time.

LOCAL GOVERNMENT COUNCILS

As noted, a considerable degree of licensing authority is vested in councils of local government, including trade licenses, health and safety permitting, road and water authority, and zoning. Local authorities can levy taxes, borrow money, and own and manage housing projects.

Zambia's provinces are administered by officials appointed by the central government. Each province is further divided into districts, presided over by district secretaries. Lusaka has a city council, and the other large towns have councils or town management boards. Most townships, however, are directly administered by government officers.

Zambia's municipal and district councils are comprised of elected locals and appointed central government officials from the Ministry of Local Government (MLG). Members of district councils often have low levels of education and administrative capacity, and, according to interviewees, there is very little accountability on the

20 ECZ's powers and responsibilities are listed in detail in Article 6 of the 1990 law, *available at* http://www.necz.org.zm/cap204/cap204part-II.html.

21 Most inspectors last less than five years. The typical ECZ inspector is a young man in his twenties with an undergraduate degree in natural resources, chemistry, other sciences, or sometimes accounting. ECZ does not pay very well, but it is considered good experience. Thus many inspectors move on after a few years—often to a job in the very industries that ECZ regulates.

22 The exact amount is unclear. Stakeholders in the industry claimed $500, but ECZ said that currency fluctuations had reduced it to $300 or less. The "per importer" requirement has led to some importers quietly cooperating to get fewer licenses and then exchange chemicals after import; this is, strictly speaking, illegal.

part of the MLG representatives. This can be a dangerous combination. Those who work regularly with the councils believe that the elected officials are either powerless or manipulated by the strong central government presence.

Administrative districts lying outside municipal and township areas are governed by rural councils, consisting of members elected by universal adult suffrage and a minority of nominated members, mainly chiefs, appointed by the Under-Minister of the Interior. Councils have evolved from the former native authorities, which were constituted on a tribal basis. The functions and powers of rural councils are similar to those of the urban local authorities.

SUPPORTING INSTITUTIONS

ZAMBIAN AGRICULTURAL RESEARCH INSTITUTE (ZARI)

ZARI is Zambia's state agricultural research body. It has several stations around the country, but is headquartered at Mount Makulu, about 20 km south of Lusaka. ZARI is responsible for analyzing and assuring the quality of agricultural and veterinary chemicals and of fertilizers. ZARI has a fairly large, well-equipped laboratory, which is probably why it was given this responsibility. However, there is some bureaucratic confusion, as ZARI shares some responsibilities with ECZ (which licenses chemicals for importation) and with the Bureau of Standards (which wants to be responsible for setting and maintaining standards in fertilizers).

LABORATORIES

Zambia has only two fully equipped agricultural laboratories capable of detailed soil analysis and other forms of agricultural testing. One is at the University of Zambia's Agricultural Department, in Lusaka, and the other is at the ZARI facility in Mount Makulu, about 20 km south of Lusaka. SCCI has a laboratory, but it is specialized for seed testing. Some of the larger commercial farmers operate small laboratories, but they are generally used for testing commercial attributes such as moisture and falling numbers. The lack of high-quality laboratories throughout the rest of the country is a significant constraint, not only upon licensing but also on agricultural research generally. (Interviews outside of Lusaka were regularly punctuated with, "We'd have to send that to Mount Makulu.") ZARI has expressed interest in building a new lab facility in Copperbelt, but this does not seem likely in the near future given financial constraints.

CROP BOARDS

Zambia has several crop boards that impose a licensing requirement. Growers of these crops must register with the board and receive a license to sell that particular crop. The specifics of licensing vary from board to board, but they generally include some paperwork and a small fee. Some boards also impose qualifications such as prior experience growing or selling the crop in question, or require commitments such as using (or not using) particular inputs, or selling only to approved buyers.

The licensing requirements do not seem overly burdensome in and of themselves. The boards can refuse a license (i.e., if a grower has a criminal record or lacks experience with the crop), but no interviewee could say that this had ever

KEY SUPPORTING INSTITUTIONS

- Zambian Agricultural Research Institute (ZARI)
- Laboratories
- Crop Boards
- National Institute for Scientific and Industrial Research (NISR)
- Plant Quarantine and Phytosanitary Services (PQPS)
- Zambian Bureau of Standards (ZABS)
- Cooperative Societies Registrar
- Croplife
- Spray service providers
- Lawyers

happened. However, the crop boards also claim the power to revoke a license if a grower does not obey their regulations and instructions. These may include instructions as to processing, grading, and marketing, and also—in at least the case of tobacco—ceilings or floors on price. As with export licenses, the licensing requirement is used as a tool to impose government regulations and policies. For further discussion of the crop boards, see the chapter on competition.

NATIONAL INSTITUTE FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (NISR)

Founded in 1967 as the National Council for Scientific Research, NISR was renamed and given its current portfolio in 1997. The agency does not engage in licensing directly, but rather works to develop and test new technologies and techniques, and may assist in their licensing by other agencies. NISIR engages in a range of activities, many of which are not related to agriculture, but it also works on developing and improving tree crops (via its Tree Improvement Research Center, which works in coordination with Zamseed) and on researching livestock pests and toxins (via its Livestock and Pest Research Center). NISR and ZARI both retain close informal links with Zamseed, which was formerly the state-owned seed monopoly.

PLANT QUARANTINE AND PHYTOSANITARY SERVICES (PQPS)

PQPS is a department of MACO. It is tasked with issuing phytosanitary certificates for both import and exports, and with reviewing and issuing plant import permits. Despite donor support—including from USAID's MCA Threshold project—PQPS still suffers from shortages of trained staff and of equipment.[23] PQPS is discussed in more detail in this report's chapter on Trading Across Borders.

ZAMBIAN BUREAU OF STANDARDS (ZABS)

ZABS is responsible for setting and enforcing approximately 500 standards, including commercial, industrial, and agricultural standards. ZABS does not issue licenses as such but does provide various forms of certifications. It also conducts inspections (for instance, of fertilizers) for which it charges fees. Complaints about ZABS were common from interviewees up and down the fertilizer supply chain; whether valid or not, there is clearly a perception that ZABS is imposing unnecessarily high fees and fines.

ZABS is also generally responsible for "truth in labeling" with regard to agricultural inputs, especially fertilizers and sprays. ZABS claims the power to approve all labels in advance; in theory, any label on a product that is overseen by ZABS must first have ZABS approval. In practice, ZABS appears to exercise more of an oversight role, since it lacks the capacity to review every label on every product beforehand. There is some overlap and confusion of authority between ZABS, SCCI, and ECZ. While this has been resolved informally, by discussions among the various actors, this may be complicated further by the passage of the Competition and Consumer Protection Act of 2010, which gives consumer protection authority to the Competition and Consumer Protection Commission (formerly the Competition Commission). Further discussion of ZABS can be found in the chapter on Trading Across Borders.

COOPERATIVE SOCIETIES REGISTRAR

This is a body within MACO that is responsible for registering agricultural cooperatives. It is of interest because historically it has not acted as a passive registrar but rather as an active licensing agency. That is, it has worked through the extension system to educate and develop potential cooperatives, and also to investigate and interrogate whether they are real and sincere. (This is an issue in Zambia, where cooperatives have sometimes been created for social or political reasons not really related to agriculture.[24]) The registrar does not charge any fees, but it is known to deregister cooperatives unilaterally if it concludes they were not carrying out their duties.[25]

23 Its website—http://www.pqps.gov.zm/—is frequently offline.

24 This goes back to the socialist period, when agricultural cooperatives were expected to be politically active. Some "cooperatives" were really party or political organizations, collecting dues but providing few or no services relevant to agriculture. Later, some "cooperatives" were formed purely to get access to donor funding. This does not appear to be a major issue, but it does still pop up often enough that extension officers spend a certain amount of time watching new cooperatives to make sure they are really agricultural in nature.

25 Additional detail and insights about the functioning of Zambia's cooperatives and other farmer organizations are set forth at the Food Security Research Institute's paper, *Fostering Agricultural Market Development in Zambia (Working Paper No. 40) (2009).*

CROPLIFE

Croplife is the industry association for Zambia's agrochemical companies. It has more than 20 members importing and selling a wide range of products, including insecticides, pesticides, fungicides, herbicides, and rodenticides. (It does not include fertilizer companies, which have their own organization.)

Croplife acts as a lobbying body and a clearinghouse for information. It also provides safety training along the supply chain, for importers, agrodealers, and end users, including spray contractors working in the smallholder sector. ECZ holds importers responsible for misuse of chemicals until the final sale to the user, so there is a strong incentive to inform and train. Croplife also encourages its members to track shipments down to the dealer level to ensure that they do not become obsolete on the shelf. It also works to discourage unauthorized repacking or decanting of chemicals, which is a problem in Zambia.

SPRAY SERVICE PROVIDERS

Most small farmers do not own spraying equipment. In rural areas, often one or two farmers will be the local "sprayers." These may be emergent farmers who have more cash and are able to buy spraying equipment and chemicals. They will spray their neighbors' crops for a fee. Sprayers do not have warehouses or official storage capacity but are likely to store their chemicals in a hut or shed; this occasionally leads to safety issues when there is a fire or spill.

Croplife has trained over 1,000 sprayers in the use of chemicals, and may be reasonably well informed about their effects. On the other hand, the sprayers have a financial incentive to spray as much as possible while keeping costs down. Any reform effort in the chemical input supply chain should take these points into account.

LAWYERS

Lawyers are only occasionally used for licensing matters, and then only for large and complex affairs such as the EIAs for a large project. However, some lawyers do provide licensing as part of a package service, most commonly when starting up a new company—as in, "We will incorporate you, register you with PACRA, and obtain the necessary licenses as well." More discussion of lawyers in Zambia can be found in this report's chapter on Getting Credit.

SOCIAL DYNAMICS

Zambia is not a license-oriented culture. Most Zambians view licenses as a nuisance, to be avoided when possible. Small farmers, in particular, will seek to avoid paying licenses or fees if they can, as even a modest payment will represent a significant diversion of resources. There is a large informal sector that prefers to avoid contact with government officials when possible. Also, limited literacy and limited access to inputs mean that end users are much less picky about, for instance, chemicals that have passed their sell-by date than their developed country counterparts are. This places a greater burden on regulators and supply chain managers to make sure that inputs are safe and effective. Informality can also encourage small farmers to make purchases from unlicensed sellers, leading to the spread of bad seed and other forms of corrupted inputs.

Gross corruption of the licensing systems is limited. On the positive side, Zambia is—by regional standards—not particularly corrupt. Transparency International's most recent Corruption Perception Index gives Zambia a score of 3 out of 10, or 101st in the world. This is not high, but it compares favorably with neighbors Tanzania and Mozambique (2.7), Uganda (2.5), Zimbabwe (2.4), the DRC (2), or Angola (1.9). Stakeholders occasionally pay speed money to get a permit more quickly or give an inspector some cash to prevent being hassled. These are real problems. That said, Zambia does not have anything like the problems seen in some neighboring countries—massive importation of obsolete chemicals, for instance, or widespread use of untested seeds.

PROHIBITION OF GMOS

Zambia has been resistant to adopting GMOs for a number of reasons. First, like other countries that ban GMOs, the Zambian government has expressed concerns over the environmental and human health consequences of GMOs. Second, there is concern, both within the government and the private sector, over Zambia's ability to effectively regulate the use of GMO crops and the licenses associated with GMOs. Third, much of Zambia's potential export market for agricultural products, both regional and European, are rhetorically GMO free. Thus, adoption of GMOs may limit Zambia's ability to participate in certain export markets. However, this appears to be rather wishful thinking. Zambia is unlikely to export large quantities of agricultural products outside of the immediate region any time soon. Nonetheless, this idea has a strong grip on the imagination of many stakeholders. Finally, commentators noted significant political pressure from certain donors to discourage the adoption of GMOs and significant political pressure from others to encourage such adoption.

FEAR OF FAKE INPUTS

Counterfeit inputs are an issue, particularly when it comes to cotton seed as discussed above, but such inputs are much less common than in other countries such as Uganda or the DRC. Fake, obsolete, or adulterated inputs are an occasional occurrence, but the relevant agencies generally work together with the private sector to deal with fakes as quickly as possible. Fear of fakes does not seem to be so pervasive as to inhibit the uptake of inputs.

WILLINGNESS TO USE INPUTS

Zambian farmers show a willingness to use inputs when they are available and affordable. Licensing issues can be burdensome, especially for small farmers, but they do not seem to have reduced the desire to acquire inputs. This is in contrast to some other African countries (as described in the AgCLIR reports for Uganda and Ghana), where small farmers may be extremely conservative and risk-averse or where social norms in a village may discourage individual farmers from investing in inputs.

WOMEN AND LICENSING

The various license requirements do not discriminate against women particularly, but they do tend to affect women disproportionately. Women in Zambia have lower rates of literacy and numeracy than men, and have lower incomes and less access to cash. It is thus more difficult for them to overcome even relatively modest bureaucratic obstacles. For instance, registering as a business with PACRA may require a trip to Lusaka, the filling out of several forms, and a fee of a hundred dollars or so. All other things being equal, this is likely to be more difficult for a small female trader or processor than for her male equivalent. PACRA does not keep formal statistics on women-owned businesses, but interviewees agreed that the vast majority of new businesses are registered by men. Similarly, interviewees at MACO agreed that almost all export licenses are granted to men.

RECOMMENDATIONS

Secure technical assistance and support to SCCI. SCCI needs a variety of technical assistance and other support. It is understaffed and not very well funded, and has only a limited laboratory. It needs training, especially for variety testing; technical assistance with its community seed enhancement and local inspection programs; and funding for expansion and upgrading of its laboratory. This last item will be particularly important if Zambia does ever venture into GMO research, so that SCCI will have a science-driven evidence base. Also, advocates of smallholder crop diversification should support SCCI and encourage expanded coverage for improved seed varieties for appropriate crops other than maize. It might also be worthwhile to consider supporting SCCI's membership in UPOV. Finally, SCCI's current location—in Chilanga, just north of

Lusaka—is adjacent to a cement factory, which causes contamination problems with airborne dust; the facility's largest building is quite old and has been condemned. SCCI would benefit tremendously from a new headquarters facility and main testing location.

Priority: Medium
Term: Short
Difficulty: Low

Review ECZ's portfolio and needs with an eye towards capacity-building. ECZ has an immense portfolio and inadequate resources to meet its statutory mandate. With climate change already impacting large and small producers in Zambia, the need for proper research and adaptive techniques will only grow. So far, it appears that ECZ must operate without a long-term strategy, moving resources where there is most political and public attention or where it can generate the most fees. It is also possible that some of its responsibilities may overlap with the environmental divisions of various ministries.

Despite its vast responsibilities, ECZ is not receiving direct assistance from any donor. It is therefore recommended that ECZ's portfolio be reviewed, with an eye toward possible overlaps and the identification of priority areas. This review should include a gap analysis and concrete recommendations for the most efficient allocation of ECZ's limited resources. Building ECZ into a competent modern environmental regulator will take years, but a funded and functional agency can truly make an impact on Zambia's management of natural resources, such as by mitigating soil erosion by industry and unsustainable commercial farming. However, ECZ has clear and obvious gaps in training, personnel, and equipment; a comprehensive assessment would prioritize these.

Priority: High
Term: Medium
Difficulty: Moderate

Support a public-private partnership to improve chemical container management. One gap mentioned by several stakeholders is container management. Zambia lacks a reverse supply chain for the disposal of chemical containers. The best ECZ can do is to recommend "triple wash, then flatten"; a few containers are incinerated, but most end up in landfills or fly dumps. This is a minor but growing problem, as the volume of chemicals to be disposed of has been growing steadily; water tables are already under stress in some areas of Zambia, so the risk of contamination is becoming a real issue. Croplife has expressed interest and willingness to work with ECZ on developing better disposal methods, but ECZ lacks the resources to respond. With donor assistance, this could be an effective public-private partnership to resolve an important environmental issue.

Priority: Low
Term: Medium
Difficulty: Low

Secure technical assistance to PACRA and encourage the geographical extension of services, particularly in serving the needs of rural small businesses. PACRA is self-financing and does not suffer from obvious deficiencies of staffing or equipment. However, under its five-year strategic plan, PACRA wants to undertake ambitious expansion in several directions. It wants to expand geographically, adding more offices and better serving rural small businesses, many of which operate informally. This is a critical adaptation for the agency, in line with this report's findings about the importance of decentralized public services for rural smallholders and processors. PACRA also wants to streamline and speed up registration processes by the aggressive use of IT, make its documents publicly available over the Internet, and at least begin a pilot project for online registration. It also wants to bring Zambia into full TRIPS compliance by 2013 or 2014 and expand its activity within ARIPO. All these activities could be accomplished faster and more easily with donor support. PACRA's management has worked closely with donors in the recent past to achieve positive

outcomes; this makes PACRA particularly attractive as a target for assistance.

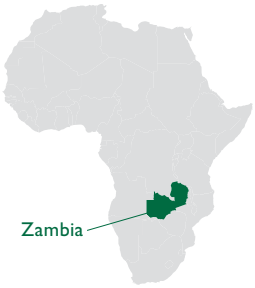
Priority: Medium
Term: Medium
Difficulty: Low

Investigate the possibility of opening a third agricultural laboratory. Zambia has only two complete agricultural laboratories, at the University of Zambia and at Mount Makulu (ZARI). Both of these are in the Lusaka area, yet another public resource that is accessible only by those agribusinesses situated along the line of rail and close to the capital. Another laboratory elsewhere in the country could dramatically shorten the time for examination and analysis of everything from soil samples to pesticides. This activity could be combined with support for existing labs, especially the labs at SCCI (which needs new equipment and more capacity) and the lab at ZABS (which has some lab equipment, but does not have a proper ISO/IEC 17025 accredited lab).

Priority: High
Term: Medium
Difficulty: Moderate

Help develop a fertilizer law.
This can be done in cooperation with stakeholders, particularly the Fertilizer Industry Association. The topic is sensitive because of the existence of the highly political FISP; however, a fertilizer law would in no way affect the FISP and should make its work easier and more effective. There is no universally applicable, model fertilizer law. But there is a set of accepted international best practices, and a number of laws exist around the region that could serve as the starting point to expanding smallholder and rural access to fertilizer through a competitive, vibrant market, rather than simply government subsidy.

Priority: Low
Term: Medium
Difficulty: Moderate



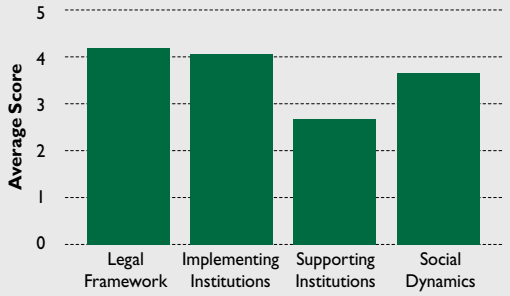
GETTING CREDIT

By regional standards, Zambia's financial sector is robust. There are 18 commercial banks and 25 registered microfinance institutions (MFIs). The sector has been liberalized and privatized for over a decade. Fourteen banks are either foreign-owned or have significant foreign investment. No bank has gone bankrupt in the last 10 years, and the majority of commercial banks all appear to be stable and liquid.[26]

The World Bank's ranking of "Getting Credit" in Zambia for 2011 is an astonishing sixth place in the world—tied with the United States, and higher than Germany, Japan, or Switzerland. Only two other countries in Africa (South Africa and Kenya) score as high. This ranking reflects the limitations of the World Bank's methodology more than the actual ease of getting credit (see box).[27] Notwithstanding a stubbornly high median interest rate—around 20 percent—Zambia's financial sector is surprisingly vigorous, especially given the country's small population (less than 14 million people) and overall level of development.

Some of this vigor extends to the agricultural sector. This is unusual. In most Sub-Saharan African countries, agriculture makes up less than 5 percent of the portfolio of commercial banks. In Zambia, the figure is approximately 15 percent. This fact suggests that the

GETTING CREDIT



GETTING CREDIT	
Doing Business Ranking 2011	6
Doing Business Ranking 2010	30
Strength of legal rights index (0–10)	9
Depth of credit information index (0–6)	5
Public registry coverage (% of adults)	0
Private bureau coverage (% of adults)	3

WHY IS ZAMBIA'S *DOING BUSINESS* RANK SO HIGH?

The World Bank's *Doing Business* indicators use a fixed methodology to determine their "Getting Credit" score. First, they check the legal framework with 10 yes-or-no questions: for instance, are secured creditors paid first when a business is liquidated? If yes, the country gets one point. Zambia's legal framework is friendly to the rights of creditors (one of *Doing Business*' emphases), so it scores 9 out of 10.

Then the *Doing Business* indicators check for the existence of a credit registry, and whether it satisfies a few simple requirements. Zambia has a small but functional credit registry, so it gets full marks here.

But, as one Zambian observer put it, "the *Doing Business* indicators only check whether the car works. They don't check whether it's actually going to drive anywhere." So while it is certainly encouraging that Zambia has such a high score, viewed alone it does not paint a full picture about actual ease of getting credit.

26 The one exception to this is the Finance Bank, which was taken over by the Bank of Zambia (BoZ) on December 10, 2010, for "conducting its business in an unsafe and unsound manner"

27 The details of the methodology can be found at http://www.doingbusiness.org/methodology/getting-credit.

agricultural sector is—by African standards—unusually well capitalized.

As discussed throughout this report, Zambia has two main agricultural economies. One is composed of smallholder farmers, growing food for subsistence, occasionally with a modest surplus for market. One interviewee described this sector as "perfectly typical African": like agricultural sectors in most African countries, the smallholder sector is undercapitalized, makes limited use of equipment or inputs, is almost entirely without irrigation, and is largely at the mercy of weather. Moreover, smallholder farmers operate within a policy environment that is highly unpredictable, especially for the their principal crop grown, maize, thus making it a risky proposition for banks or MFIs. Most of Zambia's smallholder farmers have little to no contact with banks or MFIs, either as borrowers or as depositors (only 18 percent of rural Zambians have any form of formal financial product).[28] Many of these producers are not only unbanked but are effectively unbankable. This is primarily because of the very high levels of real and perceived risk, discussed throughout this report, and which extend to smallholder Zambian agriculture. Only when these risks are reduced can Zambia expect to see an increase in lending to small or informal agribusinesses.

Another important factor is the very high level of informality. Most small Zambian farmers do not have clear title to land or other property that can be used for collateral, do not have a business license, and have no sort of credit history. Additionally, many small farmers are illiterate or innumerate. Under these circumstances, it is surprising that as many as 18 percent of them have any dealings with formal finance at all. That said, the level of informality is likely to remain high for the foreseeable future, and this will be a significant restriction on the potential expansion of credit to smallholder farmers.

The other economy is made up of Zambia's large commercial farms and processors,[29] which face very different constraints and opportunities. These large agribusinesses have relatively cheap and easy access to credit and other financial services, including insurance. They are capital-intensive and make regular use of advanced agricultural technology and equipment. Most have invested in irrigation systems. All have relatively quick and easy access to markets and to market information. Reports on their linkages to smaller farms vary, with the tobacco sector the primary example of commercial farmers contracting smallholders as outgrowers.

Commercial lending and other financial services focus on this latter group. In fact, Zambia's financial sector and its large commercial farms are quite closely linked; the large farms have been able to thrive because of easy access to financial services, while at least part of the financial sector's growth and liquidity is due to the existence of the large farms.[30]

Zambia also has a small but important subsector of "emergent" farmers, who maintain and gradually expand medium to large farms and ranches. This group has surprisingly little access to available financial services. But as they steadily grow in importance, emergent farmers are likely to demand affordable credit and other financial products. The financial sector should be receptive to this demand, since the commercial agricultural market for financial products is quickly becoming saturated. (Almost every large commercial farm now has crop insurance, for example.) Thus, banks and insurance companies must look down-market for new clients, and emergent farmers are increasingly poised to fill this role.

Emergent farmers are not likely to be incorporated as businesses; however, they tend to have a much higher level of formality than their smallholder neighbors. An emergent farmer is much more likely to be literate and to own land or other significant property. An emergent farmer may or may not have a bank account, but is likely to have experience with at least some sort of formal credit—commercial credit from an agrodealer, loans from an MFI, or some sort

28 The exception to this statement is the limited interaction that individuals have with banks, through their cooperatives, to access FISP funds.

29 Commercial farms are distinguished in part by being large—sometimes thousands of hectares—and privately owned. They are worked by large labor forces for wages and usually have very high per-hectare productivity. Almost all of them are located along the line of rail. The exact number of large commercial farms is subject to some debate. The last Crop Forecast lists approximately 1,250 commercial farms (defined as farms over 20 hectares under cultivation) in Zambia—but because of the way "commercial" is defined in this survey, the total number also includes some percentage of "emergent" farmers described earlier in the report.

30 The details of this argument go beyond the scope of this report. However, Zambia's commercial banks used to have larger agricultural portfolios than they do today; the current figure of 12% is down from about 16–18% just four or five years ago. Without large commercial farming, the banking sector would probably be somewhat smaller, and would almost certainly be much less diversified as well, with greater exposure to mining along with a more typical African portfolio of real estate, construction, and commercial loans.

of contract farming or contract ranching agreement with a large buyer. And emergent farmers are likely to be employers, sometimes of large numbers of agricultural workers—although very few will be formally registered as such.

The three subsectors are not separate. Many large commercial farms are surrounded by smallholders, who alternate between working their own plots and providing wage labor for the large farm as needed. Thus, growth or stagnation at one level (e.g., commercial farm level) will greatly affect the outcomes at other levels, including smallholders. The failure of Agriflora (a large horticulture exporter) in 2004 is a good example of this—its bankruptcy alone left some 500 smallholders without a buyer of green beans or the infrastructure or inputs to continue exporting to the European Union (EU). Emergent farmers often enter into contracts or cooperative relations with nearby large farmers—"piggybacking" on their commercial relationships to gain access to export and other markets, for instance, or joining together with the large farmers to pave a road. Some emergent farmers are former employees of large commercial farms. Others are local community leaders who may enter into a range of relations with large farms, from organizing local labor to competing for state support and resources.

One interesting aspect of the relationship is that information tends to flow very quickly between the three subsectors. This is obviously true in the case of market information and rumors, but it is also true in the case of technological and administrative information. Emergent farmers may not be able to afford the various machines and techniques that are deployed on the large farms, but they are very much aware of the benefits associated with them.

CAPITAL

Most of the banks' capital, and almost all of the MFIs', comes from short-term deposits. Most banks offer certificates of deposit, but these account for less than 10 percent of all deposits. Few banks issue bonds or borrow on international markets. As a result, the majority of bank loans are short term; over 40 percent are for one year or less, and less than 5 percent are for more than five years.

This capital structure is fairly typical of a developing country. More unusual is the fact that the pension funds and the insurance sector do not place long-term deposits in the banks. The reasons for this are unclear. The pension funds are parastatals, but they have broad discretion as to investment; for instance, they can and do invest in real estate and various sorts of bonds. They can also deposit their funds in banks. Apparently, however, they demand very high interest rates as a condition before depositing their money. The rates they demand for long-term deposits are prohibitively high; as a result, few banks will accept deposits from pension funds. Insurance companies, meanwhile, seem to prefer to stay liquid; they take short-term deposits, rarely more than 180 days. The reasons for this are unclear, but the net effect is to deprive the banks of possible sources of long-term capital.[31]

The local banking sector is partly dollarized, and many loans are either in dollars or are

31 One interviewee offered the intriguing speculation that Zambia's insurance companies do not want to make long-term deposits because of the possible impact of HIV: "people keep dying, so they have to stay liquid."

dollar-denominated.[32] This is particularly true of loans to the agricultural sector. The Central Bank's statistics do not break down dollarization by sector, but all interviewees agreed that the dollarization rate is higher for agricultural loans, especially larger loans to commercial farmers and large processors.[33] Anecdotal evidence suggests that around 50 percent of agricultural loans, representing about 75–80 percent of the agricultural loan portfolio, are dollarized.

Dollarization by itself is neither good nor bad. However, it always involves an exchange risk. If the kwacha drops suddenly against the dollar, dollarized loans will become much more expensive to repay. Banks claim that they hedge against this risk by making dollar loans primarily to commercial borrowers that already do most of their business in dollars. However, this does not eliminate the risk; it simply shifts it downstream, to the clients of the borrower. The high rate of dollarization in agricultural loans means that the sector as a whole will be more sensitive to currency fluctuations, yet another disadvantage for small, poorly educated farmers ill equipped to manage sophisticated hedging instruments.

Zambia has no policies in place to encourage savings. Government employees, and recipients of government transfers, are not encouraged to open savings accounts. There are neither matched savings schemes of any sort nor any tax incentives for saving.[34]

LEGAL FRAMEWORK

Zambia's legal framework for credit is largely based on British law. This was overlain with a body of socialist law, but most of this has been repealed. The current commercial laws were largely redrafted or amended in the 1990s and early 2000s.

The existing legal framework is generally consistent with international best practice. A wide range of transactions is allowed, including various types of secured transactions. If land is held in fee simple, it can be mortgaged. Transfers of invoices and other types of debt are allowed. Commercial banks complain that the system favors defaulters, but this is an issue with the court system (see below) rather than the legal framework. Most of Zambia's relevant commercial laws are of general application (e.g., the companies law, the banking law). However, two are of particular interest—the Zambia Banking and Financial Services Act and The Agricultural Credits Act of 1995.

ZAMBIA BANKING AND FINANCIAL SERVICES ACT

This statute is the general framework law for the organization, licensing, and operation of banks and other financial service providers in Zambia. It allows for public, private, and foreign banks, and for other financial service providers as the Central Bank may choose to regulate. At this time, the Central Bank allows banks, credit unions, MFIs, and a single "building society" to take deposits and make loans. A few organizations such as finance leasing companies skirt the law by issuing debentures instead of taking deposits, but these are also regulated by the Central Bank.

THE AGRICULTURAL CREDITS ACT OF 1995

This act specifically allows for charges, liens, and security interests on crops and other agricultural products, including charges on livestock. It allows both fixed and floating charges—a relatively advanced provision, still not adopted by many African countries—and also governs the notice and publication of such charges. It also provides for the registration of charges[35] and for priority—i.e., whether a security interest in crops will take precedence over a mortgage on the underlying land, or a lien for unpaid taxes.

KEY LAWS

- Zambia Banking and Financial Services Act
- Agricultural Credits Act of 1995
- Draft Agricultural Credit Act of 2010
- Finance Leasing Authority
- Legal Framework of Land

32 The reasons for this are historic and beyond the scope of this report. This is not very unusual, however; several other countries in Africa are dollarized or "euroized" to some extent. Zambia's neighbor, the DRC, is much more dollarized than Zambia—virtually all large commercial transactions either are conducted in dollars or are dollar-denominated.

33 The reason for this is unclear. Many loans go to finance imports of inputs or equipment, but this is also true of loans in other sectors.

34 Policies of this sort are not common in Africa, but are found elsewhere in the developing world, most notably in Asia.

35 One missing piece: it does not make specific provision for the registration of agricultural equipment. This is a minor but persistent nuisance in the case of tractors, since these are not registered as vehicles.

Finally, it governs contract farming and debts incurred for the purchase of inputs, whether in the form of loans or commercial credit. It is the basis for much of the lending to large commercial farmers.

THE AGRICULTURAL CREDIT ACT OF 2010 (DRAFT)

At the time of this diagnostic, this draft law was before Parliament. If passed, it would repeal and replace the 1995 law. In addition to the provisions in the existing law, the draft bill would create a system of warehouse receipts. Current law does not prohibit this, but the existing legal framework does not encourage it as it should. The draft act would establish a Warehouse Licensing Authority, which would have authority to inspect, license, and register warehouses. It is anticipated that this would take place in close cooperation with ZAMACE, since ZAMACE has already begun training warehouse operators and promulgating recommended standards. However, the draft law does not require this, or indeed mention ZAMACE at all. The text of the law simply says that MACO can vest licensing authority in an existing entity. The law would set up rules for the issuance, sale, trade, and transfer of warehouse receipts, with the long-term goal of developing a robust warehouse receipt system. Finally, it would set criminal penalties for relevant violations (i.e., the forgery of warehouse receipts).

As one interviewee stated, "This could be great—if it works." A warehouse receipt is first and foremost a critical trading instrument—allowing "sight-unseen" trades and transfer of ownership without physical delivery, and ultimately facilitating speculative trading. Reliable and tradable warehouse receipts also encourage the use of warehouses for storage, which in turn encourages quality control and tends to reduce post-harvest losses. A warehouse receipt is also a finance instrument, providing secure collateral for inventory financing. Nonetheless, there are challenges. There has already been one large-scale, donor-funded attempt to introduce a warehouse receipt system in Zambia: the Zambian Agricultural Commodities Association (ZACA). It was not a success, and ZACA closed its doors in 2006.[36]

CREDIT INFORMATION

Zambia has a small but functional Credit Registry, which shares both positive (repayment) and negative information about borrowers. Since there are relatively few agricultural borrowers, its direct impact on credit on the agricultural sector is modest. From the narrow viewpoint of agricultural borrowers, the registry's major impact to date has been helping to elevate Zambia's "Getting Credit" score in the World Bank indicators. However, as lending in the sector expands, it will surely become more important.

REAL PROPERTY AND MORTGAGES

Real property is by far the dominant form of security in Zambia. The majority of commercial bank loans, and a large minority of microfinance loans, are secured by real property mortgages. Only a small minority of Zambia's land is available for mortgages, however. Only 2.5 percent of rural Zambians have a true title to their land.[37] Smallholders, in particular, are almost never able to produce fee simple titles that would be acceptable to a bank. Either they do not have fee simple ownership, or they are not able to show the necessary documentation. (Zambian law provides for several forms of state and traditional ownership.)

To date, this has only had a modest effect on agricultural lending, because almost all large commercial farms can be mortgaged. However, as lending moves down-market toward emergent farmers and smaller producers, this is likely to become a more significant issue. Zambia's banks have the habit, common in developing countries, of overcollateralizing their loans. Collateral rates of 150 percent, 200 percent, or even higher are not unusual, and disputes over collateral value between banks and large commercial customers (including large farmers) are common. This practice is understandable, given

36 Various reasons have been given for the failure of ZACA. Perhaps the most important was that banks and other lenders showed a complete lack of confidence in ZACA receipts as collateral.

37 FinScope 2009, *available at* http://www.boz.zm/FSDP/FinScope_Zambia_Brochure.pdf.

the perceived risks of Zambia's lending environment. However, this will have to change if banks are to expand beyond their current market niches. In the agricultural sector, lending to emergent farmers and small producers and traders will have to rely less upon land and more upon other forms of collateral and other types of security.

Like most African countries, Zambia has no secondary mortgage market and no markets for subordinated debt. There are no Zambian debt-rating agencies.

SECURED TRANSACTIONS

Secured transactions of movable property other than vehicles are not common in Zambia. Banks dislike taking movable assets except as part of a larger package dominated by real property, i.e., a warehouse, its contents, and the land it sits on.

That said, secured transactions are not unknown. The legal framework permits a wide range of security interests, including the use of movable and intangible property as collateral. The Agricultural Credits Act allows agricultural charges: transactions secured by a future harvest, or crop liens. At least two local law firms regularly write contracts with such charges included, most typically in contracts between large farmers and banks or input suppliers. Loans secured by factory equipment or agricultural machines, while rare, do occasionally take place. The issue is not the legal framework, but simply that banks are somewhat risk averse and prefer to secure with real property. (The legal framework does allow a mixture of real and movable property, and arrangements of this nature are quite common.) Also, several banks have finance leasing programs, which have often been preferable to secured transactions. This has changed in recent years because of the change in tax treatment of finance leases. The law, however, does not incentivize these practices, and the banking sector is still somewhat reluctant to accept future harvests or other intangibles as collateral for secured transactions.

There is not a single, unified collateral registry. Charges against vehicles are registered at the Motor Vehicle Agency, charges against land at the local land registry, and charges against businesses at PACRA. The creation of such a registry has been discussed at various times, but there is not currently any serious drive to move forward with this.[38]

ACCOUNTS RECEIVABLE FINANCING

Zambia's legal framework allows accounts receivable financing in a variety of forms, including invoice discounting and export factoring. The most frequently used form is reverse factoring—where a bank customer sells the bank the invoice of a large, respected client at a discount. This appears to be a well-accepted practice in the mining sector, where subcontractors regularly use invoices from large mining companies for financing. At this time, there is no close equivalent in agriculture.

ENFORCEMENT

Enforcement of loan agreements is a problem in Zambia. While the legal framework is adequate, the court system is slow and overcrowded, and judges often have only a limited understanding of contracts and commercial law. Defaults and foreclosures do take place, and the system is able to process them, but not quickly or efficiently. Banks respond to this by overcollateralizing. Almost all large commercial loans are secured by at least 125 percent of their value, and 150 percent or even 200 percent is not unheard of. In almost all cases, the primary collateral is real property.

IMPLEMENTING INSTITUTIONS

THE CENTRAL BANK

Zambia has a typical Central Bank (also known as the Bank of Zambia—BoZ), with responsibility for issuing currency, setting monetary policy, offering treasury bills and government bonds, and regulating Zambia's banks and other lenders (though not the insurance sector, which has its own regulator). Interviewees in the financial

38 A detailed recent discussion of collateral registries and their impact on lending can be found at the World Bank publication, *Secured Transaction Systems and Collateral Registries* (2010), *available at* http://www.ifc.org/ifcext/fias.nsf/AttachmentsByTitle/PublicationMT_SecuredTransactionsSystems/$FILE/SecuredTransactionsSystems.pdf.

sector complained that the Central Bank was overly bureaucratic and high-handed, but consistently gave a high opinion of the bank's competence and impartiality. The bank publishes a monthly newsletter in both hard- and soft-copy formats and includes, among other things, statistical information. It is widely circulated around the financial sector, and can be seen in most bankers' offices. The Central Bank also has a large and informative website which includes regularly updated statistical information, exchange rates, interest rates, and news.[39]

Commercial banks and MFIs are regulated separately, in a manner that appears consistent with international best practices. The banking community is generally satisfied with the Central Bank's regulatory regime. There are complaints about reserve requirements, but this is the case in most countries, and the reserve requirements in Zambia do not seem to be unduly high. The MFI sector had two complaints that appeared more substantive: first, the Central Bank is making it unduly difficult for MFIs to take deposits; and second, the Central Bank is imposing reporting requirements (i.e., detailed monthly and quarterly reports) that are appropriate for commercial banks but burdensome for MFIs.

BANKS

There are 18 banks operating in Zambia, largely well capitalized and liquid. All but 2 are entirely in private hands, and at least 10 of the 18 are partially or wholly foreign-owned. The banking sector is currently liquid and stable and—by regional standards—relatively well engaged with the agricultural sector. Zambia's banks offer a relatively wide range of products, including short- and medium-term loans, mortgages, overdrafts, and letters of credit (LOCs).

KEY IMPLEMENTING INSTITUTIONS

- The Central Bank or Bank of Zambia (BoZ)
- Banks
- Microfinance institutions (MFIs)
- Financial leasing providers

The banking sector has come through the financial crisis without suffering serious harm. No bank has gone bankrupt or shut its doors. While the levels of NPLs and distressed loans rose sharply from 2007 to 2009, they are now declining. The major effect of the crisis seems to have been to make banks more risk averse.

In 2009 and early 2010, banks sharply cut the rate of new lending. Since deposits did not contract, banks were left unusually liquid. Many banks chose to invest this cash in government T-bills, which had the interesting side effect of bidding up the price of T-bills and thus lowering the yields of T-bills to historic lows: yields bottomed out at 5 percent and are currently between 7 percent and 9 percent.[40] Since the Central Bank's anticipated inflation rate is 7.5 percent, this means that T-bills currently bear a real negative interest rate. The fact that banks are still buying them suggests just how risk averse they have become.

One slightly unusual aspect of the banking sector is that it seems relatively isolated from direct political interference. For instance, interviewees who took part in this diagnostic affirmed that political loans are relatively rare. Bankers said that they do sometimes feel pressure to lend but that this is usually indirect: "We get lots of suggestions and requests, but not much real arm-twisting." This perception contrasts with some of Zambia's neighbors in the region.

Interest rates in Zambia are high. Interest rates for dollar loans typically run about 9–13 percent,[41] while interest rates for kwacha loans can range from 18 percent to 26 percent or more. Interest rates in the agricultural sector are slightly higher, but the rates are fairly consistent across a wide range of commercial loans.

The reasons for exorbitant interest rates are unclear and much-debated in Zambia.[42] While interest rates are high across the region, none of these factors seem to be in effect in the case of Zambia. For example:

39 See http://www.boz.zm/.

40 This is one of the lowest rates in Sub-Saharan Africa. By way of comparison, Tanzanian T-bills pay 12% and Ugandan about 16%.

41 Zambia's economy is partly dollarized; it is not unusual for contracts and transactions between large businesses either to be in dollars or to be pegged to the kwacha-dollar exchange rate. The kwacha floats freely, and there is no limit to the amount of dollars that can be bought or held (though large dollar transactions may attract the attention of the Central Bank).

42 This issue came up multiple times—with individual banks, the Central Bank, and producers, processors, and associations. A wide range of explanations was offered, but even the Central Bank was not able to provide a conclusive answer.

- The T-bill rate is currently one of the lowest in Africa, with short-term T-bills paying just over 7 percent—less than the anticipated rate of inflation.[43] Over the last 10 years T-bill rates have declined (e.g., the cost of short-term government debt has decreased), while inflation rates and commercial lending rates have also declined. Margins between T-bill rates and commercial lending rates have narrowed. This suggests gradual reductions in risk across Zambia's financial sector.
- With a few exceptions (deposits held by large parastatals, such as the pension fund), banks do not pay very high interest rates on most of their deposits. The majority of bank deposits pay 2 percent or less.
- The rates for non-performing loans, distressed loans, and write-offs are not high by regional standards, but are very high by global standards. In 2009, the overall economy had NPL levels of 13 percent whereas in agriculture the rate was 37 percent.[44] Although these rates increased dramatically in 2008–2009, they significantly stabilized in 2010 and even began to fall—partly because of banks making necessary adjustments, and partly because of a general improvement in Zambia's economy.
- Banks' regulatory burdens and administrative costs are not unusual for the region. The Central Bank's reserve requirements are not particularly stringent (and, in fact, were slightly relaxed earlier this year in an effort to encourage lending).
- Most banks are liquid, and, according to the Central Bank's statistics, the banking system in general has plenty of cash on hand.
- The anticipated rate of inflation is relatively low—between 7.5 percent and 8 percent. This is consistent with the pattern of the last few years, which has seen a steady decline in inflation since it peaked at around 16 percent in 2008.

In short, none of the usual reasons for high interest rates in a Sub-Saharan African country

seems to be present. Accordingly, other possible explanations emerge. One is that the banks engage in either tacit or explicit collusion to keep interest rates high. This is not impossible, but the large number of banks in Zambia makes it unlikely. A second possibility is that the banks do not believe the Central Bank's inflation projections and are keeping interest rates high because they believe that inflation will be high. This also seems unlikely; the high interest rates affect both local currency (kwacha) and foreign currency loans, and are consistent over a range of terms from 90 days to two years.[45] A third possibility is that banks are very risk averse, having seen a sharp rise in distressed loans and NPLs over the last two years. A fourth possibility is that banks are risk averse because of policy uncertainty, which drives up risk premiums in the market for agricultural finance. A fifth possible explanation is that banks have no faith in the strength of Zambia's economy over the short-to-medium term, and are keeping interest rates high from fear of systemic risk (i.e.,

43 Zambia's T-bill rates have been extremely volatile in the last two years, surging over 15% at one point in 2009 and then dropping down to just 5% in the third quarter of 2010. Since then, T-bill rates have been slowly rising; as of January 2011, the rate for short-term T-bills is fluctuating between 7% and 7.5%. One interpretation of this would be that banks undertook a "flight to quality" in 2009 and early 2010, contracting their lending while moving money into T-bills. The slow, steady rise in rates over recent months may reflect a belated realization that this was an overreaction.

44 NPL rates of 10% or more are not unusual in Sub-Saharan Africa.

45 If banks were worried about rising inflation, kwacha loans would be affected more than dollar loans, and over the long term more than the short term.

another business crisis or recession). A sixth possibility is the very high cost of operation—in 2009 it was 13 percent of total loans, compared with 9 percent in Botswana and 3 percent in South Africa. Finally, it may be that the banks are simply being conservative, and that interest rates are fundamentally "sticky." If this optimistic view is correct, then the current high rates should trend downwards. Whatever the reason, high interest rates are a systemic problem. They raise both production and processing costs, and make Zambia's agricultural products less profitable and less competitive.

Another issue that affects access to credit is formality. All Zambian banks require an official identity document before they will open an account. However, an estimated 17 percent of all Zambians do not have such a document.[46] Banks also require a business license before they will allow a customer to open a commercial account or apply for a wide range of products, including LOCs and almost all forms of loans. Most banks also want to see either a business license or evidence of regular, formal employment before they will issue even small personal or consumer loans. This is not a serious concern for large commercial farmers or processors, but it dramatically restricts the availability of credit for small and emergent farmers and small processors. Banks also tend to want real property as collateral, and do not accept informal or traditional property rights or interests. Again, this is not a problem for large producers, but it makes bank finance simply inaccessible for the majority of Zambia's farmers and processors.

Banks require registration with PACRA before allowing businesses to open a commercial bank account or apply for a commercial loan. This has tended to create a sharp division between small businesses that are willing and able to register and those that are not. Businesses that do not register with PACRA—for whatever reason—are simply shut out from commercial credit. This makes it even more difficult for emergent farmers and small processors to access credit from banks.

Zambia has, for a developing country, a reasonable number of bank branches,[47] but these are not distributed evenly around the country. Banks tend to be physically concentrated along the line of rail, with few branches in rural areas. Farmers in these areas may not be able to use banking services even if they are otherwise bankable.

Most of Zambia's banks are members of the Bankers Association of Zambia (BAZ). BAZ is quite active, both as a representative voice for bankers to the Central Bank and the government and as a forum and clearinghouse for discussion among the banks and other stakeholders.

One other issue that came up in several interviews was a shortage of skilled banking personnel. Banks agree that the university system does not produce enough qualified and competent graduates. All banks interviewed stated that, in order to develop the human resources they need, they had to spend significant amounts of money on internal training. In particular, banks have a shortage of trained personnel who can assess and manage agricultural loans. Some banks have brought in agricultural specialists from elsewhere in Africa, especially South Africa and Zimbabwe, but lack of human resources does seem to be one constraint on agricultural lending. The scarcity of trained and competent personnel means that they are relatively expensive. These are problems everywhere in Africa, however, and by regional standards Zambia seems to be doing fairly well; while human resource issues were significant, no interviewee stated that they were a major or crippling problem.[48]

MICROFINANCE INSTITUTIONS (MFIS)

Zambia's MFI sector is one of the smallest and weakest in the region. The total MFI portfolio is less than $10 million, and MFIs account for less than 1 percent of all lending. Per-capita MFI lending is less than $1 per Zambian. By way of comparison, MFI lending in Uganda is

46 CGAP, *Financial Access: Measuring Access to Financial Services Around the World*, http://www.cgap.org/gm/document-1.9.38735/FA2009.pdf, p. 18, citing a 2005 Fintrac study.

47 Ibid. at p. 56 (appendix). Zambia has 3.5 bank branches per 100,000 people, which is slightly above average for a country of its income level.

48 Zimbabwe's troubles may be a factor here. Interviews in the banking sector showed a surprising number of Zimbabweans and former Zimbabweans working in middle and upper management.

about $3 per capita, and in Senegal is over $20. Furthermore, MFIs make very few loans to agricultural producers, which are generally loans to small traders and agroprocessors (i.e., hammer mills) in local markets.

This is unfortunate, because MFIs have been a major source of capital to agricultural sectors dominated by smallholders in other African countries; a large body of empirical evidence suggests that microfinance can drive increases in profitability for micro and small businesses.[49] In Senegal, for instance, the MFI sector accounts for about half of all agricultural lending. Senegalese MFIs provide tens of millions of dollars in small and short-term loans for the purchase of inputs, especially seeds and fertilizer, and there are a number of MFIs that specialize in lending to agricultural producers. MFIs in Senegal also provide financing up and down agricultural supply chains, to traders, truckers, processors, and even input retailers. Nothing like this is happening in Zambia.

The reason for this appears to be historical. Until quite recently, MFIs were treated as NGOs. They were not allowed to take deposits and were sharply limited in the number and type of loans they were allowed to offer. As a result, the MFI sector grew very slowly. This changed, however, in 2008, when MFIs were given formal status as financial institutions and regulated by the Central Bank. While there are still complaints about the strictness of regulation, the MFI sector does appear poised for rapid growth, albeit from a very small base.

The MFI sector has a number of weaknesses. Zambia's MFIs suffer from a lack of technical training, a lack of internal controls, and a lack of management capacity. The sector in general has an internal brain drain problem, as the best people tend to be poached away by the commercial banks. These are normal problems for MFIs in Africa, but they are made worse by the sector's small size and lack of capital. That said, none of these weaknesses appears to be serious enough to block the sector's medium or long-term growth.

MFIs tend to be much more tolerant than banks of informality or incomplete formality. They are much less likely to overcollateralize; indeed, they are much less likely to collateralize at all. (An estimated 30 percent of Zambian MFI loans are without collateral.) Deposit-taking MFIs are likely to pay higher interest rates, charge lower fees, and be much more tolerant of very small accounts. MFI interest rates cover a wide range, depending on the MFI and the nature of the loan; broadly speaking, the cheapest loans are somewhat more expensive than a consumer loan from a bank, while the most expensive loans are comparable to the cheaper payroll finance loans (see below). MFIs are regulated by the Central Bank; they must make regular monthly and quarterly reports and hold themselves open to inspection.

MFIs do not yet compete for banks with business. At least one MFI has a tentative partnership with a bank: it encourages its larger customers to "graduate" to the bank, if it can no longer serve them, and the two entities share information. This is exceptional; so far the relationships are mostly arm's-length. This contrasts with other countries in Africa where MFIs and banks enjoy a wide range of business relationships, including mutual referrals, information sharing, collection services, and funding. If the MFI sector grows as expected, such relationships should emerge over the next few years.

FINANCE LEASING

Finance leasing can play a major role in agricultural finance in developing countries. It is particularly appropriate as a method for financing farm equipment such as tractors and irrigation equipment, because it allows the farmer to use and possess capital goods while keeping formal ownership with the leasing company. In Zambia, finance leases are used regularly by the milling subsector, particularly for the purchase of milling equipment and trucks. Leasing is of particular benefit to small and medium-sized

49 See, for example, Banerjee et al., MIT/JPAL "The Miracle of Microfinance? Evidence from a randomized evaluation," 2009.

enterprises, though it is those same businesses that struggle to be certified for any kind of credit. However, some Zambian leasing companies have launched an initiative to extend operating leases to emergent farmers.

In addition to the banks that offer financial leases, there are a number of specialized finance leasing institutions in Zambia.[50] In the past, these were a minor but significant element of agricultural finance. However, since 2008, the total value of finance leases in Zambia has dropped by more than 60 percent.[51] The reason for this is a change to Zambia's tax law, which took effect on April 1, 2007. Up until then, lessees could take finance lease payments as a tax deduction. Since then, they can only deduct the finance charge element, with the bulk of the payment being non-deductible. This has dramatically reduced the attractiveness of finance leases and has caused the sharp contraction in leasing in the last two years.

The reason for the change in the law is unclear. Zambian tax law is modeled on the United Kingdom's and, to a lesser extent, South African law; both these jurisdictions have always allowed full deduction of finance lease payments.[52] It is possible that Zambia may have been following the example of Zimbabwe, which adopted a similar provision in the early 2000s. In Zimbabwe, this seems to have led to the almost complete collapse of the finance leasing industry.

SUPPORTING INSTITUTIONS

ZAMBIAN NATIONAL FARMERS UNION (ZNFU)

ZNFU is the largest farmer based organization in Zambia, representing all regions of Zambia. It actively participates in daily politics and maintains numerous channels of communication with the public, including Farmer News Magazine and an active website. The government often engages ZNFU as a "one-stop shop" consultative forum, a practice that limits the diversity and quality of stakeholder input into government policy. ZNFU works on a wide range of issues affecting the agricultural sector, and is particularly interested in the availability of credit. Although ZNFU does not extend credit to its members, it does help them pool and exchange information about available credit, and acts as a clearinghouse and lobbying body for member complaints about banks and the banking system.

CONTRACT FARMING

Contract farming is common in some subsectors, such as tobacco and cotton. A large buyer will agree to provide inputs—typically seed, fertilizer and sprays, sometimes tools or other equipment, and occasionally technical support. In return, the seller agrees to sell the buyer the entire crop at a previously agreed price.

Contract farming can be an effective means of providing credit to farmers. However, it is sharply limited by the risk of "side-selling"—the practice by which, if a crop's price rises sharply, the farmer simply sells it to a third party instead of to the original contractor. Zambia's court system is not effective enough to be a major deterrent to side-selling, especially if the number of side-sellers is large and the amounts involved are small. As a result, contract farming tends to be restricted to crops where either (1) there are only a few buyers, and they can agree to cooperate; or (2) the commercial farming sector, where crops—and the amounts of money they bring in—can be large enough

KEY SUPPORTING INSTITUTIONS

- Zambian National Farmers Union (ZNFU)
- Contract farming
- Agricultural insurance
- Accountants
- Lawyers
- Educational institutions
- Agrodealers
- Chilambas
- Payroll finance
- Money lenders

50 There seem to be about 10 of these, though all but 2 are small. They are regulated by the Central Bank under the Division of Non-Bank Financial Institutions.

51 It is unclear how this loss has been divided between the banks and the specialized finance leasing companies. The picture is complicated by the fact that the finance leasing companies offer other financial services such as invoice discounting.

52 In the case of the UK, this is limited to finance leases of five years or less. Since most finance leases are for five years or less, this is not a significant restriction.

to make a court case worth pursuing, and so a plausible threat.

AGRICULTURAL INSURANCE

Zambia has, by African standards, an unusually robust system of agricultural insurance. Two privately owned companies and one parastatal (the Zambia State Insurance Corporation—ZSIC) offer crop insurance. A range of products is available (i.e., fire, lightning, drought, comprehensive), and several different types of crop—including both food and cash crops—can be insured. Insurance is also available for cattle and other livestock.

This is a relatively recent development. Until the last decade, agricultural insurance was rare in Zambia, and was only offered by ZSIC.[53] The majority of large commercial farms now insure their crops. As this market is becoming saturated, the insurers are actively seeking to move down-market to emergent farmers and farm cooperatives. These smaller customers have less cash on hand and are much slower to understand the benefits of insurance, so this is a slow process. However, many emergent farmers are willing to consider commercial farmers as a role model (see below), which makes marketing to them at least possible.

Insurance is critically important in the development of agriculture. The presence of insurance lowers the risk of loss to a lender. Perhaps more important, it also dramatically decreases the risk of loss to a farmer. All agricultural insurance firms perform risk surveys and advise their clients on risk reduction; in many cases they require that certain actions be taken (i.e., vaccination of animals) before they will issue a policy. As a result, insured producers tend to have much lower loss rates than uninsured ones.[54]

Insurance companies are regulated by the Pensions and Insurance Agency (PIA). A few companies also offer, in addition to crop insurance, credit insurance, although this is not yet very common in the agricultural sector.

ACCOUNTANTS

Banks say that they are generally content with access to accounting services. MFIs do not feel a strong need for highly trained accountants, as most of their financial transactions are relatively simple. It is not unknown for firms in Zambia to keep two sets of books—one for tax purposes and one "real" set that is strictly for internal use. Unsurprisingly, banks are sometimes suspicious of books and financial statements presented to them for credit purposes.

All accountants in Zambia are members of the Zambian Institute of Chartered Accountants (ZICA). ZICA is working to implement International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). All ZICA members are required to use IFRS, except when dealing with micro- and small enterprises (see below). Oddly enough, there is no corresponding legal requirement for companies to use IFRS, although as a practical matter, almost all large businesses (including all banks) do so.

ZICA has stated that it does not plan to apply IFRS to micro and small enterprises (MSEs). Instead, ZICA has developed a simplified set of standards for MSEs.[55] This is an acceptable option under international best practices, and is likely to ease the transition into the formal sector for at least some Zambian MSEs.

LAWYERS

There are less than 1,000 lawyers in Zambia, notwithstanding the fact that there are thousands of law graduates in the country. Zambia's bar exam is quite difficult. Most law graduates never take it, and of those who do, less than half pass on any given try.

Against this backdrop, some interviewees expressed concern about access to and cost of legal services. The great majority of lawyers are concentrated in the capital, and almost all others dwell along the line of rail. Most banks employ in-house counsel but also use outside lawyers when needed, especially for litigation.

53 One interviewee stated that the idea of agricultural insurance as something normal and necessary was introduced to Zambia by Zimbabweans.

54 This is to some extent a matter of self-selection: a farmer who cannot afford to inoculate his animals will not even try to get them insured. However, there is also a major element of proactive risk mitigation. For example, one of the most common causes of crop loss is fire, and one of the most common causes of fire is unsecured fuel—open containers of diesel, and the like. All the Zambian insurers will walk the grounds, examine garages and equipment sheds, and advise on fire safety. Often the recommended changes will be low cost but will produce a sharp decrease in risk of loss.

55 "Simplified" is a relative term, as the MSE Standards run to 134 pages. They can be found online as a downloadable Word document at http://www.zica.co.zm/content.php?id=199.

Lusaka has a number of lawyers who specialize in particular aspects of credit or finance (i.e., commercial mortgages). It also has offices of several international law firms. Outside Lusaka, almost all lawyers are solo practitioners. Agricultural producers and processors located outside the line of rail have very limited options in choosing legal services, even if they can afford them. On the positive side, there is general agreement that the quality of lawyers is high.

Zambia's lawyers are organized into the Law Association of Zambia (LAZ). LAZ occasionally offers continuing education in the form of seminars. None of these seems to have focused on either agricultural issues or access to credit, but it might be possible to use LAZ as an instrument of outreach to the legal community (i.e., for education on the new warehouse receipts law).

EDUCATIONAL INSTITUTIONS

Banks widely complain that university graduates lack basic skills. Both the banks and the MFIs do a great deal of internal training, subject to available resources. This is a large and continuing cost for banks and financial institutions, especially as trained staff tends to move to better-paying jobs in higher-tier institutions or with competitors. All actors in the financial sector reported shortages of IT specialists, risk analysts, and general managerial skills.

AGRODEALERS

Agrodealers occasionally allow installment purchases, deferred payment, or other forms of commercial credit to certain favored customers. Agrodealers interviewed were reluctant to discuss this in detail, as most dealers take the public position that credit will not be extended. Agrodealers also complained that they did not receive enough credit themselves—whether in the form of loans, or commercial credit extended from wholesalers or importers—to be able to extend much credit without suffering cash flow problems.

CHILIMBAS

Chilimbas are informal savings associations common in both rural and urban areas. Members of a chilimba commit to making regular payments, typically on a weekly basis. Each payment cycle, one member gets to take and use all the payments of that cycle. So a typical chilimba might have 19 members, each contributing 5,000 kwacha per week. Each week one member would take all 50,000 kwacha. Chilimbas are common all across Zambia, and are used by middle-class as well as poor people. However, women are much more likely to be members of a chilimba than men; anecdotal evidence suggests that most chilimbas are composed entirely of women, and some men said that they would not join a chilimba.

Chilimbas generally do not provide enough money to make major equipment purchases. However, small farmers do sometimes use chilimbas to purchase inputs such as tools and fertilizer. And while banks do not seem interested in chilimbas, MFIs are aware of them, and may use them as an entry point for marketing their products and for informal credit analysis ("she's never had a loan from us, but her chilimba partner speaks well of her").

PAYROLL FINANCE

Payroll finance—a loan against future wages, backed by a garnishment clause—is common in Zambia. Most payroll finance is targeted at government employees, since these are perceived as having steady, reliable jobs. Most of these loans are for less than a year. Interest rates tend to be high, with rates of around 10 percent per month for short-term loans and 100 percent per year for longer ones. There does not appear to be much overlap between payroll borrowers and agricultural producers or processors, but since most payday loans can be used for any purpose, some of this money may leak into the agricultural sector.

MONEYLENDERS

Moneylenders, sometimes known as kalobas, are common across Zambia. The typical moneylender is a successful businessman; very few moneylenders seem to specialize only in lending money. Moneylenders land across a wide range

of social groups, including both poor and emergent farmers, with loan amounts from a few dollars to several thousand dollars. Interest rates are extremely high—25 percent per month would be considered reasonable, and 50 percent per month is not unheard of. Moneylender loans are almost always supposed to be short term, but interest payments may drag on for months or years.

While many Zambians use moneylenders for crisis money (i.e., the sudden expense of a funeral or other unexpected event), a few do seem to use them for operating capital. This is, of course, only common where the borrower needs a sudden influx of cash and can reasonably expect to make a quick turnaround. One interviewee cited livestock dealers in the marketplace: "They need a lot of money to buy their goats, because they can buy many goats more cheaply than one or two. But if they sell the goats in the market quickly enough, they can repay the kaloba."

SOCIAL DYNAMICS

LARGE FARMERS AND THE BANKS

Despite the relative vigor of the financial environment, Zambia's large commercial farmers do not feel well served by the existing system. Some of the problems they cite are certainly more than mere perception or sour grapes: interest rates are among the highest in the world, and banks tend to demand overcollateralization. There are also regular complaints about high fees and a lack of orientation toward, or understanding of, agriculture. Whether legitimate or not, there is a real undercurrent of irritation and resentment in the relationship.

SUPPLY AND DEMAND

Most Zambian businesses say that access to credit is a serious constraint. Most small businesses (especially individual entrepreneurs) finance their initial operations primarily with their own funds and capital. Many of these entrepreneurs are suspicious of formal credit and would rather rely solely on their own resources and those of family and friends. Small Zambian businesses often have a foot in the informal economy and are usually trying to minimize their exposure to scrutiny from the state.

The agricultural sector remains underserved both for loans and deposits. Zambia's banks still focus on collecting deposits from civil servants, wage earners, and other elites; customers who are illiterate and unsophisticated do not find banks to be user-friendly. The average small Zambian farmer still has little by way of savings, and is likely to keep any savings in cash or valuables rather than as deposits in a bank.

LACK OF FINANCIAL SOPHISTICATION

This is a problem throughout the developing world, but it is particularly an issue in Zambia. Most Zambians are neither banked nor bankable. Many are illiterate, innumerate, or both. Very few have any experience with a modern financial system. Almost none can write a business plan. MFIs report that basic financial errors—for instance, the comingling of funds for business and personal use or the transfer of loan monies from investment to consumption—are very common.

STATE INTERVENTION

Zambia has a long tradition of state intervention in the agricultural sector. This affects access to credit in a variety of ways. Most obviously, the government has recently borrowed large sums of money—believed to be tens of millions of dollars—from the commercial banking sector in order to finance purchases of maize. This reduces the supply of money available for lending to other sectors, including agriculture. This is yet another potential driver of high interest rates.

However, state intervention has a number of less obvious secondary effects. Sudden bans on agricultural imports and exports are often imposed without notice or stakeholder input. This increases price uncertainty, making agricultural producers and service providers less attractive to lenders. The fear of FRA dumping

maize on the market is a deterrent to warehousing and to the development of warehouse receipts. And the state's consistent use of a few favored suppliers for its fertilizer program makes it difficult for other fertilizer companies to either obtain or provide commercial credit.

COMMERCIAL FARMERS AS ROLE MODELS

Zambia's large commercial farmers come from several different backgrounds. A large minority are the descendants of white settlers from the colonial period. Another large group consists of indigenous farmers who have either purchased large farms or gradually built them up. And a third, smaller group consists of Zimbabweans who have emigrated in the last decade.[56]

In addition to being important for their commercial role, larger farmers are important as role models. Most of them use large numbers of paid wage laborers, many of whom eventually cycle back to their own farms, bringing awareness of new techniques and new possibilities. Many emergent farmers quite deliberately copy larger farmers. The diversity of the large commercial farmers is probably an issue here: the fact that some are indigenous Zambians encourages emergent farmers to think they can do as well. Whatever the reason, the result is that new technical and commercial techniques, once adopted by the large farmers, can percolate downwards to emergent farmers and cooperatives[57]—if they have the human and financial capital available to take advantage of them.

HIV

Zambia has one of the highest HIV rates in the world, with an estimated 16 percent of the adult population infected.[58] This fact has a significant effect on access to credit. It increases the risks of lending to emergent farmers and small traders—exactly the groups that should be eligible for the next wave of financial services. The MFI industry is also affected; many of its most eligible potential clients are HIV-positive, but they have no way of knowing which. At least one MFI interviewee agreed that this is probably a significant contributor to the high non-performing loan (NPL) rate for MFI loans in Zambia.

One MFI required its borrowers to take out life insurance, but it does not appear that this practice is widespread. By way of comparison, the MFI sector in Uganda is involved in HIV awareness. Regular borrowers are encouraged (and, in a few cases, required) to get HIV tests, and Ugandan MFIs have made life insurance a standard procedure for loans above a certain level. There is nothing like this in Zambia, where there is still a very strong stigma attached to HIV.

HIV also has a secondary effect on the savings of small and emergent farmers. When a family member dies, there is a strong cultural imperative to provide a decent funeral. In theory this falls upon the immediate family, but as a practical matter funeral expenses are likely to be paid by whichever relative has access to funds. Since HIV deaths often occur unexpectedly, they are likely to result in sudden "surprise" expenses for the family. One interviewee stated that funerals were a common reason for Zambians to liquidate savings and/or apply for sudden loans from a payroll financer or local moneylender. (Many payday lenders have special "funeral loans"; interest rates on these loans are slightly lower, but the funds are paid directly to a funeral home.)

WOMEN AND CREDIT

Women have very limited access to credit. While Zambia has many female small entrepreneurs, women are underrepresented in the civil service and other forms of "steady" employment. Married women do not usually have property in their name and so cannot provide collateral. While a few MFIs make a deliberate attempt to reach women customers, most do not. In any event, the MFI sector is so small that it would reach few women even if all MFIs were targeting them.

Women do have the slight advantage of being more likely to join and participate in chilimbas (see above).

56 The number of Zimbabweans is small; anecdotal evidence suggests that they are only around 10% of all commercial farmers. However, they have importance beyond their numbers because they have helped import new agricultural and commercial practices from what was formerly one of Africa's most successful agricultural sectors.

57 Virtually all communities in Zambia have farmer co-ops—though few are considered commercially viable enterprises in their own right. These co-ops primarily function as conduits for FISP distribution. They also serve as platforms for extension officers to deliver extension messages. Because FISP distribution requires that co-ops open bank accounts, most have cash available for investment in co-op activities. District-level and provincial-level co-ops are also active (particularly in grain procurement), but most remain dependent on government programs for their survival.

58 Infection rates vary widely by region. The World Health Organization (WHO) estimates that the prevalence is highest in Lusaka (about 20%) and lowest in Northern Province (about 7%). Urban areas have infection rates almost double those of rural areas—about 20% and 10%, respectively.

RECOMMENDATIONS

Support the MFI sector with a focus on developing risk-analysis capacity. Zambia's MFI sector is undergoing very rapid growth from a small base; the next few years represent a significant opportunity for intervention and for developing long-term lending patterns. Elsewhere in Africa, this subsector is a significant source of finance for small-scale producers and processors. This is not the case in Zambia, but it could be. A package would include, at a minimum, capacity-building assistance that addresses the lack of skills, especially in credit analysis, risk analysis, financial management, and IT. It could come in the form of direct assistance to MFIs, but could also be combined with the development of an MFI support network. (A similar initiative by the EU's FORCE project, in Burundi in 2005–2009, achieved remarkable results, including the sustainable creation of RIM, an MFI network for training, information sharing, and mutual assistance.) The package could also include a DCA or similar loan guarantee to a local bank for credit to the microfinance sector for agricultural loans.

Priority: High
Term: Medium
Difficulty: Low

Help the banking sector increase its support to small and medium agribusiness. By African standards, Zambia's banks are relatively engaged with the agricultural sector, but most of their lending is focused on large commercial farmers, and there is still a great deal of room for expansion, especially to emergent farmers and agricultural SMEs. Banks have a shortage of trained personnel who can assess and manage agricultural credit. It might be possible to engage third-party agricultural experts, whether Short Term Technical Assistance (STTA) or based in Zambia, to educate lenders on the risks and opportunities in the country's agricultural sector, and to work directly with lenders to identify and assess potential clients. There are opportunities here for public-private partnerships; Zambia National Farmers Union (ZNFU), for instance, has expressed an interest in working with the Bankers Association (BAZ) to provide training to junior and mid-level bankers. It should also be possible to work with banks to develop new products or to expand existing ones (agricultural leasing, invoice financing, equipment loans secured by crop charges) that are particularly appropriate to agricultural lending. This should also include assistance to banks in developing new methods for analyzing and securing agricultural loans, as the current practice of massively overcollateralizing every loan will not work with emergent farmers and smaller producers.

Priority: Medium
Term: Medium
Difficulty: Moderate

Provide basic skills training to select SMEs that are agribusinesses, particularly small processors and emergent farmers. This would cover basic business skills training, including training on drafting a sound business plan, analyzing loan terms, learning basic bookkeeping skills, and negotiating a written contract. The focus would be on producers and processors who are already have basic literacy and numeracy skills but who are not conversant with the finance and credit system or the requirements of a modern SME. For less competitive, less productive rural smallholders, an emphasis on both crop and income diversification will help these households hedge risk and present a more bankable profile.

Priority: Medium
Term: Medium to Long
Difficulty: Low

Support a gap analysis of agroprocessing, with a particular focus on capital-intensive agroprocessing. Zambia has a number of striking absences in agroprocessing. Its leaf tobacco is sent to Zimbabwe, for instance. And while Zambia is a major maize producer, there is not a single processor producing corn oil, corn syrup, or corn starch. In some cases, there are reasons for these absences; there is not a large

market for corn syrup in Zambia, and the uncertainties inherent in exchange rates and government policies may make a large investment unattractive. That said, some of these gaps seem to exist for historical reasons and to persist because of an absence of technical expertise, marketing ability, or capital. The relative availability of capital in Zambia, relative to its neighbors, may give it a comparative advantage here.

Priority: Low
Term: Short
Difficulty: Low

Fix the finance leasing tax deduction. This is a fairly simple and straightforward change; it only involves amending a single line in the tax code, to change it back to what it was before 2007. The finance leasing companies have lobbied for this since 2008. They have met several times with ministry officials, who have professed sympathy, but no action has yet been taken. Bringing back this deduction will be particularly useful for agriculture, but it will also have knock-on effects on other sectors (i.e., mining and construction, which also make heavy use of leased equipment). Failure to do this will probably result in the complete elimination of finance leasing as a method of financing new equipment purchases; as noted above, finance leases have already decreased by almost 60 percent in the last two years, and this trend is likely to continue until the subsector simply disappears.

Priority: High
Term: Short
Difficulty: Low

Investigate the possibility of creating a collateral registry. Zambia does not have a unified collateral registry. Various stakeholders have expressed interest, but to date this has not been a priority. A unified registry would bring various benefits, including increased security to lenders. Since no actor in Zambia is currently pushing this reform, however, it would be desirable to (1) do an analysis of the need for a registry and the particular issues involved in creating one in Zambia, and (2) hold a preliminary conference of banks and other stakeholders to collect input and build support.

Priority: High
Term: Short
Difficulty: Moderate

Investigate credit systems in agricultural supply chains, especially input supply chains, with an eye towards improving access to commercial credit, particularly to smallholder farms. As noted above, agro-dealers are reluctant to extend commercial credit; this is partly because of perceived risk and partly because of cash flow issues. It might be worthwhile to examine commercial credit practices up and down the input supply chains, especially in the case of those inputs (sprays, drip systems, tools) that are not implicated in the current system of input subsidies. The goal of such a study would be to find ways to increase the flow of credit up and down the chain, from importer through wholesaler to dealer and buyer, whether by the introduction of new systems or practices or even the provision of targeted credit guarantees.

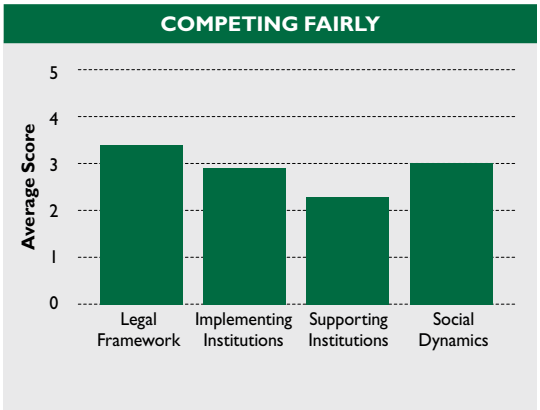
Priority: Low
Term: Short
Difficulty: Low

COMPETING FAIRLY

A successful market economy requires, among other things, effective competition and consumer protection policies. Each complements the other and serves to advance economic efficiency, consumer choice and welfare, and overall economic growth and development. Competition forces producers to offer the most attractive array of price and quality options in response to consumer demand. When consumers dislike the offerings of one seller, they can turn to others. This ability to shift expenditures—that is, to "spend one's money elsewhere"—imposes a rigorous discipline on sellers to satisfy consumer preferences. This is true in all sectors, including agriculture. Indeed, competition in agriculture might be of heightened concern because it produces essential products purchased by all consumers, including the poor who are disproportionately affected by anticompetitive activities.

Free markets do not automatically create a competitive environment. Like competition on a playing field in any sport, a clear set of enforceable rules must prevent cheating by those who fear the sometimes harsh realities of losing. Left unchecked, firms may engage in practices that undermine competition. When firms engage in such behavior, effective law enforcement is necessary to restore competition.

Law enforcement is a necessary tool, but it is not sufficient to ensure that markets function properly. Rather than breaking the rules, firms may seek the assistance of the government to shield them from the harsh realities of competition. For example, a firm may seek rules that limit the number of market participants or impose substantial entry costs on new companies. Such regulations may prove as disruptive as cartelization or other anticompetitive practices. Yet, because the regulations are sanctioned by the government, they do not violate the law and enforcement is not an option. Accordingly, intervention in the form of competition advocacy may be the only means to ensure that markets continue to function properly.



A consumer protection regime – which consists of policy, law, and public and private advocacy – aims to prevent sellers from unfairly increasing sales by misrepresenting their products or by engaging in unfair practices such as unilateral breach of contract. Without a consumer protection regime, widespread and persistent deception by a group of sellers may lead consumers to doubt the integrity of the entire industry or to distrust markets generally. Thus, by striving to keep sellers honest, consumer protection does more than safeguard the interests of the individual consumer. Namely, it serves the interests of consumers generally and facilitates competition.

Although Zambia has a modern law on competition – one that guards against cartels and other unfair mechanisms for restricting participation in national markets, as well as supports consumer protection – the country does not yet support a broader "culture of competition." That is, habitual acceptance of barriers to entry or productivity-usurping government interventions – particularly the work of the Food Reserve Agency and the Fertilizer Support Program – has undermined public expectations for a truly free economy. An environment that more proactively defends the benefits of competition would foster a freer market for fertilizer and a more rational system of maize management. Moreover, a true culture of competition would not abide arbitrary bans on imports and exports of agricultural products (detailed more extensively in this report's chapter on Trading Across Borders).

LEGAL FRAMEWORK

THE COMPETITION LAW

Zambia has a competition and consumer protection law that clearly sets forth standard tools expected in laws regulating these areas. Enacted in 2010 and currently in force, the **Competition and Consumer Protection Act** (the Act or Competition Act) replaces the earlier Competition and Fair Trading Act.[59] Although the new law is intended to continue the policies reflected in the earlier statute, it provides substantially more detail, particularly in the area of consumer protection. It also increases the powers of the renamed Zambian Competition and Consumer Protection Commission. The Act's stated objectives, as set out in its preamble, are to continue the Zambian Competition Commission as renamed, to safeguard and promote competition, and to protect consumers against unfair trade practices. Key details about the Act, which applies to all industries, including agriculture, are set forth in the Appendix to this chapter.

KEY LAWS AND POLICIES

- Competition and Consumer Protection Act (2010)
- Laws authorizing crop boards (i.e., cotton, tobacco, coffee)
- Farmer Input Support Programme
- Food Reserve Act (1995)

THE COMPETITION LAW AND REGULATED AGRICULTURAL SUBSECTORS

Zambia's competition law provides that regulated agricultural subsectors are subject to its prohibitions. To the extent that there is an inconsistency between the policies of the regulators and Zambia's competition policy, the law requires the Competition Commission to enter into Memorandums of Understanding to harmonize the policies.[60] This appears to be a substantial break from past practice. For instance, as one study has noted, the Cotton Act, which created the Cotton Board in 2005, does not appear to have had input from the Competition Commission.[61]

Examples of agricultural regulators likely to be affected by this new policy of enhanced integration of their work with national competition policy include the following:

- **Cotton Board.** The Cotton Act created the Cotton Board to regulate that subsector.[62] The purposes of the board are to regulate the production, processing, and marketing of cotton; advise the government on regulations and policies relating to cotton; and monitor and report on implementation of those policies. The Cotton Act requires anyone dealing in cotton to register with the board, and states that the board may refuse to register a person if it is satisfied that the applicant or a person employed by the applicant does not have sufficient knowledge or experience in the cotton trade.[63] The Cotton Act also gives the board policing powers, allowing it to confiscate cotton held in contravention of the law, and it provides

59 Competition and Fair Trading Act of 1994. The Zambian Competition Commission, created under the Act, started in 1997.
60 Competition and Consumer Protection Act §43.
61 Food Security Research Project, *A Case Study of Regulation in Zambia's Cotton Sector* (Apr. 2010), *available at* http://www.aec.msu.edu/fs2/Zambia/index.htm (comparing the Cotton and Tobacco Acts).
62 The Cotton Board had its genesis in the Cotton Development Trust, which brought a number of stakeholders together for the orderly regulation of the industry.
63 Cotton Act §34.4.

for judicial review from board actions. The Cotton Act does not address the issue of price-setting.

- **Tobacco Board.** The Tobacco Act similarly creates a Tobacco Board and requires that buyers of tobacco be licensed with the board. Like the Cotton Act, it allows the board to inspect premises and seize tobacco deemed to be contrary to the statute. Unlike the Cotton Act, the Tobacco Act allows the setting of minimum external prices of tobacco sold by farmers for export and internal minimum pricing for tobacco sold into the domestic market. Unlike the Cotton Act, the Tobacco Act has no provision for an appeal from a Tobacco Board decision.
- **Food and Nutrition Commission**. The Food and Nutrition Commission imposes health and safety requirements relating to food products. Included is a requirement that all sugar in Zambia be fortified with vitamin A. The ostensible purpose of this requirement is health promotion, but many interviewees claimed that the requirement is a mere pretext to exclude foreign competition and to protect Zambia's dominant sugar refiner. They explained that the logical flaw behind the requirement is that only the most disadvantaged suffer vitamin A deficiencies and that they lack processed sugar in their diets. The policy thus misses the intended beneficiaries. While this diagnostic did not delve into the costs of fortifying sugar, if it is sufficiently costly to deter entry, then the policy may have the effect of keeping sugar prices above a competitive level.

While the policies and objectives of these regulators and others are important, the Competition Commission's role in reviewing their activities for conflicts with the country's overall competition policy is appropriate and should be encouraged. Moreover, the legislation underpinning each of Zambia's agricultural boards – and, more important, its implementation – is worth scrutinizing for consistency with

COMPETITION WITHIN THE FOOD AND AGROPROCESSING SECTOR: A HIGH PRIORITY IN SOUTH AFRICA

The South Africa Competition Commission has given high priority to the food and -processing sector because of the value-adding activities and employment involved (about 30 percent of the country's workforce), as well as the fact that it produces essential products bought by consumers, including the poor. It became a priority sector after the competition agency observed the impact that food price hikes were having on the poor and the uncovering of cartels in the bread and milk markets. Since early 2008, the agency has been studying and making interventions in the food-value chain from an enforcement, merger, and competition-advocacy perspective. The agency has actively investigated (and, in some cases, successfully prosecuted) various types of allegedly anticompetitive behavior in the sector, including, but not limited to: (a) agreements among three large fertilizer suppliers to fix prices and divide markets for various fertilizer products; (b) abusive behavior by a vertically integrated firm with a dominant position in grain storage market to exclude non-integrated rivals in the downstream market for grain trading; (c) agreements among milk producers to fix prices for raw and processed milk; and (d) agreements among bread companies to fix prices and allocate markets for bread. In the past year alone, the agency initiated five new investigations of allegedly anticompetitive behavior in the sector, including possible anticompetitive conduct in the supermarket industry. Most recently, the South Africa Competition Commission, the Egyptian Competition Authority, and the Zambian Competition Commission started a Joint Food Project (funded by the International Development Research Centre) aimed at sharing knowledge and approaches with regard to assessing possible anticompetitive conduct in food markets. See, generally, www.compcom.co.za/priority-sectors/. See also Competition Commission Annual Report for 2008–2009, available at www.compcom.ca.za/annual-reports/ and *Competition News*, Edition 32 (June 2009) and Edition 33 (December 2009), available at www.compcom.co.za/newsletters/ (describing recent enforcement activities in the sector).

PRICE FIXING AND THE POOR

These two political cartoons appeared in the South Africa press after the country's Competition Commission brought a price-fixing case against sellers of bread. They illustrate the disproportionate effect anticompetitive conduct in the agricultural sector can have on the poor.

the overall mission of competition and consumer protection. This is particularly important given the movement to establish a new agricultural marketing board (or "council") under the draft Agricultural Marketing Act. A thorough analysis of precedent will make that new council stronger.

OTHER COMPETITION-RELATED POLICIES AND LAWS

In addition to the Competition Act, other laws and policies in Zambia have an impact on competition in the agricultural sector. Although they generally have goals aside from that of promoting competition, they impact competitive conditions. In fact, many interviewees insisted that government intervention was the central competition issue facing the economy. The Competition Commission is active in studying these issues.

MAIZE POLICY

With respect to both inputs and outputs, government interventions in Zambia's maize crops result in uncompetitive, damaging market distortions. First, through its Farmer Input Support Programme (FISP), the government purchases fertilizer through a bidding process and then distributes it to qualified farmers. Many interviewees claimed that the bidding specifications for fertilizer are unduly complicated and include a requirement that the bidder have five years of experience in the fertilizer business, thus precluding new entrants. Many also complained that winning bids go to the same two firms annually (with a small third-place award) and that the procurement process lacks transparency. Many further complained that the fees charged to the government by these firms for distributing fertilizer under the FISP are higher as a result and asserted that the system could be improved by adopting an electronic voucher system that would allow farmers to negotiate directly with fertilizer suppliers.[64]

The system is a drag on the development of Zambia's own fertilizer industry, which must compete with subsidized fertilizer without having a corresponding opportunity to provide it to the government. It is not clear whether government suppliers of fertilizer must adhere to the quality assurance required by ZARI and other requisite licenses described in this report's section on Licenses.

On the output side, the Food Reserve Agency encourages maize overproduction by offering producer prices that are far above world market prices and costs of producing maize for the large majority of farmers in Zambia. The FRA acts as a maize board; it attempts to control prices through procurement, imports, and distribution and is essentially the outgrowth of the pre-liberalization National Agricultural Marketing Board (NAMBOARD). Virtually every interviewee who

64 Additional insights about the FSP are detailed at *Report on Proposed Reforms for the Zambian Fertilizer Support Programme* (February 2009), *available at* http://www.aec.msu.edu/fs2/zambia/FSP_Review_Report_feb_09.pdf.

discussed this issue indicated that the process is politically driven and too costly. The proposed Grain Marketing Council is intended to provide more formality and consultative decision-making to this process.

IMPORT/EXPORT BANS

The maize and import/export bans (discussed in more detail in this report's chapter on Trading Across Borders) significantly disrupt the free operation of Zambia's agricultural markets. If policymakers believe the benefits of intervention outweigh the competitive harms, then it is not the proper role of competition policy to alter that choice. But with the Competition Commission's role as an advisor to the government and educator to the public, it is appropriate for it to closely examine the costs and benefits of those policies and to advise other branches of government accordingly.

IMPLEMENTING INSTITUTIONS

COMPETITION AND CONSUMER PROTECTION COMMISSION

This independent body within the Ministry of Commerce, Trade and Industry is responsible for investigating and correcting violations of the Competition Act, advising the government on competition matters and informing the public on competition and consumer protection issues. It came into existence in 1997.

The Competition Commission has a budgeted staff of 26, mostly economists, but also including one or two attorneys, and a support staff. The staff is professional and well trained in issues of competition policy, and has economists trained in the agricultural subspecialty. Given the commission's broad mandate, however, it is too small to allow investigators to focus on, and to develop an expertise in, any one particular market segment, as might be necessary to fulfill the commission's mandate.

The commission conducts about 30 investigations per year of alleged anticompetitive business practices, and slightly fewer merger investigations. Ordinarily, the result of these investigations is a conclusion that no further action is warranted. When the commission concludes that further action is warranted, the commission typically works with the affected parties to gain their voluntary compliance. This requires the parties to agree to commit to appropriate undertakings and to enter into an enforceable compliance program. In the agricultural sector, the commission has made such interventions in areas such as poultry, maize-meal processing, fresh vegetables, and flowers.

The commission has also been active in competition advocacy. It organizes and participates in conferences, seminars, and workshops to promote a greater understanding of the role of competition in the economy. In terms of advocacy within the government, the commission studies laws and policies and recommends that the government take, or refrain from taking, some action. In the agricultural sector, the commission has recently undertaken detailed studies of the maize market from the input to the end-user levels, including consideration of the government's FISP and FRA policies, and it has previously studied competition in the beef, poultry, and dairy sectors. It has also worked with competition agencies in South Africa and Egypt, studying agricultural issues affecting the three countries.

One weakness with the agency's structure is a perceived lack of independence from the Minister of Commerce and the political officials in the government. Under the new Competition Act, commissioners are appointed and can be removed at will by the minister, with no parliamentary involvement or other oversight. This

KEY IMPLEMENTING INSTITUTIONS

- Competition and Consumer Protection Commission
- Competition and Consumer Protection Tribunal
- Regulatory boards, including boards for cotton, tobacco, and coffee

has led some to see the commission's independence as compromised.

The commission has received some piecemeal technical training and capacity-building assistance from the donor community, including The European Development Fund, The International Development Centre of Canada, and the U.S. Federal Trade Commission. Given the small size of the agency, long-term assistance is needed for it to develop into a more effective competition watchdog and advocate. Stakeholders uniformly stated that competition policy is important for economic development in Zambia, and for the commission to have a proper role in promoting competition, it needs more resources and greater independence.

COMPETITION AND CONSUMER PROTECTION TRIBUNAL

The Competition and Consumer Protection Tribunal is constituted as a part-time panel to hear appeals from commission actions. While an appeal is before it, the tribunal also has its own investigatory powers and may compel testimony and documents as appropriate. From the tribunal, parties may further appeal to the High Court from adverse decisions. The tribunal was created by the newly enacted legislation and was not operational at the time of this inquiry.

REGULATORY BOARDS

Although this diagnostic did not focus on specific subsectors of agricultural regulation in Zambia, the boards that oversee certain crops (such as cotton or tobacco) in any country are worth scrutinizing for their overall impact on economic freedom and growth. Crop boards often serve the very important purpose of helping smallholders realize efficiencies of scale, creating methods for encouraging high-quality outputs, and identifying potential markets. But they can also succumb to the temptation of fixing prices and restricting the number of buyers available in certain market. For example, the 2010 AgCLIR diagnostic in Tanzania found a particular crisis in crop board management in that country, one that resulted in depressed markets and undue market access for just a small group of buyers.[65]

SUPPORTING INSTITUTIONS

GOVERNMENT AGENCIES

The Competition Commission advises the government on competition matters affecting various government operations. The Competition Act also gives the commission new powers to review competition issues in regulated sectors in an effort to harmonize the goals of regulation with the objectives of the competition policy. At the same time, other government agencies must have an input on the commission's operations. In addition to domestic agencies, the commission has been active in working with foreign competition agencies, most notably that of South Africa, in investigating competitive conduct that may have an effect in Zambia.

Among the agencies the commission must work with is the **Ministry of Agriculture and Cooperatives** (MACO). Although the Competition Commission has studied the ministry's controversial maize policies, there is no evidence that the ministry has been advised or compelled to take corrective action. Contributing to this may be a lack of leadership at the top of the ministry. While interviewees overwhelmingly blamed politics for the failures of the maize policies, others also stated that the ministry has had three heads in the last five years and that not all of those had expertise in agriculture. In any event, the ministry could benefit by actively involving the Competition Commission in reviewing those policies.

Two other agencies that play a large role in the commission's activities are the **Ministry of Commerce, Trade and Industry** (MCTI) and the **Attorney General.** Under the new Act, representatives of both agencies must serve on both the commission and the tribunal. In fact, one weakness identified with the

65 See AgCLIR Tanzania, Agenda for Action, "Competing Fairly" (May 2010).

commission's structure is a perceived lack of independence from the MCTI and the political officials in the government. Under the new Act, commissioners are appointed and can be removed at the sole discretion of the minister for MCTI, with no parliamentary involvement or other oversight. This has led some to see the commission's independence as compromised. On the other hand, at least one interviewee offered an opinion that the real power behind the commission will come from the Attorney General's Office. In any event, both agencies will have vital roles to play in the formulation of commission policy.

COURTS

Zambia's court system is also an important supporting institution as a legal framework providing clear rules in areas such as contracts, property rights, business association, securities, and bankruptcy is a necessary element of any competition regime. While Zambia has a well-developed legal system, stakeholders complain about the length of time it takes to decide cases. In this respect the new tribunal should help in providing parties receiving unfavorable commission decisions a quicker opportunity to have an appeal heard. Also, some interviewees expressed the view that the commission should extend its outreach efforts to the courts as they might not have sufficient expertise in deciding competition matters.

ADDITIONAL STAKEHOLDERS

In the private sector, there is considerable recognition of the benefits of competition, views that are supported in the academia and private organizations that provide public information on trade policy. There are respected economists in the country and a healthy economics department at the University of Zambia. In addition, the Economics Association of Zambia has been active since the 1960s and commits itself to the development of sound economic policies. CUTS International (Consumer Unity & Trust Society), an international advocacy group, has similarly been active in Zambia and seeks to inform the public on the benefits of competition. Both organizations have conducted and attended seminars and discussions directed at professionals and the general public, and have disseminated literature to the public promoting the benefits of competition. CUTS in particular has posted on its website articles discussing Zambia's new competition regime.[66]

KEY SUPPORTING INSTITUTIONS

- Government agencies
- Ministry of Agriculture and Cooperatives (MACO)
- Ministry of Commerce, Trade and Industry (MCTI)
- Attorney General
- Courts
- CUTS International
- Farmers Cooperative Society
- ZNFU
- MAZ

Other groups representing small-scale farmers indicated a strong support for competition policy. The Farmers Cooperative Society, for instance, is an association of farmer cooperatives that focuses on lobbying and on providing extension and marketing services to small-scale farmers. Representatives of that organization voiced their strong support for competition policy and said they educate their members on competition policy.

Ultimately, stakeholder awareness alone does not translate to a robust culture of competition. The market-distorting maize practices and barriers to entry in the fertilizer industry underscore the intractability of key anti-competitive practices. Moreover, the private sector often complains that the government favors foreign competition over local business interests. There is a risk that such sentiments may turn to a desire to return to a more fully controlled economy.

SOCIAL DYNAMICS

By far the competition issue that dominates all others in Zambia is the government's many market interventions, particularly its maize policies.

66 See http://www.cuts-international.org/ARC/.

While some said the policies had benefits of providing security to small-scale farmers, the policies were harshly criticized and many said they were unsustainable. This raises the question of why, if there is general acceptance of the benefits of free markets, these policies persist. Interviewees gave several explanations.

First, there is the practical problem of what to do about the policies. Many farmers depend on the policies, and to end them suddenly would likely cause substantial dislocation. Many interviewees advocated moving farmers into crops other than maize, and some groups, such as the Farmers Cooperative Society, are actively pursuing that goal, but the process takes time.

The second reason given was retail politics. Many interviewees stated that the FISP and FRA polices were effective tools to gather votes and that nothing will be done until a crisis occurs.

Finally, many interviewees pointed to the opportunities for corruption in the system giving many a stake in keeping the policies in place. Some noted that the policies encourage rent-seeking at grain storage facilities, for instance. These facilities are naturally crowded at harvest time, and with the right payment, a farmer can advance to the head of the line. Others complained about the lack of transparency in the FISP procurement process, again raising suspicions of rent-seeking. Many suggest that this problem could be alleviated with an electronic voucher system that would allow voucher recipients to negotiate directly with fertilizer suppliers.

Although there is widespread acceptance of the benefits of competition in the agricultural sector, the transition of Zambia's economy to one that is fully based on market principles is slowed by the government's many interventions in the economy. These are widely seen as politically motivated, which in turn encourages stakeholders to lobby for more interventions in an effort to level the playing field. While these interventions have political winners, it is ordinarily more difficult to identify the associated costs. The Competition Commission can, through its advocacy mission, better educate the public on the tradeoffs these policies involve.

RECOMMENDATIONS

Encourage the government of Zambia to bolster the Competition Commission and help it fulfill its statutory mandate by providing it with sufficient staff, independent funding, and other resources to investigate and remedy anti-competitive conduct in the agricultural sector.

Priority: Medium
Term: Short
Difficulty: Moderate

Undertake a comprehensive review of Zambia's overall legal framework to determine its secondary impact on competition and consumer welfare, with a focus on smallholder inclusion in the market. Some issues are immediately apparent and simple enough to address (notwithstanding the political process); for example, the Competition Act should be amended to require cause for the removal of Competition Commission members. Laws and regulations affecting specific crops (the Cotton Act and the Tobacco Act), and any regulated sectors, should be reviewed and harmonized with the objectives of the Competition Act. Over the longer term, other general laws and regulations should undergo an independent cost-benefit analysis to determine: (1) the specific harm the law is designed to address and whether the regulation is appropriately tailored to that purpose; (2) the extent of the secondary effects of the law on competition and consumer welfare; and (3) if the secondary effects outweigh the harm the law seeks to prevent, whether it can be more narrowly tailored to accomplish that purpose without unduly restricting competition.

Priority: Medium
Term: Short
Difficulty: Moderate

Work with the Competition Commission to study specific agricultural subsectors. This effort has already begun, so that it may better understand the market structure, market concentration, entry conditions, and market dynamics, and identify appropriate areas for law enforcement and competition advocacy activities. When such studies reveal potential violations of the Competition Act, these should be investigated and mitigated. In particular, there should be a more thorough comparative analysis of past marketing boards in Zambia and similar economies, and the language establishing the Grain Marketing Advisory Board should be refined to reflect lessons learned.

Priority: High
Term: Short
Difficulty: Low

Combine advocacy efforts on topics of constraints to agribusiness competition with those of the Competition Commission, which continues to educate stakeholders on the commission's statutory mandate, the overall benefits from competition, and the costs to society from government intervention and market distortion. The commission should be encouraged to direct its advocacy efforts both at the government, including officials with responsibility for issues affecting agriculture, members of Parliament, and the judiciary, and at private stakeholders including business groups and consumers.

Priority: High
Term: Medium
Difficulty: Moderate

Make annual financial reports of the FRA and FISP publicly available. This information is not public, and the lack of transparency makes it impossible to have an honest industry and public debate about these programs and policies. There is an opportunity to introduce this language into the draft Agricultural Marketing Act, and this should be done without delay.

Priority: High
Term: Short
Difficulty: Moderate

Coordinate and support a long-term capacity-building program for the Competition Commission. This program should be designed to train the agency staff in identifying likely effects on competition and consumers, conducting efficient and effective investigations, and developing effective remedies. A comprehensive capacity-building program should include short-term training programs on specific legal and economic issues, investigative techniques, long-term resident advisers from experienced competition authorities, and staff exchanges.

Short-term programs: This capacity-building tool is best used for training staff in substantive legal principles, analytical frameworks, investigative techniques, and agency operations needed for the success of a competition-law enforcement regime. Program topics could include competition law and economics; practical and analytical skills for investigations in all areas of competition law; remedies; data collection, confidentiality, and agency transparency; administrative aspects of case handling; strategic planning and priority-setting, and competition advocacy; and international and regional cooperation.

Long-term resident advisors: This tool would use experienced staff from foreign competition authorities as long-term legal or economic advisors to the Competition Commission for periods of three to six months. The resident advisors would work directly with the staff on their actual investigations on a day-to-day basis. The long-term, in-country commitment also would allow the advisor to become more familiar with Zambia's competition regime and relevant market developments, thus contributing to more focused counseling. In addition, by working closely with staff, the advisor could more easily identify other capacity-building needs and priorities, and establish a working relationship that would continue long after departure from the country.

Staff exchanges: Select Competition Commission staff should be offered internship opportunities with foreign competition agencies. Ideally,

internships should last three to six months, providing ample opportunity for staff to participate in all phases of the host-agency's investigations and enforcement actions, and to gain a valuable firsthand appreciation of the practices and approaches used in other jurisdictions. Interns would return to the Competition Commission to impart their learning to other staff members.

Foreign competition agencies should take an active role in these capacity-building programs for at least two reasons. First, they can draw on their institutional strengths and experiences to provide assistance that is comprehensive in its scope, emphasizing the pragmatic over the theoretical and focusing on transferring institutional skills and experience in investigating, analyzing, and remedying anticompetitive behavior. Second, they can foster valuable working relationships that continue well after the capacity-building program has ended.

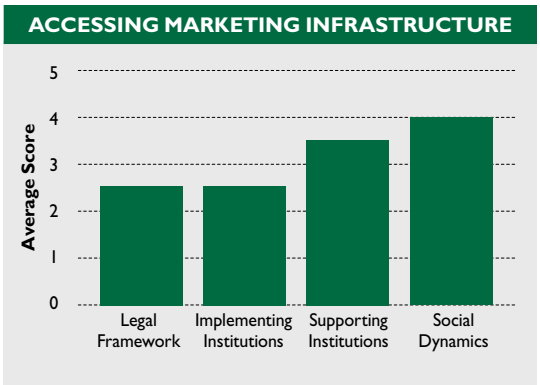
Priority: Low
Term: Long
Difficulty: High

ACCESSING MARKETING INFRASTRUCTURE

Past applications of this diagnostic have not considered market infrastructure as a stand-alone issue. However, because of its integral importance to the agribusiness sector, and because of the impact that an effective legal framework and government institutions can have in this area, it has been defined as a new AgCLIR category. In the process of developing the scope of this chapter, trade-offs were made. The focus of the analysis is on marketing infrastructure, and excludes productivity-enhancing public goods like electricity and water systems for the sake of brevity and focus. The chapter looks at both "hard" and "soft" marketing infrastructure – the physical and information systems necessary to make strategic decisions and effectively trade agricultural products. The inquiry looks at the laws, institutions, and dynamics that have led to the current state of marketing infrastructure, and those that promise to lead it forward.

During this diagnostic, three troubled infrastructure components emerged as being of top importance to Zambia's agricultural economy: feeder roads, post-harvest storage, and price information systems. Specifically, feeder roads have been neglected to the extent that many are impassable, thus severely limiting the range and depth of participation in the agricultural sector, especially among smallholder farms. Post-harvest storage facilities, though likely adequate in quantity, do not meet the needs of farmers in rural areas. The overwhelming presence of the government in the country's maize markets distorts markets for storage; furthermore, weak on-farm storage options deprive smaller holders of the economic opportunities their products present. Finally, there is a chronic lack of information not just on prices but also on production, consumption, imports, exports, and all the other data necessary to make informed decisions in a transparent and (relatively) risk-free environment. Information asymmetry severely disadvantages the smaller players and benefits those holding what little information there is.

Strengthening the laws and institutions that support each of these components would improve



their contributions to agricultural enterprise in Zambia. With respect to roads, streamlining of agency responsibilities and more effective fiscal and administrative decentralization may result in more efficient administration of the country's network of feeder roads. Efforts to improve storage resources in rural areas will require thoughtful rationalization of government-owned storage facilities and opportunities in private-sector development in the field. Market information will be strengthened by improving capacity among agencies. Stakeholders must grasp and act upon the importance of a public, objective, consistent, and coordinated agricultural information system.

LEGAL FRAMEWORK

A legal framework that clearly outlines the responsibilities and processes for public investment in infrastructure can set the stage for whether a country's agriculture markets will flourish or flounder. Law and supporting regulations should endow specific government agencies with specific functions related to planning and executing public works such as paving main transport corridors, grading rural feeder roads, and maintaining publicly owned storage facilities. Laws should also delineate the conditions for stewardship of public goods, from physical structures to information, and establish rules governing the use of these goods. Laws that pertain to private investment in infrastructure are also key, from regulations and licensing to the structure of tax incentives.

ROADWAYS, INCLUDING FEEDER ROADS

In 2002, **Public Roads Acts Nos. 11, 12, and 13** were passed, establishing three agencies formally responsible for Zambia's core road network. According to this legislation, the **National Road Fund Agency (NRFA)** is responsible for mobilizing resources for funding the road sector and administering the Road Fund; the **Road Development Agency (RDA)** is responsible for planning, maintaining, and managing the core road network; and the **Road Transport and Safety Agency (RTSA)** is responsible for road safety, traffic management, motor vehicle registration, and drivers' licensing.

Prior to this legislation, the Ministry of Works and Supply handled the procurement that RDA now manages. Tourist roads were managed separately under the Zambia Wildlife Authority (ZAWA) and agricultural roads were maintained by MACO. The missions of these institutions were not altered by the legislation, and they are still involved in an advisory or support capacity. However, for the past eight years their decision-making responsibilities and budget expectations were made much less clear. In this sense, the 2002 road legislation package created a confusing situation in which at least a dozen central government agencies were charged with overseeing some aspect of the country's road system, creating a tapestry of responsibilities not conducive to strategic direction or efficient service.

KEY POLICIES AND LAWS

- Public Road Acts No. 5, 6, 10, 11, 12, and 13 (2002)
- Decentralization policy (2002)
- National Constitutional Conference Act (2008)
- Public Private Partnership Act (2009)
- Food Reserve Act of 1995, and Amendment of 2005
- Draft Agricultural Marketing Act
- Draft Agricultural Credit Act

LOCAL MANAGEMENT OF RURAL ROADS

Of course, rural roads are of particular interest to the agricultural sector. Institutions of local government are directly concerned with the quality and maintenance of these roads. As part of its 1996 constitutional amendments, Zambia created a Ministry of Local Government (MLG), in part to define the role of local government with respect to building and maintaining infrastructure. The changes failed to delineate, however, the respective roles and responsibilities of local government institutions versus those of the central government. Two subsequent acts of Parliament detailed the MLG's structure, methods of fee collection, and appointments at the local level. There remains little guidance, however, about the role of district councils in terms of prioritizing requests or implementing public works. Unchecked central government oversight is allowed under this regime, tying the hands of local decision-makers and making it difficult for them to think strategically about local infrastructure and other needs of their districts.[67]

In 2002, Zambia's government launched a **decentralization policy**, naming a secretariat within MLG to manage the process of unbinding

67 Zambia, Ministry of Local Government and Housing, Laws and Regulations Documents May 3, 2010 (November 2010), *available at* http://www.mlgh.gov.zm/index.php?option=com_docman&task=cat_view&gid=25&Itemid=58.

central government authority and empowering local governments to assume a greater role in the oversight of their districts. Implementation of the policy, including full transfer of administrative, fiscal, and political responsibilities to district councilors, is not anticipated by the Zambian Constitution or any subsequent acts of Parliament.[68] A constitutional review has been ongoing for several years, and in 2008 the government enacted the **National Constitutional Conference Act.** Advocates of decentralization are pushing for more explicit guidance for district councils in the new Constitution.

The current legal framework for district councils vests significant powers with the MLG representatives at the expense of democratically elected local leaders. Central government representatives can, with presidential approval, suspend elected counselors or dissolve a district council. Current law also provides no detailed guidance related to sources of council financing.

PUBLIC-PRIVATE DEVELOPMENT OF ROADS

The **Public Private Partnership Act** was passed in 2009. The law addresses private sector investment in roads, but it is structured in such a way that investors need to charge a toll to realize returns on their investments. While this approach was derived from detailed analysis concluding that toll roads are viable in Zambia, it closes off other options for public-private cooperation with respect to roads. A more comprehensive and effective PPP package would offer cheaper credit and tax incentives for road infrastructure built or maintained by the private sector.

POST-HARVEST STORAGE

The **Food Reserve Act** of 1995 established the Food Reserve Agency (FRA) as a parastatal agency and gave FRA the role of administering the national food reserves, managing publicly owned storage facilities, establishing and operating a Market Information System (MIS), and "other functions as the Minister may assign to the Agency."[69] Based on this last provision, FRA began procuring surplus maize. The law was amended in 2005 to officially expand the FRA's role to include grain marketing and market facilitation.

The legal foundation for storage of agricultural goods is insufficient, and, as detailed in recent analysis by the Food Security Research Project, has led to expensive and impractical methods of removing maize from rural areas for storage and milling.[70] As detailed in this report's chapter on Getting Credit, a draft Agricultural Credit bill (in Parliament at the time of this diagnostic) would create a system of warehouse receipts, allowing for a more diverse approach to storage that keeps surplus products closer to consumers and potential processing concerns. Current law does not prohibit warehouse receipts, but the existing legal framework does not encourage it. The draft bill would establish a Warehouse Licensing Authority, which would inspect, license, and register warehouses.

THE CURRENT STATE OF INFRASTRUCTURE

- There are over 90,000 km of road in Zambia but only 40,000 km are defined as the Core Road Network (CRN). Only the CRN has a chance of receiving central government support for upkeep.
- The criteria used to assess road conditions are under review, but the latest RDA survey found that 83 percent of the unpaved core road network is in poor condition, and that 64 percent of Zambia's unpaved roads are beyond maintaining.
- The country has sufficient grain storage in the form of slabs and sheds, but it is poorly situated, and there is not enough bulk storage capacity. Cold storage is either unavailable or too expensive to be an option for most.
- Multiple well-designed price information systems are operated by various public and private organizations. However, formats and measurements are not compatible, information is not shared or effectively disseminated, and there are major gaps in coverage.

68 Nachilala Nkombo et al., *A Case for Decentralized Government in the New Zambian Constitution* (Lusaka: MS Zambia Knowledge and Strategy Team, December 2008).

69 Republic of Zambia, The Food Reserve Act, enacted by Parliament 21 April, 1995, *available at* http://www.fao.org/docrep/w4979e/w4979e0l.htm.

70 Food Security Research Program, *Fostering Agricultural Market Development in Zambia* (Working Paper No. 40) (2009), p. 8.

The law would set up rules for the issuance, sale, certification, trade, and transfer of warehouse receipts, with the long-term goal of developing a robust warehouse receipt system. Finally, it would set criminal penalties for relevant violations (i.e., the forgery of warehouse receipts). The challenge of the new law is that of implementation: examples from other countries, such as Tanzania, suggest that establishment and use of storage facilities in rural areas takes a long-term investment not merely of money but also educating users and building their confidence in the program.[71]

MARKETING INFORMATION

The primary objective of the draft **Agricultural Marketing Act** (under review by the Ministry of Justice at the time of this diagnostic) is to outline the structure of a public-private Grain Marketing Advisory Board. In addition, the draft law would formalize the role of ZAMACE (the commodities exchange) in agricultural marketing. It includes an important provision on the MACO-operated Agricultural Marketing Information Center (AMIC), stating that the center will "coordinate and harmonize other marketing information systems managed by other players. The harmonization is necessary to improve coverage, type and quality of the information" and "the proposed legislation should provide some instruments which will compel all market players to provide information."[72]

This language seems overly optimistic about AMIC's capacity to integrate and harmonize various sources of information, and not specific enough about how to generate private sector support. It implies that such institutions as ZNFU (the powerful farmers' organization) and ZAMACE will collaborate with AMIC, not that individual private businesses will be compelled to submit price data to the government. This language needs clarification, and the law must devise a work plan for anticipated implementers. Namely, when it comes to tools and approach, AMIC should prioritize compatibility among information contributors over inaccessible cutting-edge approaches. Moreover, the AMIC provision should be implemented through activity-specific funding at the district and camp level. Data submissions from the private sector do not substitute for the more objective and broad-based data collected by MACO officers.

IMPLEMENTING INSTITUTIONS

FEEDER ROADS

Since the new road laws were put into effect, three government agencies have assumed primary responsibility for Zambia's roads. But many other institutions at the national and district levels are involved at various stages of the proposal and implementation process, which is responsive to an even wider group of private and donor stakeholders. Perhaps because there are so many parties involved, the government's road works process suffers from a lack of strategic focus and intention at every stage, including planning, budgeting, procurement, and implementation.

The **National Road Fund Agency (NRFA)** mobilizes resources for funding the road sector and administering the Road Fund. It receives money from fuel levies and the national budget, but around 50 percent of its funds come from donors, with the European Union and the World Bank playing a leading role. The **Road Development Agency (RDA)** is responsible for planning, maintaining, and managing the core road network, which means that its main functions are technical assessment and procurement.

KEY IMPLEMENTING INSTITUTIONS

- National Road Fund Agency (NRFA)
- Road Development Agency (RDA)
- Ministry of Local Government (MLG) and district councils
- Ministry of Agriculture and Cooperatives (MACO)–Agribusiness and Marketing Division, including the Agricultural Marketing Information Center (AMIC)
- Food Reserve Agency (FRA)
- Ministry of Works and Supply
- Zambian Development Agency

71 See AgCLIR Tanzania, Agenda for Action (2010), "Getting Credit," *available at* www.bizclir.com.

72 Republic of Zambia, Ministry of Agriculture and Cooperatives, *Concept Paper on the Proposed Agricultural Marketing Act* (June 2010).

Although these two institutions are located in the same office compound, they have struggled to work together effectively. Inefficiency, waste, and accusations of corruption led to a donor-funded audit of RDA from 2006 to 2009 that was released in January 2010. The study, conducted by Zambia's Auditor General, revealed a significant overcommitment of funds, resulting in the inability to pay contractors, as well as questionable technical justifications for budgets, vague and weak contracts, irregular and unethical payments, and overall poor performance and quality. During the investigation, donor funding was put on hold for 18 months, and three top RDA and NRFA officials lost their jobs.

Since then, a new RDA Board has convened and the cooperating partners have committed to dispersing funds soon, though some donors have different timelines than others. All government employees who are involved in purchasing must complete a level-appropriate Chartered Institute for Purchasing and Supplies (CIPS) course. RDA managers are now taking this requirement very seriously. Third parties interviewed during this diagnostic consider the CIPS certification, which is internationally recognized, to be far superior to the Zambian national version of the same course.

This audit, along with subsequent anti-corruption reforms and improvements to staff capacity, has dominated the national conversation about road development in Zambia. However, the basic process for road proposals and prioritization has not changed, and weaknesses in this area negatively impact the agribusiness sector more than any other.

The Core Road Network (CRN) is made up of 40,113 km of road, including 14,333 km of unpaved feeder roads.[73] But the entire Zambian road network includes more than 90,000 km of road.[74] This is not a mathematical discrepancy. The CRN is defined as "the bare minimum road network that Zambia requires to be maintained continuously and on sustainable basis in order to realize social-economic success."[75] The current CRN reflects the economic priorities of the past, and it is undergoing revision.[76] Since the 2002 legislation, planning and maintenance of all roads fall under the NRFA and RDA umbrella, but in reality anything outside the CRN has not been considered for government funding.

In the meantime, interviewees from various public and private institutions are confused about who is ultimately responsible for the roads that fall outside the CRN, many of which are secondary feeder roads upon which rural farmers rely. The RDA Board is comprised of representatives from a number of different government offices, but the Agribusiness and Marketing office of MACO, the office tasked with supporting small-scale farmers throughout the country, has no formal input.

The road works proposal process starts with the district councils managed by the **Ministry of Local Government (MLG**). When it comes to agricultural feeder roads, MACO camp officers notify the councils when grading and improvement are needed, and supply the councils with technical information to help them prepare budgets and justifications. The councils review requests and submit a package of technical and cost proposals to RDA for funding. Once the RDA annual budget is approved, the council is authorized to procure works under US$1,000,000 (5,000,000,000 kwacha). RDA manages procurement for larger jobs on behalf of the councils

The councils are not automatically allocated funds for road work. Rather, they must apply for funding through RDA, which in turn is accountable to the NRFA. In this context, councils receive mixed messages. They are "encouraged" to grade secondary feeder roads, but since there is no separate process or funding source for such projects, they have little incentive to prioritize them in their requests to RDA. Councils are permitted to solicit levies and fees on livestock, charcoal, minerals, and sand. They often do so with the stated intention of funding small-scale road works. However, interviewees

73 Republic of Zambia, *Report of the Auditor General on the Road Development Agency for the Period January 2006 to September 2009* (Lusaka: Audit House, May 21, 2010), p. 10.

74 World Food Programme (WFP), *Zambia Logistics Capacity Assessment (LCA)* (Johannesburg, December 2009), p. 54.

75 RDA *Road Condition Report*, at p. 2.

76 The network is being reviewed in the Road Reclassification Study, due to be completed in late 2011.

report having seen little evidence of works executed using these funds.

NRFA has recently started using the Zambia Highway Management System, a software program that helps plan and prioritize sector investments and then makes recommendations to the Ministry of Finance, which ultimately publishes them in the thick tome known as the Yellow Book. However, publication in the Yellow Book does not guarantee that a project will happen. Despite multiple reforms since the RDA audit, the road sector suffers from a severe lack of resources, worsened by the ongoing 18-month freeze on donor funds and the decision to follow through on all justifiable contracts to which RDA overcommitted from 2006 to 2009. Those involved with the ongoing World Bank–funded Road Reclassification Study and sector strategy acknowledge that even when donor funds are released, there will be nowhere near enough resources to maintain even the 40,000 km core network defined as the new CRN, let alone those roads that fall outside that category.

The government's sector strategy is expected to focus on the main transport routes and tourist roads in the west. These main corridors have received a somewhat higher level of care and attention in recent years, although the two main arteries suffer from overuse. Informally, road sector strategy discussions have considered the need to improve overland links to open up new key ports in neighboring countries (such as Walvis Bay, Namibia, and Lobito Bay, Angola). Despite a consensus that strategic road construction is a critical part of opening new export markets, however, it is not clear that the road-planning process has incorporated any substantive cross-border trade analysis.

The **Ministry of Works and Supply** has very little control over which projects are proposed or funded. Its main role is to implement approved and funded works through the Rural Roads Unit, which delivers equipment to the districts and manages its use. In fact, public criticism routinely levied by stakeholders on the Ministry of Works and Supply may be misdirected. What is perceived as incompetence or inefficiency may be explained by unreliable funding, even for projects that are approved and appear in the Yellow Book.

GOVERNMENT-OWNED POST-HARVEST STORAGE

The FRA manages a nationwide grain storage system with a total of 2 million MT capacity, 1.2 million MT of which is in "usable" condition. This is primarily in the form of sheds and hard standings (slabs), with only 15 thousand MT of usable silos. Most sheds are located in the southern and central parts of the country. These were the most productive agricultural zones 20 years ago, though production patterns have shifted north since then. Based on a *normal* year of maize production, this storage capacity is sufficient in terms of total volume, though it is not strategically located, and there is not enough usable bulk storage–like silos or bulking centers.

At the time of this diagnostic, all government-owned sheds were bursting with either maize (the surplus harvest from 2010 and some from 2009) or bags of FISP fertilizer. Approximately

40 percent of the 1.2 million MT usable storage has been leased to the government's fertilizer suppliers in three-year leases. FRA is trying to sublease much of that space back from the fertilizer vendors; however, late payments by the FISP program have resulted in distribution delays, and the fertilizer vendors were not willing to vacate the facilities.

It is unclear how the pending warehouse receipts legislation, discussed in this report's chapter on Getting Credit, will be implemented, particularly with respect to the use of FRA storage facilities. There is a hope that enrolling FRA in the new system could be a more efficient platform for government procurement and distribution. The government sees warehouse receipts as a social service, with the potential to increase smallholder access to both storage and credit. This is partially true, but given the current policy environment, legal changes such as the Agriculture Credit Act are unlikely to have a significant effect on grain storage; in other words, the fundamental disincentives to store grain will remain.

However, when the government launches a warehouse receipts program targeting disadvantaged producers, it should be careful not to do so at the expense of a burgeoning warehouse management industry. Rather, it must consistently seek ways to incentivize the use of warehouse receipts by ensuring that the system can be profitable to investors. Implemented properly, this can inspire firms to construct new facilities designed for small-lot storage.

Therefore, simply rehabilitating storage is not warranted. Regardless of how many silos, sheds, and slabs are available and made more accessible to smaller businesses, the majority of small farmers will still be unable to afford paid storage. The Agribusiness and Marketing Division of MACO has an on-farm home storage program focused on encouraging farmers to store grain and sell strategically. However, like most government extension initiatives, it is underfunded and unable to supply basic inputs (e.g., proper storage bags). The program's objectives also run counter to those of FRA procurement. While both programs are administered at the farm level by MACO extension officers, many officers find it difficult to reconcile the two.

Another reason why increasing the total amount of usable grain storage may be unnecessary, even counter-productive, is that more grain stored equals more grain that must ultimately be moved, and this is the much bigger challenge in Zambia. There is a wide range of estimates in Zambia for how many tons of maize can be moved from FRA storage to Harare per month, but by all accounts the 2010 harvest will not be moved fast enough to avoid significant losses. There are simply not enough trucks or return-trip incentives for transporters.

MARKETING INFORMATION

Price information in Zambia is treated neither as a public good nor as an easily accessible and reliable private service. Despite three government programs and as many private systems dedicated to collecting and disseminating agricultural price data, the only way to get accurate price information, most active market participants believe, is to contact and ask influential farmers, millers, traders, or district-level officials. This equates to an advantage for buyers (traders and millers) and large farmers (many of whom are getting involved in trading and milling), and a serious disadvantage for small farmers.

The **Agricultural Marketing Information Center (AMIC**), MACO's price information system, is intended to be the primary public sector source of price data for agricultural products. Despite significant technical support from donors, and attempts to improve its format and dissemination, AMIC is weak and by all accounts unable to perform its core function. It is managed by a small team at MACO headquarters, and relies entirely on the promise of weekly submissions from district marketing officers, aggregated and sent by the provincial MACO office. However, none of those field staff receives adequate (or any) dedicated

activity funding for price collection, which is needed for motorcycle fuel and mobile phone airtime. To make matters worse, the camp and block officers tasked with data collection are already stretched beyond capacity supporting FISP distribution and FRA procurement. As the national government's only representatives in many of the country's villages and farm camps, MACO officers end up with additional responsibilities from other government agencies, as well as donors and NGOs. Because of underfunding and poor utilization, some extension officers' only opportunity to perform actual extension services is when they conduct seed demonstrations. But these trainings are funded by private seed companies, target potential seed buyers (not the poorest), and are subject to little government oversight.

AMIC headquarters struggles to adopt a new Microsoft Access–based system, a technological improvement to the last database, which seems pointless given the low levels of data coming in from the field, and inadvisable since other market information systems in the country do not use this format.

Several other government institutions collect different kinds of data relevant for crop marketing. FEWS NET no longer works directly with AMIC, instead relying on **Central Statistics Office (CSO)** prices collected as part of the Zambian Consumer Price Index (CPI). FEWS NET receives these prices by fax, and must manually enter them by district (rather than by commodity) into its own spreadsheet. Not only is this time-consuming but also the data is not quite what FEWS NET would like to be tracking.

FRA has its own Market Information System (MIS) for four strategically important commodities (maize, sorghum, rice, and cassava), but gathers this information for its own purposes, does not share with other systems, and does not disseminate to the private sector. Not only is this inefficient in terms of the shared goal of collecting accurate and timely price information, but it also means that there is very little validation of FRA's own price data. Crop forecasting is done by **MACO's Disaster Response Unit**, based on MACO data collected during the planting season. Consumers of this information believe it is generally justified and useful, and the private sector often requests information from this office in the period leading up to the harvest. However, since this is not the target audience, the information is not optimized for making marketing decisions.

As discussed in this report's chapter on Getting Credit, the draft Agricultural Marketing Act calls on AMIC to coordinate all government and non-governmental market information systems. While this makes sense from the point of view of organizational structure, the program clearly has a long way to go before it can achieve this goal. Industry experts cite the need for a Zambian equivalent of the South African Grain Information Service (SAGIS) that collects and disseminates information on production, deliveries, imports, exports, consumption, stock-in-store, and so on. Accurate information provision to SAGIS is mandatory and enforceable, whereas in Zambia it is voluntary and unverified. Most reported prices come from agribusinesses whose trading position does not benefit from total transparency, such as when it comes to reporting inventory.

SUPPORTING INSTITUTIONS

Industry associations and individual businesses are hugely influential in the Zambian agricultural sector, and in framing the overall business climate. This does not mean, however, that the private sector is getting what it needs, nor that one subsector is a clear "winner" from year to year. Rather, Zambia's policy and budget process is overly responsive to one-off demands by individual groups. This is at the heart of the agricultural sector's unpredictable business environment, with a number of negative implications for those same influential farmers and processors.

KEY SUPPORTING INSTITUTIONS

- Donors
- Private sector
- National Peasant Farmers Association (NPFA)
- Zambia National Farmers Union (ZNFU)
- Post-harvest storage providers (including FRA and large private companies)
- ZNFU SMS Trade/Market information System (4455)
- Zambia Agricultural Commodities Exchange (ZAMACE)
- Cross Border Trade Association (CBTA)

Zambia relies heavily on foreign aid, particularly in the area of infrastructure development. Zambian public sector employees perceive some donors as "shopping around" for non-governmental "winners" to support, particularly industry associations and advocacy groups. Similarly, donors in the transport sector fund specific lengths of road, but withhold budget support for NRFA. This is not surprising—the political establishment presents donors with policy unpredictability at best and debilitating market distortion at worst. However, this approach can detract from fledgling efforts on the part of key government counterparts to prioritize and implement a comprehensive infrastructure development strategy.

DONORS

The European Union leads the Transport Sector of the Cooperating Partners Group (CPG). When RDA was suspected of improper contracting in 2009, the donors group established a unified position. The EU and the Danish International Development Agency (DANIDA) paid for the audit, which was conducted by the Auditor General and outside consultants.

A new RDA board has operated since summer 2010, and a sector strategic planning process has been launched. The World Bank, DANIDA (through the EU), and the Japanese International Cooperation Agency (JICA) have made a joint decision to release funds that are tied to specific projects. However, all untied budget support (from the EU) will be on hold until the sector strategy is passed.

Donors were right to hold the government accountable for corruption, and the GRZ -led audit was the way to do it. Similarly, they are right to make decisions as a group, and to delay the release of budget support until a strategy is in place. However, the 18-month funding freeze was an enormous setback to the sector, which

A NOTE ON RAIL

This diagnostic did not focus on railways, but it is worth addressing briefly. Rail has the potential to be a cost-effective, efficient way to move bulk agricultural commodities between two hubs (production or trading centers). Rail can also reduce the wait time and cost of cross-border trade.

In Zambia, however, this is not the case. The limited rail freight capacity is devoted to higher-value mining trade, service is notoriously poor, and the physical infrastructure has declined steadily over the years rather than expanded.

Part of the problem is a poorly drafted and implemented Railway Concession Agreement for management of the north-south rail corridor.

The private concessioner and the government have been tied up in a years-old debate over responsibility for maintenance and repair. The concession cannot be revoked under current law, but the government hopes to rewrite it.

The government and the World Bank, with support from the Public-Private Sector Infrastructure Advisory Fund (PPIAF), are carrying out the Zambia Railways Concession Study. The study will determine rail infrastructure investment requirements and the mechanisms for funding for the remainder of the concession term. A Canadian firm is conducting the study, and the results are pending release.

was already overcommitted on contracts and behind on payments.

Since the only funding that will be released is project-specific and tied to specific lengths of road, it is unlikely that a coherent sector strategy will be possible, even if the political will exists. And the only way that any feeder roads will receive priority attention is in the context of a truly market-driven, strategic plan. If donors want to support rural road infrastructure improvement, they must commit to consistent funding, support for the planning process, and addressing the transport needs of rural agribusinesses.

The **World Bank ROADSIP program** has been the focal point for this planning process for decades. It recently financed a midterm review of the existing 10-year program, and is now supporting the government to conduct the Road Reclassification Study. Once that study is complete, the bank will support the NRFA Financing Strategy, which will consider donor funds in addition to its budget allocated by the Zambian Treasury and national fuel levies.

Within its own organizational structure, the World Bank separates support for agricultural feeder roads into a different program (The Agricultural Development Support Programme (ADSP)). The two programs do not collaborate on a technical level. As a result, the bank-led RDA reform and strategy efforts do not consider the links to feeder roads as comprehensively as they might. ADSP's goal is to create or rehabilitate 2,000 km of unpaved feeder roads in five target districts (Eastern and Southern Provinces), though it has also been caught up in the sector-wide funding freeze pending the audit.

ADSP engages contractors through an Output and Performance Based Road Contracting (OPRC) system, whereby the contractor that improves the road has a five-year contract to maintain it, so they have an interest in doing the job well. The contractor is paid by level of service (based on inspections), not completion of tasks. This model could be rolled out for road improvement and maintenance procurements administered at the district level.

PRIVATE SECTOR

Commercial agribusinesses have two options when it comes to improving their roads, and neither is a formal request for road work through the district council. Some individuals yield their personal influence with the Ministry of Works and Supply, the Local Government (in Lusaka), or (before the audit cleaned up shop) the RDA. Other businesses simply grade, maintain, and even pave the public roads that link their production sites with main arteries. They receive no tax or credit incentives for such work on public infrastructure, but the wear-and-tear of unmaintained roads on their vehicles justifies the expense.

The need for political or financial capital further consolidates the selling power of larger producers, reinforcing the rift between Zambia's two farming economies. Mills' contracts are often ex-farm, and when deciding on a farm block from which to source grain, accessibility is often a greater consideration than factors such as quality or payment terms.

Small, poor farmers are simply out of luck when it comes to improving their market access roads. Even those in cooperatives do not have sufficient political influence at the national level, and formal channels do not function to meet their needs. **The National Peasant Farmers Association (NPFA)** that represents this group is perceived as wrapped up defending input subsidies and FRA procurement of surplus maize.[77] While it recognizes the need for improved rural feeder roads, this issue is not central to NPFA's advocacy agenda. However, in recent years NPFA has lobbied successfully, and key district roads have been graded, but it took a concerted push by the organization, and an exclusive focus on particular lengths of road.

Critics of the **Zambia National Farmers Union (ZNFU**) say that it is "all talk when

77 The NPFA is not always in lock-step with the ZNFU. For example, in recent debates, the association came out against the 85,000 kwacha per bag price that ZNFU argued for. NPFA recognizes that such a price harms the consumer.

it comes to rural infrastructure, with their speeches, plans, and reports . . . but they're still a preserve of commercial farmers along the line of rail." ZNFU refutes this accusation, but admits that infrastructure is not at the heart of its lobbying effort. One ZNFU representative sits on the RDA Board, as required by the Road Act, but it seems that ZNFU's road sector influence ends here. According to sources within their own organization, since "400km of road can be 60 percent of the national budget, our expectations are low," which is why ZNFU does not emphasize its constituents' need for rural road improvement. At the district level, some ZNFU representatives lobby the councils for grading and road improvement, but this varies widely and is personality-driven.

Overall, interviewees suggested that ZNFU has not yet settled into its role as a representative of smallholders from across the country. Rather, the institution is described as taking a somewhat ad hoc stance on certain issues facing the rural farmer. But ZNFU has an impressive lobbying power, and it is influential at both the political and technocratic levels of government. Elements within the organization want to start advocating for reforms and resources that are in the long-term interest of small producers. In that sense, ZNFU is an important partner and may have more potential to be a strong representative for the smallholder than NPFA.

TRANSPORT COSTS

An efficient and cost-effective transport system is essential for Zambia to compete regionally. Zambia has 20–30 transport companies with a total fleet of 1,200–1,500 trucks, which are generally in good condition. Each day of transit delay costs $300. Due to high financing charges, many companies restock their fleet with used vehicles, increasing maintenance costs.[78] The sector's main representative, Fedhaul, trains companies in regional requirements and secures harmonization of transport regulations and policies to facilitate movements. Zambian transporters now haul 40 percent of all international cargo, up from 2 percent in 1991. South Africa and Zimbabwe are responsible for the majority of the remaining international cargo transport.

Zambian fuel prices are the highest in the region. The high prices are attributable to five separate duties or taxes levied on diesel, including: Import duty (0–25 percent), diesel fuel duty (25 percent), excise duty (45 percent), road levy (15 percent) and VAT (16 percent). For every $1/liter of diesel imported, a $1.16/liter in duties or levies is applied by the government, which hurts consumers and producers of agricultural products alike. Some trucking fleets are able to stay competitive with regional haulers purchasing fuel at lower prices when traveling outside of Zambia.

A NOTE ON FUEL

An "enabling environment" for agribusiness is influenced by a wide range of factors, such as those covered by this diagnostic. Marketing infrastructure is largely about the provision of public goods. While fuel supply and price is a critical aspect of transport cost, it is more often seen as a private input. However, when it comes to state-owned refineries (and questionable import bans on refined products), it is easy to see how a government's priorities and policies regarding fuel can influence the entire transport sector.

Indeni, on the road between Lusaka and Ndola, is Zambia's only oil refinery, and it has been fully state-owned for the past year. Plagued with regular shutdowns because of overuse of obsolete machinery, it is seriously over capacity. Combined with import restrictions, this plays no small role in the country's high cost of fuel. Discussions are ongoing about its privatization, but because of the failure of so many privatized parastatals in recent years, there is popular opposition to this move. As in so many areas, the government must commit to more effective partnerships with the private sector, with a focus on rules-based regulation rather than direct management of the concession.

78 There are no major restrictions on the import of new or used trucks. Roadworthiness certifications are a condition of import of used vehicles. The fee for this service is approximately $150 per vehicle.

Transport rates have recently increased due to limited fleet availability during peak production and selling seasons. The cost of transporting maize shipments on the Lusaka-Harare route rose from $45 per MT to around $65 per MT for a round-trip and up to $75 per MT for a one-way haul. Transportation delays at Mufulira and Chililabombwe were noted as particularly damaging to regional trade (with the DRC) due to excessive government checkpoints.

Infrastructure conditions between Zambia and major seaports play a large role in the transport sector's profitability, at times more so than travel distances. Poor infrastructure increases travel time, which increases truckers' fixed daily costs. For example, the Beira Corridor, with the shortest route by road to any regional seaport, is less preferred than Durban Port. Transporters are discouraged by Beira's few direct calls by shipping lines and the port's low draft levels.

The roads along all major corridors to Zambia are in good condition except for the corridor from Dar es Salaam, making transport costs to and from that port and within Tanzania high. Although Angola could be a potentially lucrative market for export of agricultural products, there are no adequate transport corridors that link the country to Zambia. Similarly, trade is limited with the DRC as roads outside of Katanga province are in poor condition.

The transport sector faces a number of challenges. The inadequacy of weigh stations allows oversized cargo to deteriorate the Zambia's roads and increases maintenance costs. These maintenance costs are high when tariffs are added to spare parts and tires. Even if tariffs are reduced, new excise taxes will often be placed on goods to offset the reductions. Finally, Zambia's high HIV rate also plays a role in the sector's struggle, though training initiatives in recent years have reduced the sector's high turnover rate.

> "All the top farmers are in the storage business."
> –Employee at a large Copperbelt mill company

Although transport rates are still regionally competitive, they are high in comparison to international rates, mainly due to Zambia's landlocked location and relatively small market. Shipment of a 40-foot container from China to Zambia costs approximately $6,500–$8,000, depending on the commodity. Of this, only $2,000 is for sea transport. This cost can be reduced by $2,000–$3,000 if a return load back to port is scheduled, but backhauls are not generally available due to the wide disparity between import and export volumes.

Escalating air freight charges have been a dominant factor in Zambia's 50 percent decrease of fresh flower, fruit, and vegetable exports over the last five years. The jump in international fuel prices, coupled with Zambia's 35–40 percent higher aviation fuel prices than elsewhere in the region, have increased transport rates from $1.60–$1.70 per kg to $2.20–$2.30 per kg in late 2010. Transport accounts for 50–60 percent of total costs, up from 25 earlier in the last decade. High costs coupled with shortages in electricity needed for irrigation and refrigeration, have provided challenges so great that some producers have lost their businesses.

POST-HARVEST STORAGE

Access to proper and sufficient storage is key if a farmer, trader, or miller wants to work strategically within a market. With so many policy-based constraints to long-term decision-making in Zambia, incentives to construct and manage storage are reduced, particularly from the point of view of foreign investment. However, some large, local agribusinesses are looking to the future and constructing impressive facilities, with support from international grain storage corporations and commercial banks. Industry competitors say such farmers are "holding the market for ransom" by storing half the wheat harvest and taking it to import parity.

In a normal year, FRA storage facilities are generally sufficient and available for lease, and a recently awarded concessional loan from the Chinese government (implemented by Chinese contractors) will add to this by improving 98,000 MT of FRA unusable sheds. Lusaka's large FRA silo was recently rehabilitated through a similar arrangement.

Warehouse operations can be an attractive business, particularly for an entity that invests in a combination of silos or bulking equipment, sheds, and trucks. The commercial farm blocks that have invested in shared storage commonly offer warehousing services to their customers (mills and traders) at a premium. It is an expensive service ($2.50/ton/month), but given policy and market unpredictability, medium-size mills and traders have in the past preferred this arrangement rather than investing in their own facilities.

Recognizing the long-term opportunities, regional grain storage giant AFGRI wears two hats to ease into the Zambian market: (1) through donor-funded (primarily UN) programs training FRA in warehouse management, and (2) its own private investment in the burgeoning storage industry. The ability to use warehouse receipts as collateral will drive expansion of this sector, provided that such services are marketed to the bigger players as well as smallholders. ZAMACE is positioning itself to be a leader in this area, and may even have a greater chance of financial self-sufficiency through warehousing revenues than through fees earned from the exchange itself.

Cold storage for perishable products is privately or donor-financed in Zambia. Some newly renovated markets, such as Soweto in Lusaka, include cold-storage rooms. But these facilities are physically and financially inaccessible to the retail vendors, who feel excluded from the conversation about overall market design and management. And outside of these few donor-funded initiatives, fee-based cold storage is simply not publicly available.

MARKETING INFORMATION

ZNFU's new SMS system for price information gets a lot of press in Lusaka, but most farmers outside the line of rail have not yet heard of it. It is relatively simple to use with a mobile phone. However, the wholesale numbers are derived through phone calls to millers and traders. Because of this, the prices reported are offer prices, not actual observed transaction prices. This information depends heavily on personal relationships of trust between the ZNFU caller and the millers, is subject to potential manipulation, and is not a sustainable data collection system.

In theory, ZNFU's market information activities, like its extension services, are redundant, a parallel system to MACO's. The Ministry of Agriculture has a more robust organizational structure, better technical capacity, and more of a historical connection with smallholders at the camp level. However, since the government does not supply the fuel and airtime MACO camp officers need for information services, ZNFU's services are in higher demand.

In recent years, FAO and the EU have supplied ZNFU extension agents with motorcycles and fuel, which has made an enormous difference in their effectiveness. Given that MACO has more coverage throughout the country, it makes more sense to support this system, and encourage ZNFU to share information with AMIC.

ZAMACE hopes to improve Zambian agricultural marketing by playing a number of "soft" marketing infrastructure roles—it is at once a virtual marketplace, a verification and warehousing system, and a mechanism for price discovery. The reference prices that it puts together through consultations with its 15 members and other stakeholders are considered to be fairly accurate, blending farm gate, inter-mill, and trading prices. But to date FRA is the only seller of a note that floats maize on the open exchange,[79] so ZAMACE as an open trading platform is not yet truly operational. Furthermore, since so little of the country's

79 See www.bidvolumeonly.org.

trade goes through ZAMACE, it does not yet truly reflect market prices.

The Cross Border Trade Association (CBTA) previously managed a Market Intelligence System through ZAIN SMS. The program gathered statistics on price, demand, and supply at the Kasumbalesa border crossing. This information was useful to small producers and traders, helping them decide what products (if any) were worth transporting to market. The program was shut down for lack of funding, and now the only insights about cross-border market conditions are available through word of mouth.

SOCIAL DYNAMICS

One trend among commercial agribusinesses is toward vertical integration, primarily as a way for businesses to hedge policy shifts and avoid reliance on an unstable market for inputs and support services. That is, millers engage in trading and brokering, farmers construct bulk storage and mills, traders are involved in warehouse management, and all players try to handle more of their own input provision and transport. Vertical integration is not uncommon or unwarranted, provided it can improve a company's market share and profits. But in Zambia the strategy appears more "defensive" than "offensive." That is, these businesses view vertical integration as the only way to secure predictability in the supply chain, given the absence of a properly functioning market.

Vertical integration as a hedging mechanism by local players is coupled with investments from multinationals. For example, Seaboard, one of the largest grain trading firms in the world, owns a national milling company as well as Unga milling in Kenya). Export Trading Company, a large grain-trading firm, owns a farm in Mpongwe (the biggest farm in Zambia, in fact) as well as Africa Milling in Lusaka.

FEEDER ROADS

Zambians commonly bemoan that "feeder roads were better under Kaunda." Whether or not that is true, it is a good example of how rural infrastructure is as political as everything else in Zambia. The primary political factor is the upcoming election in October 2011. Since almost all the roads across the country are in poor condition, and there are not enough resources to maintain a fraction of them, the only realistic road improvement plan will be systematically phased over several years, and will necessitate unpopular trade-offs. No one expects such a strategy to be unveiled before 2012.

However, the RDA corruption, audit, and reform of the past year has received a lot of press and caught national attention. Even in remote parts of the country where civic involvement is not common, public attendance at the District Development Coordination Committees has increased. This may represent an opportunity to reinforce public rejection of such corruption, thus creating a shared consciousness that proper rural road infrastructure is a right, and that it is the government's responsibility to provide it.

Still, grassroots outcries are rarely in unison, and there is no real association to represent them. The transport industry association FedHaul, which has the ear of the road authorities more than any other, appears unconcerned about rural feeder roads. Rather, the association advocates for reform of traffic regulations and weight and speed restrictions on the main arteries, since their main routes are to and from Copperbelt, Lusaka, Chirundu, and the Tanzanian border.

POST-HARVEST STORAGE

Lack of adequate storage facilities is often cited as one of the primary causes of insufficient grain storage and consequent food price volatility in Zambia. However, as argued earlier in this chapter, an absence of physical storage space may not in fact be the fundamental cause of limited private sector grain storage. Rather, the unpredictable nature of government policy with respect to strategic grains serves as a disincentive to both grain storage and investment in storage facilities.

> "The only reason for me to care about rural roads is that I go fishing on the weekends."
> –Director of large, international transport company

Highly discretionary government policies create major risks for grain storage. Export bans, sudden modification or removal of import tariff rates, and stock releases from government silos at concessionary prices are examples of how government activity can undermine the returns to intra-seasonal storage. Furthermore, there is a great deal of uncertainty over the disposition of existing FRA storage facilities: Most of the silo capacity in Zambia remains in public sector hands. The potential for selling FRA storage facilities at concessionary prices as part of some future privatization plan acts as a deterrent to new commercial investment in storage.

Regardless of the amount of available storage space in Zambia, grain policy will continue to limit the amount of grain private sector actors will be willing to store. To stimulate greater grain storage the government must commit to a policy in which interventions in grain markets are triggered by a clearly defined set of rules. Furthermore, some clarity must be achieved with respect to the risks of disposition of FRA's silos before meaningful investments are made in new storage facilities.

MARKETING INFORMATION

There is a good business case for a trader not wanting to publicly announce his purchase price, as it gives away some portion of pricing power in the market. However, in Zambia this natural reluctance is compounded by a pervasive (and less justifiable) "old boy's club" sentiment. Sharing information on prices and price influencing factors such as production and consumption through informal channels reinforces a sense of who is "in" and who is "out" of the loop. In recent years, as commercial agribusinesses have become savvier and more regionally focused, there is an increased understanding of the importance of a public, objective, consistent, and coordinated agricultural information system.

RECOMMENDATIONS

Support ongoing efforts by various donors and advocacy groups to improve the decentralization and local government clauses in the new draft constitution, in order to ensure that the voices of individual smallholders are heard. Ensure the roles and responsibilities of district councils, particularly as they pertain to rural business services and rural infrastructure. The District Agricultural and Cooperatives Office (DACO) should have a statutory role in decision-making on each council. These legal provisions are essential to ensuring that the voices of individual smallholders and small rural agribusinesses are heard by local government.

Priority: Medium
Term: Short
Difficulty: Low

Following legal reform, advocate for performance-based evaluation of civil servants, and greater transparency and effectiveness generally at the district level. The larger challenge with the district councils will be to increase the capacity of both democratically elected councilors and local representatives of the national government. Councils must strive to be responsive to the local private sector and commercialize market services.

Priority: High
Term: Medium
Difficulty: Moderate

Improve the working relationship between farmers associations, DACO staff, and the district councils. ZNFU and the Agriculture Support Programme (ASP), funded by the Swedish International Development Cooperation Agency (SIDA) from 2003 to 2007, piloted a program in Chisamba, Masambuka, and Choma. In this model, fee collection and funding for road maintenance were administered collaboratively through a joint account. The approach could be assessed for viability in other venues.

Priority: High
Term: Short
Difficulty: Moderate

Review the Output and Performance Based Road Contracting (OPRC) system used by the World Bank's ADSP, whereby the contractor that improves the road has a five-year contract to maintain it, and is paid by performance, not task completion. This should be considered for broader use as a model for district procurement, since it poses less of an administrative burden for simple road-grading procurements.

Priority: Low
Term: Medium
Difficulty: Low

Launch a multipronged campaign on the importance of rural road infrastructure, as a way for the government to support poor rural constituents. A marketing campaign directed at the general public should equate "Support the smallholder!" with "Improve rural roads!" Tailor outreach efforts to recast farmer subsidies as social safety nets, while increasing rural constituents' understanding of the importance of public goods supportive of long-term economic growth. NPFA should be encouraged to raise this issue to the top of its national lobbying agenda.

Priority: High
Term: Short
Difficulty: Low

Encourage planners and decision-makers in the road sector to incorporate feeder road maintenance in a serious way. Articulate to the government the importance (from a fiscal and political perspective) of a phased, district-by-district strategy. There are trade-offs to a long-term strategy for infrastructure development, but there is no substitute. There should be a focus on "farmer growth poles" and an earnest outreach campaign to let all districts know when their "turn" will be and what levels of investment they can expect. Given its influence in the road sector, the World Bank must be engaged and supported as the lead in this effort. The bank's ROADSIP program should be convinced to find ways to integrate rural feeder roads into the Road Reclassification Study and the Sector Strategy, perhaps by more hands-on technical collaboration with their colleagues from the bank's ADSP program. At the same time, further research is needed to assess points of leverage and resistance to decentralized decision-making over road construction and maintenance, with the goal of more effective local management of rural roads.

Priority: High
Term: Medium
Difficulty: High

Refine the language in the draft Agriculture Marketing Act to ensure a clear mandate for AMIC, and ensure that this is backed up by sufficient resources. Make sure that the final draft of the Act supersedes related existing legislation, such as the 2005 amendment to the FRA Act that formally expanded its role.

Priority: High
Term: Short
Difficulty: Low

Ensure that AMIC has adequate technical and financial resources, not just in the form of technical assistance and donor support, but tied directly to the national budget. If it is truly to serve as the country's centralized coordination unit, the center needs a multipronged work plan to improve data collection, information-sharing, measurement/unit conversion, and dissemination to the private sector (small and commercial). Operating under the mandate of the new Agricultural Marketing Act, AMIC must become a coordination center with a collaborative relationship with other MACO offices, ZNFU, ZAMACE, CSO, and FEWS NET. The information it collects is cheap, but not free, and enumerators at the camp and block level require activity resources to effectively complete this task.

Priority: High
Term: Medium
Difficulty: Low

TRADING ACROSS BORDERS

This chapter reviews the legal, institutional, and social dynamics relating to Zambia's trade in agricultural products, including both topics of trade policy (policies, laws, agreements and relationships underlying regional and international trade) and trade facilitation (the system of procedures and documentation for international trade, with an emphasis on the work of Customs services and other border agencies). The analysis concludes by suggesting an approach to reform that would meet government and private sector interests while increasing benefits to Zambia's consumers.

TRADE POLICY

Zambia's Fifth National Development Plan (FNDP), for the years 2006–2010, emphasizes the importance of agricultural trade and investment to the government's economic development strategy. The document sets forth the government's goal of transforming the country into a more diversified and competitive economy by increasing regional and global integration. Zambian trade policy is markedly more business-friendly since the country embarked upon a wide-ranging reform program in the 1990s. Reforms included the reduction of import duties, removal of exchange controls, liberalization of prices, and removal of subsidies. According to the World Bank's Trade Tariff Restrictiveness Index, Zambia's trade regime is more open than that of an average Sub-Saharan African or low-income country, but less open than regional competitors such as Kenya, Tanzania, Mozambique, or South Africa.[80]

Interviews with private, public, and non-governmental actors over the course of this diagnostic revealed just how sensitive trade policy is in Zambia. On one hand, Zambia continues to lower trade barriers to profit from regional trade opportunities, exemplified by the country's continued engagement in the COMESA and SADC free-trade areas. On the other hand, the simple average tariff has dropped only slightly since the late 1990s. Complaints of non-tariff barriers are fairly widespread. Agriculture remains Zambia's most protected sector, with average applied tariff rates of 19.1 percent and a duty range from 2–25 percent. The upper bound of 25 percent tariff rate applies to a relatively high number of agricultural products[81] and non-tariff barriers are frequently reported, especially in the milk and oil trade. Despite the progress on a regional level, a lack of transparency and policy unpredictability are the defining characteristics of Zambia's trade regime. According to numerous stakeholders interviewed for this diagnostic, examples of such unpredictability include the following:

- Trade policy decisions such as trade bans, quotas, and tariffs are made behind closed doors, with little public consultation and often with no public notice.

TRADING ACROSS BORDERS	
Doing Business Ranking 2011	150
Doing Business Ranking 2010	157

80 See *http://info.worldbank.org/etools/wti/docs/Zambia_taag.pdf.*

81 Current rates as of November 2010, WTO.

- A large gap exists between the average applied tariff rate of 13.4 percent and the bound rate of 105.7 percent, leaving the government free to raise tariffs at will.
- The vast majority (83 percent) of tariff lines are unbound (that is, they can be changed without discussion with trade partners).
- When policies and processes are changed at the border, neither private traders nor government agencies are effectively notified of the decision.

Table 2 below lists the top 10 (recorded) export crops by volume between 2002 and 2009. Informal trade flows, to the extent they are monitored, focus on a limited number of commodities and are difficult to calculate and verify.[82] Each has experienced positive average growth rates over the same period, with periods of negative growth (sometimes sharp) since the appreciation of the kwacha in 2005. Most but not all of these crops are characterized by low margins and high competition in the region. Reflective of the entire agricultural sector, these crops tend to be produced on rain-fed plots of land and at below-average levels of productivity, even by regional standards. These facts help frame the opportunities available to Zambian trade and the remainder of this chapter.

TRADE FACILITATION

Imports of food staples (as well as imports of inputs such as fertilizer and equipment) and exports of surplus production are critical to ensure food security. For example, Zambia is well situated to turn to Tanzania's largest maize-production area, the southern highlands, during deficit periods.[83] Likewise, with more than 15 million people, the Katanga province in the DRC provides a ready market for Zambian products.. To access these markets at a relatively low cost, a simple, predictable border clearance process must be in place. This type of process is achievable if border agencies are adequately staffed, competent, harmonized, and view trade facilitation with equal importance as quality control and revenue generation.

Lack of effective trade facilitation procedures, infrastructure, and inefficient transport/logistics systems constrain intraregional trade. For example, money that could support trade instead sustains an inefficient clearance process. For every day a truck is delayed in transit, an additional $300 can be added to the transport costs, according to a major transport company in Lusaka. Zambia has prioritized trade facilitation in its national agenda, recognizing the critical role trade facilitation plays in expanded economic growth and poverty reduction. The national government has focused most of its trade facilitation improvement efforts on Customs modernization and border infrastructure improvements. Although this approach has shown results in terms of decreased border delays, reforms within and between border agencies (e.g., PQPS, ZABS) reportedly proceed at a slower pace. Ongoing infrastructure projects at major border

TABLE 2: ZAMBIAN EXPORTS (MT)

Product	2002	2003	2004	2005	2006	2007	2008	Avg MT
Maize	6,765	34,418	126,703	64,101	41,596	256,877	241,602	110,295
Cotton lint	28,815	52,482	222,320	111,501	114,616	78,284	56,311	94,904
Cottonseed	10,902	30,042	32,967	74,474	63,014	63,918	9,935	40,750
Flour of Wheat	2,318	3,725	9,536	23,016	33,940	41,017	59,648	24,743
Vegetable Frozen	11,370	14,053	27,935	22,833	31,982	27,672	28,198	23,435
Bran of Maize	5,409	3,910	13,342	6,149	5,427	28,698	34,099	13,862
Coffee, green	10,412	13,384	16,037	19,138	11,985	10,277	9,574	12,972
Chillies and peppers, dry	1,950	1,431	1,874	353	1,645	2,334	850	1,491
Groundnuts Shelled	619	2,784	1,422	404	2,041	738	290	1,185

Source: FAOSTAT

82 *Informal Cross Border Food Trade in Southern Africa* (Feb.–Mar. 2010), *available at* www.fews.net (the Famine Early Warning System website).

83 Tanzania's own recent and unpredictable use of trade bans may frustrate this expectation, however. See AgCLIR Tanzania, Agenda for Action (2010), *available at* www.bizclir.com.

crossings, such as Zambia's first one-stop border post (OSBP) at Chirundu or the improved facility at Kasumbalesa, will offer reduced clearance times and thus even greater potential for improved trade facilitation, once fully operational. However, lack of capacity within both the private and public sector hinders projects from achieving more substantial gains, such as the creation of an IT-driven, seamless border process. It is important to underscore the economy-wide benefit associated with such improvements.

Zambia's efforts to expedite the border clearance process are reflected in the country's slightly improved World Bank *Doing Business* ranking (150 in 2011, up from 157 in 2010).[84] This is especially true in the case of average export and import times, which dropped from 53 days to 44 days and 64 days to 56 days, respectively. The World Bank's reported average processing time for export and imports is 3 days and 4 days, respectively. These times do not align with data from Zambia's Customs IT management system. Interviews with stakeholders indicate that actual average export processing is less than 1 day while imports generally exceed 4 days. Import clearance times vary, as some duty free and/or perishable imports are cleared more rapidly than other products.

The environment for trade facilitation improvements in Zambia is good. The government has demonstrated its commitment in both the modernization efforts of the Zambia Revenue Authority (ZRA) and its Customs division and the major infrastructure improvements

INFORMAL TRADE —A CHALLENGE FOR ZAMBIA

Available data suggests that informal cross border trade with DRC, Tanzania, Malawi, and Mozambique is often substantial. Local interviewees and FEWS.net report that the principal driver of this trade is commodity price differentials across markets. Persistent deficit markets such as the Katanga province in DRC present the most substantial opportunity for Zambian producers, processors, traders, and transporters. "Hunger seasons" in surrounding countries present another consistent market for Zambian products, including maize, beans, and rice.

Informal trade between Zambia and the DRC supports a large percentage of both Zambia's production base and the DRC's food deficit population. This trade flows mainly free of regulation, and mostly between Zambia and the DRC's Katanga province (population 15.7 million). An estimated 75–80 percent of Zambia's agricultural exports to this province are traded informally through Kasumbalesa. Customs acknowledges the large amount of informal food staple exports flowing out of its country. However, restrictions are essentially non-existent and would most likely have to be initiated in the DRC as it suffers the majority of revenue loss.

Demand from the DRC generally exceeds supply. Most food staple imports to the DRC are of Zambian origin, although Tanzania holds a large share of the rice, beans, and groundnut trade, and South Africa continues to gain market share, particularly in maize. Sellers depend heavily on informal trade for income. Informal sellers consist equally of farmers and traders from all over Zambia. Women sellers are often physically or sexually harassed when selling their goods.

The informal trade process with the DRC is strikingly efficient. Informal buyers are almost exclusively from the DRC, many of whom are major traders. Staple food lots are purchased at the three specialty markets close to the border. Buyers arrange for bicycle couriers to carry stock from Zambia across one of the 200-plus informal paths, where trucks wait at the DRC side. Two 30 MT trucks of maize can be loaded onto large numbers of bicycle couriers in about four hours. Trade continues throughout the day but escalates around 8:00 p.m. Independent haulers provide most market transport at high rates. A producer from the Lusaka area noted that she could sell her onions for at $3 per sack in Lusaka, for a reasonable profit, but had to sell at a minimum of $5 per sack in Kasumbalesa to cover transport costs. Informal traders are in a difficult negotiating position since they cannot guarantee frequency or volume of goods. While much of the current trade is informal, easing formal trade barriers, such as licensing requirements, can be expected to drive substantial informal trade into more formal channels.

84 See http://doingbusiness.org/data/exploreeconomies/zambia.

ongoing at the borders. If these are to be sustained and realize their full potential, the capacity to absorb these changes in both the public and private sector will have to be upgraded and more emphasis placed on improved public-private partnership. A quality consultative process would resolve problems prior to implementation and speed cost and time reductions in border processing.

LEGAL FRAMEWORK

TRADE POLICY

Zambia's legal framework for agricultural trade consists of a disparate set of laws and regulations. It is readily available to users, though only in English. The laws tend to be clearly drafted and easy to use. Copies of all laws and regulations that comprise the country's regime pertaining to trade in goods are available to interested stakeholders via the Parliament's website (though without any meaningful search functionality).

INTERNATIONAL TREATIES

While Zambia has established a regime of treaties and agreements that supports international trade, its commitment to these arrangements is in question. Zambia is an active member of the WTO and leads the least developed country (LDC) group in the Doha negotiations. Zambian private sector and government actors are particularly interested in the below-listed trade negotiations under way, with top Zambian priorities ranked as follows:

- **World Trade Organization (WTO)**: Conclusion of Doha round to address agricultural subsidies in developed countries;
- **EU Economic Partnership Agreement (EPA)**: Use of EPA sensitive list to shelter products from EU subsidies;
- **COMESA Customs Union:** Lengthy submission of agricultural products to be placed on "sensitive" products list (and therefore immune from further liberalization);
- **SADC FTA:** Duty-free access for South African wheat; and
- **DRC Bilateral Trade Agreement:** Reduction of duties on bilateral trade.

FUEL TAXES
• Import duty, 0–25 percent • Diesel fuel, 25 percent • Excise duty, 45 percent • Road levy, 15 percent

Regional trade is limited by the lack of an international trade treaty. This is particularly true for larger, formal agribusinesses (some of whom source from smallholders). Exporters report strong demand and a ready market for food products including maize meal, milk, and wheat, especially in the DRC. Zambia is at a competitive disadvantage in terms of trading with the DRC, in part because of an absence of preferential trade between the two countries. While the relatively high cost of Zambian products is the main determinant of Zambia's inability to capture the Congolese market, private traders (especially larger ones) consistently report a lack of bilateral agreement as a meaningful barrier to stronger commercial ties between the two countries. Moreover, private traders reported large variations in duty charged on their agricultural exports to the DRC. It is unclear how much of this is due to graft, and is an area in need of further research.

The answers of private traders to questions about duty rates are revealing, but not straightforward. First, given the opaque nature of the trade with Congo, the vast majority of traders unload their product on the Zambian side of the border where they sell to Congolese traders, who then deal with moving the products into Congo. Second, one trader in Kasumbulesa reported that duty rates change frequently between individuals (i.e., one person is charged one rate and the next person another rate). While one trader noted that the maize duty "is not even high enough to affect the price," another quoted it at 25 percent ad valorem. For wheat products the rate is reported as

substantial, but not fixed. These duties help to explain South Africa's position as supplier of first resort based on price, despite that country's higher transportation costs. With growth of contract farming and trade often happening between large borrowers who consolidate smallholder surpluses, such a policy shift can be considered pro-poor.

TARIFFS

Zambia's tariff regime is substantially simplified over years past and generally does not impede imports or exports of strategic importance. Tariffs and regulations dealing with the importation of agricultural products and foodstuffs do not tend to interfere with access of domestic agribusiness to the goods and services required. Interviewees reported no problem accessing fertilizer, crop protection materials, or planting material based on tariff or trade policy more generally. There appear to be two exceptions to this "rule": First, the five layers of fuel tax (including duties levied and VAT) amount to a substantial increase in the cost of production across the agricultural sector, substantially limiting Zambia's competitiveness. A second exception to this "rule" are the government announcements of future import tariff waivers that have kept grain traders out of the market in recent years; government inaction following such announcements has limited the vigor of trader reentry into the market. Somewhat less clear is the degree to which the government has not fulfilled its promises to exempting VAT on all agricultural products for export as the law specifies, including knapsack sprayers, and by some accounts, irrigation equipment, and inputs and technologies used for agricultural processing. Farmers are not eligible for VAT reimbursement due to a provision in Zambian law that distinguishes between VAT "exempt" and "zero rated." While neither category of taxpayer pays VAT, those who are exempt, including farmers, are not able to claim back VAT because they are not formally part of the VAT system under the exempt status. Zero-rating farmers would substantially reduce their tax burdens, increasing their ability to compete in local and regional markets.

ZRA values trade based on cost insurance and freight (CIF) with all duties ad valorem based on three tariff bans: 5 percent for raw materials and capital equipment, 15 percent for intermediate goods, and 25 percent for final products. Fertilizers, seeds production machinery for agribusinesses, and staple food products originating in either a COMESA or SADC country should be duty-exempt. Given the relative proximity to Zimbabwe, a former agricultural giant in its own right, accessing necessary inputs such as cartons, packaging materials, and packaging and processing equipment was not reported as a constraint to doing business with multiple quality suppliers from which to choose.

IMPORT/EXPORT BANS AND TRADE PERMITS

The national government frequently applies quantitative restrictions on a number of products. At the time of this diagnostic, the private sector confirmed complete quantitative restrictions (i.e., bans) on the import of wheat, milk,[85] and

KEY LAWS AND REGULATIONS

- Customs and Excise Act, as amended (1955)
- Zambia Revenue Authority Act (1993)
- Food Reserve Act (1995, as amended 2005)
- Food and Drugs Act and Public Health Act
- Plant Pests Disease Act
- Stock Disease Control Act
- Cattle Slaughter Control
- Competition and fair trading Act
- Environmental protection and pollution control Act
- Control of Goods Act (1985, as amended in 1994)
- Trade licensing Act
- The Zambia National Tender Board Act
- Standards Act
- Act to Amend the Weights and Measures Act (1994)
- Trade Marks Act
- Plant Breeders' Rights Act, No. 18
- Seed Act

85 It was reported at the time of writing this report that the import ban on milk was lifted, but this could not be verified.

all products of GMO origin and the export of wheat, wheat flour, soya, and maize. Ad hoc bans of exports and/or imports tend to occur in years of production surplus or production deficit as a way of dealing with price fluctuation, but generally result in increased uncertainty in the markets when certainty is needed most.[86] The unpredictable nature of these bans is widely reported as a principal barrier to the establishment of stronger commercial ties with neighboring countries, including the DRC and Zimbabwe.

Export and import bans tend result from high-level guidance on when to or not to issue import/export permits for those products. According to a Zambian official, "There are no export bans. Trade in certain products is just highly controlled." Bans can also be given legal basis by amending the Control of Goods Act, which has been used to ban the importation of wheat and wheat products in the past. To export maize, a company needs to be on the export list; this list will note the origin of the product, which will in part determine if the product can be exported. Only six companies and the FRA are on an approved list of maize exporters, for example. At the time of writing this report, interviewees noted the existence of such a list only for maize.

The purpose of such bans is to serve specific constituents' interests, usually producers or processors. Despite vociferous lobbying for such bans, the use of import and export bans or tariff rate changes to protect local industry, over time, has had a negligible effect on average prices but a substantial effect on price instability. The lack of a discernable impact on average prices before or after the imposition of such bans implies a substantial informal trade that is able to avoid such restrictions in these products.[87]

NON-TARIFF BARRIERS TO TRADE

Non-tariff barriers to trade may be the principal barrier to the free flow of goods and services in

TABLE 3: SELECT NON-TARIFF BARRIERS IN AND AROUND ZAMBIA

Product	Type of non-tariff barrier	Complaint
Milk	SPS Measures	Zambia denying entry of Kenyan milk into country based on claims of adulteration.
Transport Service	Transit Issues	South Africa trucks with Zimbabwean and Zambian drivers are being impounded despite reciprocity agreement.
Seed	Export/Import license	Mixed reports of Zimbabwean authorities rejecting Zambian produced seed; further, the office dealing with export permits and Ministry of Agriculture only opens at 11:00 a.m.
All Products	Transit Issues	Inland Zambia State Police request for Customs documents at road blocks (Matumbo, Chinsali) creating unnecessary delays.
All Products	Clearance Procedures	ZRA clearance delays at Victoria Falls Border Post in Livingstone. Wait time is 1–2 days, with only one officer assigned to post.
Coffee	Technical Barriers to Trade	Restriction of coffee exports to Zimbabwe.
Sugar	Quotas	Import quotas into SACU member states for sugar (e.g., Botswana); Zambian Vitamin A fortification requirement.
Meat	SPS Measures	South Africa's ban on imports of all meat from Zambia.
Chilies	SPS Measures	South Africa denies plant import permit for imports of chilies from Zambia.

Source: Author interviews and Non-tariff Barrier Monitoring Mechanism, *available at* http://ntb.africonnect.com/.

86 For evidence in support of this conclusion, see MSU International Development Working Paper 102, *available at* http://www.aec.msu.edu/fs2/papers/idwp102.pdf.

87 Michigan State University, Food Security Research Project (2010).

the region. Table 3 lists some of the non-tariff barriers most frequently reported in Zambia. Private companies and others knowledgeable of these issues criticized many of these as ways of blocking Zambian exports to its neighbors or ways to evade Zambia's obligations under SADC, COMESA, and the WTO. Not surprisingly, private sector interests benefiting from any particular barrier praised it, while deriding the rest. This rather mercantilist approach to regional trade threatens deeper and more successful integration efforts in the future.

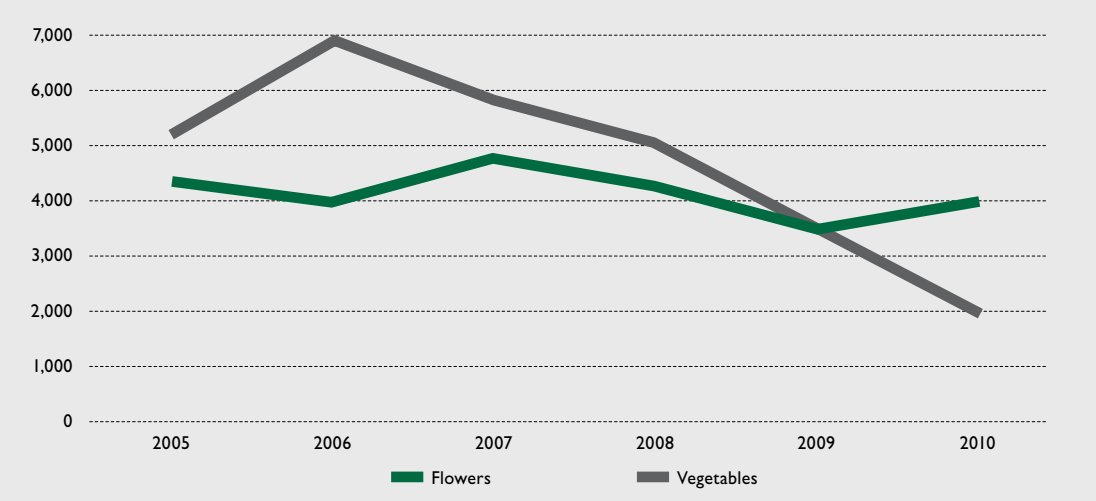
EXPORT INCENTIVES

Efficient, simple, and easily accessible export incentives could contribute significantly to export expansion, but existing programs are underperforming and underutilized. Only 43 companies (95 percent of which are involved in agribusiness) use the main export incentive program – duty drawback. This scheme permits refunds of duties and excise tax paid on inputs, including fuel and electricity, upon export of the finished product. Of the 500 yearly claims for duty drawback, officials reported that more than 50 percent are processed within the 30-day standard set by ZRA. Interviews with the private sector suggest that the process is "near impossible to manage" even for big agribusinesses, implying a substantial scope for making the system small business–friendly. The duty drawback program was last modified in 2002 and requires complex calculations and record-keeping. Work is ongoing to automate the process so that filers can transmit claims and check status electronically. The program must be simplified and coupled with an outreach program to expand usage, including small less-endowed businesses. With the proper revisions to simplify the program and provide IT applications for electronic filing and status notification, the duty drawback scheme could be extended to almost all exporters in agribusiness and significantly reduce their final costs.

SANITARY AND PHYTOSANITARY (SPS) MEASURE

The legislative framework for plant, animal, and food safety oversight is generally regarded as sufficient for Zambia's current level of trade. The "weak link" is the lack of financial resources to adequately monitor and enforce this legislation. In the past, Zambian exporters and foreign trade partners reported SPS-related problems with exports into the EU market. Interviews with exporters and trade associations and recent analysis of the topic by the World Bank[88] all suggest that SPS measures are a limited burden but not a primary constraint to the country's agricultural growth. With increased reliance on the EU or North American markets, this situation could change, necessitating

CHART 2: ZAMBIAN FLOWER AND VEGETABLE EXPORTS, 2005–1010 (MT)



88 World Bank/USAID, *Zambia: SPS Management: Recommendations of a Joint World Bank/USAID Assessment Team* (2006).

continued improvement in this area. But with the majority of agricultural exports being shipped throughout the region, often informally, sanitary and/or phytosanitary standards are reportedly of little consequence to that trade. Moreover, growth in Zambian exports tends to come from products such as sugar, cotton, and tobacco, which are less sensitive to SPS measures than products such as cut flowers, fruits, and vegetables. (See Chart 1.) Nonetheless, SPS measures are commonly reported to be non-tariff barriers to trade with regional partners. This is a reciprocal problem throughout the region and poses a serious risk to future intra-regional trade and Zambia's export potential.

PUBLIC AND PRIVATE STANDARDS

Zambia is a member of the Codex Alimentarius Commission, the body responsible for the development and implementation of internationally recognized food standards by member countries. The Zambian government maintains 500 standards, enforceable by the Zambian Bureau of Standards (ZABS). The government is in the process of adopting internationally recognized standards and certifying agricultural products with export potential including honey, groundnuts, and others. At the time of this assessment only one (government) lab was ISO compliant for a limited number of agricultural products. The draft National Quality legislation in Parliament at the time of this diagnostic will fully separate development and implementation of standards and enforcement activities. However, given the preponderance of informal food sales, much of the trade is extra-legal and not affected by this legal framework. Voluntary standards increasingly demanded by the private sector are viewed as real threats to Zambian producers, traders, and exporters, and one that they are much less prepared to confront. Most Zambian producers, especially smallholders, do not have the knowledge or resources to meet high costs of training, auditing, or certification required by the formal private sector. Although reports suggest that a small group of high-value export growers is certified under GLOBALGAP, annual certifications tend to prove too costly to maintain, given current market shares. ZABS reports a rise in food-poisoning complaints, leading the country's largest supermarkets to require audits of agricultural supply chains. The risk to smallholder agriculture is clear – unless food safety issues are dealt with quickly and decisively, farmers viewed as 'high risk" are likely to be shut out of high-growth supply relationships with local supermarkets.

MARKETING LEGISLATION

The Food Reserve Act and the statutes that it replaced, including the National Agricultural Marketing Act of 1989, set forth the rules for marketing a limited number of commodities. The marketing of crops including coffee, tobacco, and cotton is regulated under separate, stand-along legal instruments. The marketing of other crops by the private sector remains largely unregulated. According to stakeholders consulted for the development of the new Agricultural Marketing Act, "this has resulted in an inefficient and poor agricultural marketing system." Even if passed, it is unclear what specific gains the country will reap from the new consolidated legislation, since it is hard to judge the government's intention and ability to live by any new "rules of the game." The new law will likely establish an Agriculture Marketing Council and contains other provisions aimed at increasing predictability. However, the language in the statute must be explicit and incorporate lessons learned from establishing past marketing boards (in Zambia and elsewhere in the region), as recommended by this report's chapter on Competing Fairly.

Trade in seed. Stakeholders in Zambia's agricultural sector are upbeat about the legal and regulatory framework governing trade in seed. Despite a history of heavy state intervention and state monopolies at all levels of the seed chain, private growers, retailers, and distributors expressed confidence in the efficiency of the sector and the soundness of the existing regulatory regime supporting the sector. While the legal framework provides incentives

for future dynamism, such as a national seed framework that includes plant breeders' rights and a well-defined phytosanitary and quarantine system under Zambia Agricultural Research Institute (ZARI), challenges do exist.89 These include process issues more related to institutional bureaucracy than to legal and regulatory soundness, such as wait times for variety release (approximately two years). Although SADC ministers finally signed a protocol on the harmonization of seed policy in the region, Zambia still requires legislation to support regional variety release and the harmonization of distinctness, uniformity, and stability (DUS) testing. Currently SADC requires one year for variety release, while Zambia requires two years. Completion of legislative and regulatory harmonization will increase competition in the regional seed sector by allowing seed to move across national boundaries, unhindered by variations in national rules.

Perhaps more important, regional differences in seed certification, quarantine, and phytosanitary standards are preventing a more robust trade in seed among the SADC and COMESA member countries. Each country has its own (lengthy) variety testing and release procedures that must be fulfilled before the seed can be marketed. Given differences in seed legislation across the region, private seed companies tend to select priority countries for the release of seed material. This practice delays farmers' access to new seed lines and hinders the growth of markets for seed producers. Furthermore, regional variation in national standards for seed certification and quality control, and in quarantine and phytosanitary measures for seed, reportedly complicates the trade of seed across the region and decreases the efficiency of seed trade flows in emergency situations.90

Trade in fertilizer and crop chemicals. Government participation in the fertilizer markets is widely reported to crowd out private sector activity. This is an issue that has received substantial attention by local and international analysts. The government undermines private sector activity in the fertilizer industry through its procurement policies related to the Farmer Input Support Program (FISP) and through the occasional activity and unfair playing field on which the parastatal fertilizer company operates (Nitrogen Chemicals of Zambia). In both cases, the government argues that leaving market forces to operate unhindered would result in farmers not being adequately served. Interviewees knowledgeable about the input procurement practices under FISP regard them as uncompetitive, opaque, and likely involving the exchange of money for tenders. This in turn undermines competition in the sector. It is worth noting that since 2002 only two companies have won tenders for FISP, though more price-competitive bids have been received. The tender process is set up to do just this, specifically by requiring that companies have a specific quantity of fertilizer already in the country in order to win the tender. If companies feel that the playing field is not level, they have no incentive to import large quantities of fertilizer prior to the farming season, which in turn disqualifies them from winning the tender.

Local stakeholders familiar with the legal framework covering the manufacture, processing, and trade and distribution of fertilizers note that it is considered generally inadequate, fragmented, and outdated. Moreover, trade in fertilizer and crop chemicals is reportedly hampered by the high cost of ZABS licensing fees. For example, on a recent shipment of fertilizer, ZABS charged $3,700 to inspect, test, and certify a shipment of 1,000 MT, or $37/MT. This reflects the lack of competition in Zambian testing and analysis, and is a good example of the limiting impact on the competitiveness of underdeveloped testing and analysis within the government and private sector. This equates to $1.85 per 50 kg bag of fertilizer, an additional cost that is borne by farmers.

TRADE FACILITATION

In order to access needed agricultural inputs and products, as well as to find markets for staple food surpluses, a country needs simple and

89 Zamseed had a unique relationship with ZARI until recently, allowing them exclusive access to the country's genetic research and development investments.

90 Harmonized Seed Security Project Planning Workshop, FANPRAN, Lusaka, Zambia (2010).

harmonized trade procedures based on current best practices and globally accepted standards. An efficient clearance process allows border infrastructure to accommodate traffic and operations, and well-maintained routes allow the transport sector to provide dependable service along markets. With solid clearance processes and transport routes, farmers and traders will be more able to compete in regional and international markets. Simple and transparent practices are particularly necessary for the successful integration of SME agribusiness companies. Zambia's national government has a good understanding of the best practices it must employ to expedite and harmonize the border process.

The primary laws governing movement of international trade are the **Control of Goods Act (1954)**, the **Zambia Revenue Authority Act (1993)**, and the **Customs and Excise Act (1955)**. The latter is the most significant in regulating the border process, and is updated and implemented by the Customs and Excise Division of the ZRA. The statute is available electronically on the ZRA website, and implementing regulations are published in the government Gazette.

Information flow. Traders consistently reported that the Customs clearance processes are predictable and harmonized among all border posts. Customs has implemented Simplified Advise Centers at border posts where traders can secure information on Customs processing as well as other agency processing if necessary. These other agencies, including PQPS, ZABS, and Immigration, do not offer viable websites or centralized service centers, which presents problems to trade outside of the remit of Customs.

However, traders generally find it difficult to locate needed information when change does occur (usually without prior notice). Traders are not notified directly by Customs or by the other border agencies in the formulation of reform policies and are therefore taken by surprise when changes affecting their business appear in the Gazette. Moreover, interviewees reported that sector groups, including clearance agents, do not effectively communicate with their constituents. This leads to relatively high rate of incorrect data submissions, ultimately slowing down the clearance process. Last, individual border agencies often fail to notify other agencies of changes being made even though the changes will impact their operations.

Information flow is inhibited at certain points and between certain groups involved in the clearance process, such as during procedure revision, between the government to private sector, and between private sector groups and their constituencies. For example, a large amount of government information is not available locally or online. To access information, one would have to travel to Lusaka to pick up a hard copy, which would only be available in English.

Compliance with international standards. Zambia's Customs and Excise Act generally complies with the World Customs Organization's (WCO) Revised Kyoto Convention (RKC), the blueprint for modern and efficient Customs procedures, which Zambia acceded to in March 2006. However, implementation of this law is uneven due to lack of institutional capacity. ASYCUDA++, the Customs IT management system, meets RKC-accepted processing standards. The mandatory use of a Customs clearance agent is one area of nonconformity. Updates to the law are made almost yearly as part of the national budget process.

A formalized appeal process, both within ZRA at a first level of review and then to an independent body for second review, is in place but not used extensively. Valuation,[91] classification, and rules of origin are generally in accordance with WTO/WCO requirements and guidelines. In-house efforts, coupled with WCO-conducted training, have been effective in increasing staff competency. Traders' challenges regarding valuation or classification decisions are rarely related to the agribusiness sector, although some traders noted problems with duty assessed on spare equipment parts,

91 At times valuation slows the clearance because this is performed at point of entry by field staff to determine final duties and taxes owed. WTO rules require the first basis of valuation to be the transaction value, which is price paid or payable. But for many goods, field officers in coordination with the headquarter's valuation department have ranges for certain repeat commodities; if the import does not fall in this range Customs will reject it and demand entry at an increased value. Note that valuation of commodities does not relate to method of shipment, whether break bulk, bulk, or containerized. Same valuation process is applied to all commercial shipments regardless of how it is packaged or transported.

especially when arriving by air freight. The legal requirement for 28 days of prior notice is generally adhered to. Fees are imposed as published and relate to degree of service rendered.

Regional initiatives. Zambia's greatest legal and regulatory challenge to trade facilitation is the adoption of the regional Customs union legal framework. These unions were named by COMESA in 2009 and have yet to be named or formalized in SADC. Formal technical committees are addressing the issue of Customs unions, which will likely take years to resolve. As a landlocked country, Zambia depends on the ports of other African countries for international trade. A bond must be purchased by the trader to safeguard the passage of goods through each transit country. Both COMESA and SADC have regional transit bond programs that allow the shipper to purchase one bond to cover a shipment through multiple countries (e.g., South Africa, Zimbabwe, and Tanzania). This reduces bonding from $200 to $50 for international transit shipments. Due to lack of information and the loss of revenue implications for both the forwarder and insurance company in the transit countries, this scheme has few users in Zambia. The country's Customs clearance sector arranges the bonds; however, the sector lacks commitment to the program and discourages its use. In order to gain from this program, traders must first become aware of its existence and then force clearance agents and bonding companies to participate.

The third-party rules ban trucks registered in one country to transport goods between two other countries, thus restricting market access in transport and hampering the liberalization of regional road transport throughout Southern Africa.

Clearance agent regulation and licensing. The legal framework for Customs regulation of the clearance agent sector and license requirements is sufficient; however, these regulations are not always applied with equity or consistency. Customs is undertaking measures to improve its oversight, as evidenced by the ZRA Licensing Committee's recent rejection of over 40 applications and appeals. One initiative is taking measures to ensure employees of the companies are knowledgeable about Customs matters. A more reasonable approach would be to increase vigilance among licensing companies by holding them responsible for the quality of their staff. Punitive action could be taken against the company, such as revocation or suspension of the license for employee wrongdoing. Also, pre-licensing examination would remove those unqualified and ensure objectivity in the licensing process.

IMPLEMENTING INSTITUTIONS

TRADE POLICY

Managing agricultural trade in Zambia is complex. Not only is trade managed by a wide range of government offices but the responsibilities of each office also often overlap, are unclear, or are not aligned with the ministries' own objectives. Across the board, interviewees reported that despite improved venues for public-private consultation, decisions and decision-making processes remain opaque, and often captured by very narrow interests.

The **Ministry of Agriculture and Cooperatives (MACO**) is the principal government agent charged with regulating and servicing the agricultural sector in Zambia. It is responsible for providing a wide range of

KEY IMPLEMENTING INSTITUTIONS

- Zambia Revenue Authority
- Ministry of Agriculture and Cooperatives
- Ministry of Livestock and Fisheries
- Zambia Bureau of Standards
- Zambia Weights and Measures Agency
- Ministry of Health
- Zambia Association of Chambers of Commerce and Industry
- Ministry of Commerce, Trade and Industry
- Ministry of Finance and National Planning
- Zambia Agriculture Research Institute

TABLE 4: THE ESTIMATED COST TO TAXPAYERS OF THE FRA PROCUREMENT PROGRAM

Intervention	Calculation	Total
Purchase 873,779MT	$270/MT	$ 235,920,330
Storage and financing	$5/MT/month x 6 months	$ 26,213,370
Losses	10%	87,378MT
Sale	$180/MT	$141,552,198
Cost to taxpayer		**$ 120,581,502**
Collateral Damage' to market	Loss of confidence	Unquantifiable

Source: Authors' calculations based on USAID/PROFIT model

services that affect Zambia's ability to trade, including extension services, market information, plant quarantine and plant health, the issuance of import and export permits for agricultural commodities, among other roles.

Despite MACO's broad mandate to support agricultural trade, a review of its budget reveals a rather stark orientation toward social protection as opposed to its stated mission to "facilitate and support the development of a sustainable and viable agricultural sector." The majority of MACO's budget is targeted at smallholder subsidy programs. Nearly 50 percent of the ministry's budget is taken up by two programs that do little to support trade-led growth. Approximately 35 percent of the ministry's 2011 budget is devoted to fertilizer subsidies via the FISP. Another 11 percent is devoted to the FRA's smallholder maize procurement budget. Reports of leakage within Zambia and across its borders under both programs are widespread.

FRA activity is particularly damaging to domestic and international trade. Private sector traders and others assert that the FRA's participation in the market has led to substantial market uncertainty and caused traders to take fewer risks based on an inability to compete with the government. Based on purchase and sale prices of recent FRA transactions, and the costs associated with storage, financing, and losses, the loss of hard currency can be estimated at approximately $120,581,502 for the 2010 season alone, *more than the sum of total government and donor-funded agricultural development budgets for the last two years combined.*[92] (See Table 4.) These resources could be better used to help kick start agriculture and increase agricultural trade through organs of MACO including extension, PQPS, SCCI, ZABS, or ZARI. Some commentators point out that FRA may be better analyzed as a social safety net program, but because of the inefficiency of such a program, a targeted cash transfer program would be both cheaper and avoid weakening market confidence as the current program manages to do on a yearly basis.

SEED CERTIFICATION AND CONTROL INSTITUTE (SCCI)

This agency enforces the Plant Varieties and Seeds Act and the Plant Breeders Rights Act, which regulate seed production, sale, import, and export of seed and provide for protection of plant breeders' rights and registration of plant varieties, respectively. SCCI is accredited by the International Seed Testing Association (ISTA) – accordingly, its testing procedures are internationally recognized. While SCCI uses International Union for Protection of Plant Varieties (UPOV) guidelines to test plant varieties, the country is not yet a signatory of the convention. SCCI is generally considered by the seed trade to be a competent and functional but underfunded arm of MACO. Interviewees reported that the low-level funding did not permit SCCI to adequately enforce certification or quality issues reported by private seed companies, including the illegal use of branded seed bags and counterfeit sale of "chalked" seed. Key constraints described in interviews include the following:

- High staff turnover related to uncompetitive salaries;

92 Total agricultural development expenditures (Zambian government plus foreign donor) in 2009 were 158B kwacha and in 2010 were 247B kwacha, or approximately $86 million.

- Insufficient numbers of staff for seed inspections;
- Limited access to vehicles needed to allow for greater geographic coverage;
- A lack of testing equipment for "end use quality tests";
- Insufficient attention paid to informing farming communities of the benefits of high-yield varieties; and
- Lack of machinery to handle certain types of seed.

Additional discussion of SCCI's mandate and capacity is set forth at this report's chapter on Dealing with Licenses.

PLANT QUARANTINE AND PHYTOSANITARY SERVICE (PQPS)

PQPS is the National Plant Protection authority under the International Plant Protection Convention. Its mandate is to prevent the introduction or spread of plant pests and disease through the enforcement of the Plant, Pest and Noxious Weed Acts. PQPS, with the support of the World Bank, USAID, and EU, is reported to have made substantial progress strengthening previously weak parts of their institution. In recent years, and with the support of the Millennium Challenge Corporation (MCC), PQPS has become a stronger, more capable institution. While facilities and tools at their disposal are still considered basic, PQPS has begun participating in regional and international plant protection and quarantine organizations and revised its operations and pest risk-analysis manuals to give inspectors up-to-date information. PQPS now has current, accurate, and accessible pest lists, an important step forward for Zambian producers and exporters. Its inspectors have been trained in pest risk analysis and new inspectors can be trained using materials developed with the program.[93] Areas of particular concern to local officials and private companies include the following:

- Limited IT connectivity and information access at border posts for pest identification and procedure support;
- Limited surveillance reach due to vehicle, staff, and budget shortages;
- Inefficient procurement processes delaying access to critical equipment;
- Total absence of research and development funds for plant protection purposes;
- Little information dissemination on pest identification and/or control;
- Complaints that inspectors lack a degree of professionalism and fail to know protocols for export central to their mandate;
- Too few inspectors relative to need; and
- Petty requests by field inspectors demanding rides to and from their place of business, expecting "lunch money."

PQPS should be able to operate independent, or nearly independent of central government budgetary support based on service revenues. However, the funds generated by PQPS must first be deposited into "Control 99" at the Bank of Zambia prior to being used by PQPS. It takes so long to get paid back that the funds cannot be counted on to pay for daily operations. The World Bank has proposed a revolving fund that would allow PQPS to access its revenues more quickly, but the Bank of Zambia has not yet given PQPS authority to do so. PQPS continues to lose senior technical staff due to the difficulty of working conditions and relatively low pay – this loss of critical knowledge is a threat to the agency. Indicative of the service's problems dealing with the Zambian bureaucracy, the printing office responsible for issuing SPS certificates recently ran out of funds to buy the paper on which SPS certificates are printed.

Additional discussion of PQPS is set forth at this report's chapter on Dealing with Licenses.

ZAMBIA BUREAU OF STANDARDS (ZABS)

ZABS is responsible for "standards formulation, quality control, quality assurance, import and export quality inspections, certification and removal of technical barriers to trade."[94] ZABS provides tests to certify the quality of Zambian products for international markets, an

93 Millennium Challenge Corporation Threshold Country Program, Final Report for Zambia (May 2009).
94 See http://www.zabs.org.zm/.

increasingly important public good in any country. ZABS does not have any ISO/IEC 17025 accredited labs, but expects to within the next two years, allowing ZABS certification to be globally recognized. There are relatively few agricultural standards in Zambia, with the government only recently receiving equipment (via an EU-funded project) to test agricultural products. The institution will rely on international standards rather than develop its own, while taking what they call the "Malaysian approach" to adopting international standards (i.e., gradually raising standards over time at a pre-defined pace until arriving at international benchmarks). ZABS is developing a simple test kit to allow farmers to do some of their own farm testing for metal or other toxic substances that may be present on-farm.

MINISTRY OF COMMERCE TRADE AND INDUSTRY (MCTI)

MCTI "coordinates industrial, commercial, and trade matters and liaises with various public and private sector organizations to facilitate the implementation of government sector policies related to trade and industry." The MCTI's role in the agricultural sector is limited by the greater powers of the Ministry of Agriculture and Cooperatives and the tariff-setting role of the Ministry of Finance and National Planning.

Additionally, the much anticipated Trade and Tariff Commission, in the pipeline for awhile, "is stuck and not going anywhere any time soon." Furthermore, in order to deal with emergency trade measures and increase predictability in the system, the government passed safeguards legislation, which mandated the formation of a safeguards council. However, the council has no permanent staff and is unlikely to be functional until it is staffed.

> "How can we say we have trade policy? There is no known inter-ministerial process for dealing with trade bans before they are imposed. There is little communication between the MCTI and MACO, and anything of real significance is dealt with outside policy process."
> –Local Interviewee

TRADE FACILITATION

The amount of trade into and out of a country often depends on the quality of border agencies, primarily Customs. The following section details the administrative, procedural, IT, and other challenges faced by the Customs and Excise Department (Customs) within the Zambia Revenue Authority (ZRA) as they relate to trade in agricultural goods.

Customs is the primary border agency and therefore most responsible for creating and managing an efficient border process. The goals set at ZRA's founding have been or are in the process of being met. The trade community acknowledges the improved level of professionalism and integrity of the Customs staff and recognizes Customs' awareness that facilitating trade is as important to its mission as controlling cross-border exchange and collecting revenue. Customs has incorporated modern practices into its operations, specifically the following:

- Adopted an automated management system, ASYCUDA++, which has expedited release and allowed importers to track shipment status;
- Permitted and widely used pre-filling to expedite releases, and implemented a program to fast-track clearances for pre-approved clients;
- Planned a pilot program for electronic funds transfer to reduce the potential of corruption and expedite clearances; and
- Opened a one-stop border post (OSBP) at Chirundu for reducing bureaucratic constraints (owever, problems with IT connectivity and interagency coordination remain, as well as outstanding issues in the bilateral agreement between Zimbabwe and Zambia).[95]

Though Customs has made progress toward modernization, the agency needs to build capacity (particularly in the areas of risk management

95 Importers can pay border tariffs by cash or check, and payment must be made on site before release of shipment. About 20 approved filers have an open account at the Central Bank for payments to ZRA. ZRA sends these clients a weekly invoice and then the filer authorizes payment. This is the only system in place for release prior to payment of full obligations. Customs is piloting a full electronic payment process that should be operational in 2011.

and post-audit) and increase its cooperation with stakeholders and other border agencies.

Administrative issues. Customs collections include duty, a variety of levies, and VAT, the latter accounting for 60 percent of import collections. Import collections account for 30 percent of all ZRA revenue, which constitutes 70 percent of the national budget. Collections goals are established for each border post; although these goals are not the sole performance indicators, they occasionally take priority at the expense of facilitating trade. Total import/export transactions by Customs decreased by 15 percent between 2008 and 2009. While export transactions have grown steadily since 2007, import volumes have dropped 23 percent.

The Customs staff includes 457 positions, which is insufficient and causes many of the border delays reported by private actors. A staffing study by Customs to be completed in 2011 will determine required staffing levels and priority functions and aim to redirect personnel accordingly. Interviews suggest that ZRA has no problem in attracting qualified candidates as staff remuneration is comparable to the private sector. Customs has a waiting list of qualified candidates but is not authorized to hire due to national budget constraints and allocated positions. Although the 2010 national budget allocated 494 positions for Customs, only 457 could be filled due to budget problems. Many college graduates view working with any department of ZRA as a premier job, lying outside of the normal national civil service structure and allowing high salaries by government and even private sector standards.

Insufficient staff negatively impacts the handling of agricultural exports at the Lusaka airport in particular. Although exports of flowers and fresh vegetables/fruits is a seven-day-a-week operation, Customs clearance is only available for these exports on an overtime basis on weekends, which adds to transaction costs. Accommodations by Customs to permit prefiling based on estimation of shipment details often result in penalty assessments. Such actions should be discontinued, especially since no loss of revenue is involved.

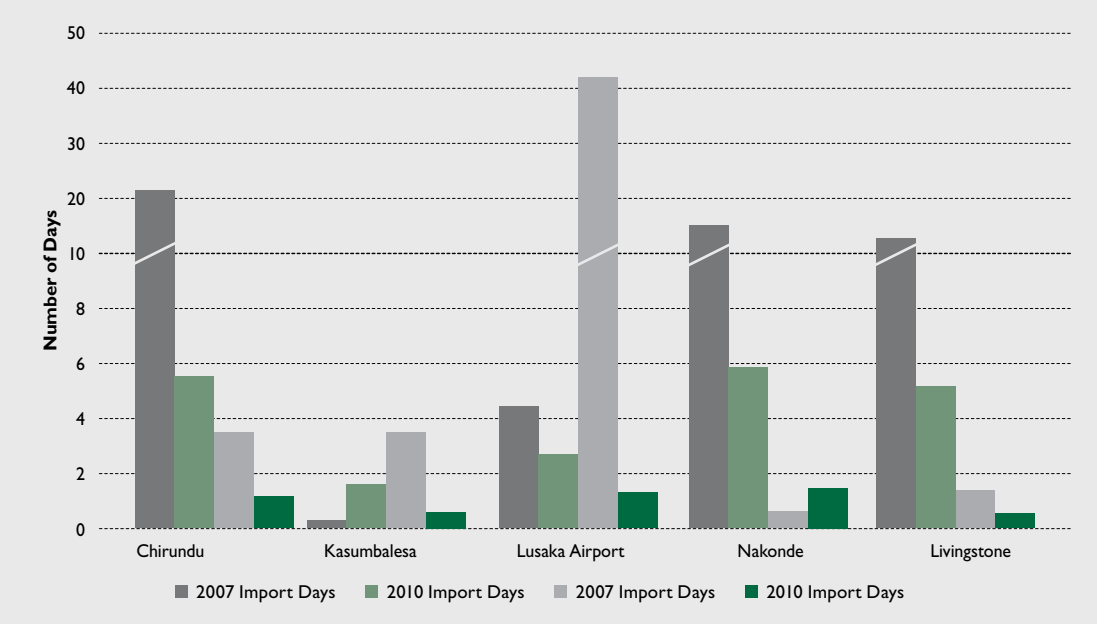
Although ZRA has a training center, a lack of modern equipment, inadequate classroom space, and weak capacity among in-house trainers prevent the agency from meeting its training needs. This limitation impairs the agency from effectively communicating its trade facilitation agenda to staff and gaining full support in implementation.

ZRA has a well-organized system in place to handle integrity issues. This system includes an employee code of ethics, a full-time ethics officer, a dedicated hotline for anonymous reports of irregular behavior, and a formal Integrity Committee to oversee investigation and resolution of misconduct issues. Staff is rotated about every 2–3 years to minimize opportunities for collusion with the private sector. More than half of the 7 percent staff turnover rate is due to dismissals for misconduct. Traders regard ZRA staff to have one of the highest levels of integrity, professionalism, and service orientation within the public sector. Irregular behavior is reportedly confined to small payments for expedited handling.

Strategic planning is handled by the ZRA's Department of Research and Planning, which oversees implementation and measures results. Customs also has a plan that contains clear priorities for improving trade facilitation and focuses on measurable results.

Customs procedures. As noted, most traders are satisfied with the progress in the level of service provided by Customs. No special Customs licenses are required on imports or exports, and perishables are given expedited treatment. Certificates of origin, which are required to secure duty-free status on most agricultural products traded within the region, are issued efficiently and free of charge. Customs effectively tracks its release times, and reports that it meets the 1.5-day processing time for a clean declaration, as stated in the ZRA Tax Payer Charter, 62 percent of the time.

CHART 3: IMPORT AND EXPORT DELAYS BY BORDER POSTS



Comparisons between 2007 and 2010 reflect the significant drop in processing times overall.

At least half of all transactions are pre-filed up to five days prior to arrival, which significantly reduces border delays and shows progress toward the ultimate goal of paperless processing. However, officers generally complete the file only shortly under the 36-hour time frame. With more incentives (such as rewarding offices that improve release times or are the fastest among the other office locations), release times could improve.

Risk management at the borders is in initial stages, and examination rates for imported and exported food staples and agricultural products are reported to be low. Risk management officers need more analytical training to target cargo in a more sophisticated manner. Examiners are not required to input findings into ASYCUDA++, but they should be mandated to input their findings into ASYCUDA as a standard practice. Customs has placed mobile scanning units at Chirundu and Livingstone. Scanners have had little impact revealing discrepancies among cargo or relieving congestion. Backups occur because the scanners frequently require maintenance, and all imports are required to be scanned before entry. If low-risk cargo were immediately released and only questionable shipments were required to be scanned, procedures would move more quickly. Chirundu is to receive a fixed scanner in early 2011, which could help reduce congestion.

At least two programs exist that quicken the clearance process and reduce costs: post-clearance audits, and the Customs Accredited Client Program (CACP). In a post-clearance audit, examination is performed at the trader's premises after the goods have been released rather than at the border. The program is reasonably advanced and has proven successful in identifying significant revenue discrepancies among major traders. CACP, piloted in 2008, expedites clearance and provides for periodic payments for a group of 50 identified large taxpayers. However, neither of these programs includes many agribusinesses. Both could be refocused to benefit importers in the agricultural sector that still pay duty and taxes.

Chirundu is one of the busiest border crossings in Africa. It serves as the main entry post between Zambia and Zimbabwe as well as the transit point between Zambia and the ports of Beira in Mozambique and Durban in South

Africa. The border post handles about 8,000 clearances per month, of which 60 percent are imports, 15 percent are exports, and 25 percent are transit. Principal agricultural products crossing northbound from South Africa are vegetable oil, rice, and processed food products. Southbound exports consist primarily of fresh flowers, tobacco, and maize, the latter destined for Zimbabwe.

In December 2009, Chirundu was selected to pilot Zambia's first OSBP in Zambia, in cooperation with Zimbabwe. This project, under COMESA/SADC/EAC North-South Corridor, has made processes somewhat more efficient. Customs officers from both countries are co-located in the new infrastructure facilities on each border side, and carriers only need to stop at one facility (in Zambia for imports and Zimbabwe for exports). Although the OSBP has made processes more efficient, the Chirundu border still faces problems, mostly as a result of the weak partnership between stakeholders and border agencies. Poor communication between the two led to a design focused on facility improvement rather than on process improvement; for example, the new infrastructure does not provide a single space for all border agencies to reside, and processing time increases as traders must visit each separate agency. The OSBP also struggles with IT connectivity, border management integration, and simplification of documentation and processing.

Information technology. UNCTAD's ASYCUDA++ is the IT Customs management system, and captures 95 percent of all formal transactions. The program has many available applications, only some of which are utilized by Zambian Customs. Eighty percent of the required data input is provided through service centers run exclusively by the company NECOR under a three-year renewable government contract. The remainder is directly input by filers under Direct Trader Input (DTI). Necor provides input data clerks, hardware, and communications link to ASYCUDA++ for which all filers, including DTI users, pay a $4 fee per transaction.

Customs must transition to mandating DTI for all filers according to a firm timeline. This would require that clearing agents automate their processing by having them directly input their entry data, which would upgrade the overall professionalism of the sector and reduce error rates. At a minimum, Customs must install its own security firewall protection and eliminate fees for DTI filers.

External cooperation, communications, and partnership. There is a need for increased public-private dialogue on trade facilitation. The trade sector is not involved in policy or procedural development, and both parties struggle to understand the working environment of the other. At times, public procedures do not comply with private business realities, as shown in the case of the Chirundu border post. Efforts to create a more effective partnership between Customs and its stakeholders have resulted in the creation of the National Customs to Business Forum modeled after the successful South African entity. It remains to be seen whether the lack of trust among the parties can be overcome through this mechanism.

Other border agencies generally lag behind Customs in trade facilitation, and an effective consultative mechanism among all the border agencies is not in place, which results in a more complicated border process. The designation of Customs as the lead agency at Chirundu is a first step, but must be followed by more aggressive actions.

Although joint inspections now occur at major border posts (e.g., Lusaka airport, Chirundu), the agencies do not share processing schemes or data. With proper IT systems to support data-sharing, agencies could reduce staffing demands and move toward a paperless environment. Ultimately, agencies should aim to operate in a single window where one set of clearance declaration data is filed and jointly acted upon by

relevant border agencies. If implemented, this model would follow the single-windows example set by Ghana and Senegal to the benefit of all. The national government acknowledges these issues in its Sixth National Development Plan, which mandates improved interagency coordination. The Ministry of Commerce Trade and Industry (MCTI) is in charge of a resolution that will likely require major investments in technical assistance and capacity.

In 2010, COMESA piloted a Special Trade Regime (STR) between Zambia, Malawi, and Zimbabwe. The program is targeted at small, cross-border, informal traders who principally deal in agricultural goods. The STR allows these traders to conduct business through formal Customs channels, with simplified processing and documentation if the value of the goods is under $500. This value is soon to be raised to $1,000. Zambia has not approved maize to be traded under the STR.

A full assessment of STR would be premature as the program is in its early phases. Participation during the first four to five months of implementation remained low; only 793 imports and 874 exports were recorded, mostly between Zimbabwe and Zambia. To expand the program, COMESA must address issues regarding SPS applicability, assessment of VAT and internal income tax, and the exceedingly high cost of travel documents/permits regionally. The DRC is not eligible to participate in the program since it has not joined the COMESA Free Trade Area.

SUPPORTING INSTITUTIONS

The degree to which Zambia's supporting institutions affect the flow of agricultural products into and out of the country cannot be overestimated. Two quasi-public institutions in particular tend to dominate government policy and regulation of the Zambian agricultural trade: the Zambia National Farmers Union and the Millers Association of Zambia. Other institutions including the Cross Border Traders Association, the Zambia Exporters Association and the Grain Traders Association are particularly active in influencing the conditions faced by agribusinesses interested in international trade.

Zambia National Farmers Union (ZNFU). ZNFU is the largest and most influential farmer-based organization in Zambia, representing all regions of the country. It actively participates in daily politics and maintains numerous channels of communication with the public, including Farmer News Magazine and a website. The government has a reputation for using ZNFU as a one-stop shop consultative forum, something that limits the diversity and quality of stakeholder input into government policy. ZNFU works on a wide range of issues affecting the industry, including trade policy, marketing policy, trade integration issues (in conjunction with MCTI), and relevant infrastructure development. ZNFU broadly advocates a liberalized and open trading environment to promote Zambia's agricultural regional competitiveness. However, ZNFU has also lobbied for the continuation of the wheat import ban (to protect domestic wheat producers), the export ban of wheat and maize bran between the months of July and November (to protect local cattle industry that use bran as feed), and the continuation of FRA procurement policies. Critical to the issue of trade bans, numerous officials associated with ZNFU stated off the record over the course of this diagnostic that they would be willing to call for the lifting of all trade bans if the Millers Association would agree to the same measure.

Millers Association of Zambia (MAZ). MAZ has 33 members engaged in the commercial milling of maize meal, flour, and stockfeed. Members are located across the country, but concentrated along the line of rail. MAZ represents the political and economic interests of the large-scale grain-processing sector. MAZ's stance on trade and its relationship with government are both inconsistent and ambiguous. MAZ, along with ZNFU, supports high levels of government

intervention in grain procurement and cross-border trade, when such interventions suit their interests. Due to the oligopolistic structure of the large-scale milling sector, large-scale millers derive a number of benefits from active state interventions in grain procurement. FRA buys from small-scale farmers, transports the maize to central depots, and covers the cost of storage until the grain is sold. This grain is mostly channeled into the large-scale milling sector, often at concessionary prices with the intention of avoiding dramatic rises in maize flour prices. Thus, through FRA procurement systems, millers are able to limit their costs of procurement and storage and place the burden squarely on the shoulders of the Zambian taxpayer. In terms of imports and exports, millers advocate for the free movement of grain exports during a surplus year. Yet, during a deficit year, MAZ pressures the government to ban exports. Conversely, MAZ will push for import restrictions or open borders depending on regional and local market conditions. If local prices are high, MAZ will advocate for a freeing up of maize imports. However, if millers have taken strong positions on grain at a certain price and regional prices drop below that price, millers will attempt to ban imports in an effort to protect their market positions. Ultimately, this mercantilist approach to trade has led to Zambia being viewed in the region as an unreliable trading partner. This perception, in turn, limits the ability of grain traders to enter into long-term contractual arrangements with buyers and sellers in the region.

Zambia Export Growers Association (ZEGA). ZEGA is a non-profit group that represents the export horticulture sector focusing on air freight, consolidation of purchases, training, marketing advice, advocacy, and finance. Until recently, association members received tax-free and duty-free status on all inputs; since 2007 members have had to reapply for duty free status on a yearly basis, a level of unpredictability that greatly concerns its membership. Members reported very little use of the "dysfunctional" duty drawback system. The association was split evenly between vegetable and flower growers, but due to a recent decline in the vegetable industry has more flower producers as members. The decline is attributed a number of key factors including the collapse of Agriflora, the largest exporter of green beans out of Zambia. ZEGA members have developed a code of conduct for members, to which they generally respond positively. Members noted the importance of the code of conduct as a branding element for Zambia to show that it is a serious and responsible trade partner, and largely in line with EU codes such as GLOBALGAP. The code of conduct includes four pillars: (1) storage, use, and disposal of pesticides; (2) worker welfare; (3) good agriculture practice and protection of the environment; and (4) due diligence in the production, harvesting, grading, and packaging of produce.

Since early 2010, members have had two consignments rejected by the EU for SPS reasons. In such instances, members are warned and given notice that future rejections will endanger their status as members of ZEGA. Members of the horticulture sector expressed a feeling of "abandonment by the government," with little attention paid to horticulture at the university level, investment promotion level (ZDA), or within MACO, where there is only two staff focused on the whole industry. This is compared to the FRA where there is over 300 staff.

Customs clearance agents/freight forwarders. Customs clearance agents represent traders before border agencies for documentation, payment, and clearance. The sector has a low level of professionalism; only an estimated 20–25 percent of the clearance agent companies perform at acceptable levels. Professionalism, procedural knowledge, and ethical standards must be raised to increase efficiency. Clearance agent companies are lawfully required to clear all shipments over $2,000. The number of clearance agent companies has grown significantly; in 1994, for example, only 28 firms were licensed by Customs, in contrast to the 683 companies

that currently oversaturate the market. Of these firms, 30–35 are medium to large in size, and clear the majority of all international transactions. These transactions account for 80 percent of total Customs collections. The remaining clearance agent companies are small, with no set business location, no automated capabilities, and no basic filing systems.

Fees for Customs clearance have dropped dramatically over the last several years, from about $120–$250 per transaction to about $50 per transaction. This is significantly lower than prices in the DRC and South Africa, which are about $250 per transaction. Clearance of fertilizer, due to its high volume and duty-free status, is around $20–$30 per 30 MT truck. Business at the border is secured mainly through use of "chimutengos," independent runners impersonating agents. These runners approach arriving trucks to arrange clearances. Runners charge $200–$250 on a typical shipment and then negotiate with Customs clearance agents to clear the goods for $50.

Clearance companies are challenged by unsustainable fees, lack of capacity, and few training opportunities. Existing conditions also increase the potential for engaging in fraudulent activities, especially among agents in direct contact with transporters. In order to effectively partner with Customs and other border agencies, clearance agents should charge sustainable fees to employ modern business practices and increase professionalism.

SOCIAL DYNAMICS

Cross-border trading in Zambia is conducted through both formal and informal channels, which are poorly integrated and operate according to very different social and legal processes. The formal sector is dominated by a few large-scale, often multinational firms, which have access to critical market information (prices, supplies, demand), are aware of and can maneuver within the limits of current trade policy (quotas, restrictions, licensing etc.), and have access to ongoing political discussions concerning trade policy. Conversely, the informal trading sector is dominated by a multitude of dispersed, poorly organized small-scale entrepreneurs with limited access to market information or political influence. Indeed, although informal trade frequently dominates the agricultural trading sector, this business is regarded as illicit, because these traders circumvent official trade bans, trade without official permits, and do not pay duties on imports or exports.

The pace and direction of change within the cross-border trading system is a deeply political process in Zambia. Trade policy for food products tend to be reactive, with government intervening both directly and indirectly in cross-border trade in response to the various pressures from millers, traders, international organizations, and, most important, ZNFU. As a result, needed imports are often delayed due to uncertainty over how and to what extent the government will participate in imports. Or conversely, exports will not occur or will be severely delayed, even in major surplus years like the 2010 maize harvest, as the government and the various stakeholders try to make a decision over how much, where, and at what price food crops should be exported. As a result, food prices often soar over import parity (i.e., the price of importing a given commodity, including transport, duties, and other costs associated with trade) during deficits, which directly hurts Zambian consumers, or, as is the case in 2010, huge amounts of Zambia's available storage are absorbed during critical periods as the government tries to decide on export procedures. In all these cases, the informal, small-scale trader is excluded from the decision-making process.

The degree of receptivity to change varies drastically by sector. For example, millers seem to advocate for the perpetuation of the status quo, which serves their needs quite well. By allowing the government to actively regulate imports and exports of key commodities, the millers are able to protect their positions in regard to

purchased stocks (preventing cheap imports that would make their stocks overpriced or exports that would drive up their costs of procurement) and place the burden of imports, when needed, on the state. Conversely, grain traders would like a great deal more change to occur within the agricultural trading sector, which would allow them to more freely trade across borders and limit their exposure to risk caused by government intervention in the market. ZNFU advocates for an interventionist trading system aimed at keeping producer prices for commodities high, with the government also intervening when necessary to drive down consumer prices. The official trading system that emerges from these various pressures and negotiations is reactionary, rather than guided by a formal set of rules, highly interventionist, and aimed at pandering to the demands of certain well-positioned constituencies, rather than the broader needs of many Zambian consumers who simply need reliable access to low-cost food and agricultural tools. Critical to resolving this persistent and damaging equilibrium, members of both MAZ and ZNFU suggest that a compromise could be reached. Millers, for their part, noted their interest and ability to agree to a moratorium on trade bans if the government would agree to cease all informal or formal pressures to control prices of millers' products. Individuals associated with ZNFU, on the other hand, noted their interest in such a deal only in the presence of a total moratorium on trade bans.

Border infrastructure. Zambia is undertaking major initiatives to upgrade its border facilities, which are often overlooked as critical components in improving trade facilitation. In addition to the OSBP at Chirundu, a new facility will open in early 2011 at Kasumbulesa where hundreds of trucks currently wait 2–14 days in lines 3-5 km from the border, due to a complex and inefficient DRC entry process. This initial project under the Public Private Partnership Policy Act is one of the first, if not only, design, build, operate, and transfer (DBOT) models for border operations worldwide. The facility will incorporate state-of-the-art facilities for security, relieve road congestion, and improve control and processing through use of advanced IT applications. Although formal trade at Kasumbalesa is mostly restricted to the copper industry, storage space will be added so that Zambian trucks carrying maize or wheat flour can offload, store, and reload goods onto DRC trucks. Additional storage will reduce transport costs, reduce delays, and allow Zambian companies to keep their vehicles from needing to travel in the DRC if desired. The contractor for DBOT, Zambian Border Crossing Company Ltd., has been awarded five more border post projects. If the DRC proves cooperative and all projects go as planned, trade facilitation could see major improvements.

Pontoon boats are responsible for commercial transport across the Zimbabwe-Zambia border at Livingstone. Waiting times for this limited service ranges from three hours to seven days. At Kazungula on the Zambezi (linking Zambia to Botswana, Namibia, and Zimbabwe), obstacles to constructing a bridge to expedite regional transport appear to have been resolved, and construction is set for February 2011. This bridge will significantly reduce transport time and costs as well as offer an alternative to the overburdened pontoon between Botswana and Zambia.

RECOMMENDATIONS

TRADE POLICY

Increase the predictability of Zambia's trade regime as a way to reduce risk for small-scale producers, stimulate commercial agribusiness, and incentivize infrastructure investment. It is imperative that all actors in the agricultural sector work to increase the predictability of trading within Zambia and across regional boundaries. First, all future trade policy–related announcements by the government must be managed in a way that more accurately anticipates market reactions. This implies a much more inclusive

process of trade policy–making, including a substantial vetting process with producer, processor, consumer, and academic groups. Second, all policy announcements need to be followed up by clear, transparent, government action to allow for orderly and informed private sector response. Donors should work with the government to help standardize private sector alerts for any changes made to cross-border trading procedures – 30 days' notice should be standard and minimum notice given to the private sector. Third, the government needs to fast track the bilateral agreement with the DRC to promote increased commercial exchange and consistent border treatment for all Zambian goods. Donors can and should support this process at a bilateral level with the governments of Zambia and the DRC. Fourth, the government should begin to close the gap between average applied and average bound tariff rates by committing to a 25 percent bound rate in one year, 40 percent in two years, and 75 percent in three years. Fifth, the government should immediately move to set up a review board to consider the viability of using a combination of local and international (SAFEX) call options that would provide the Government of the Republic of Zambia (GRZ) comfort that stock is available at a set price either locally or, if imports are needed, from the regional market as a way of hedging against future price or spikes without distorting local markets. Donors should continue to provide technical assistance in this review process. Last, all actors in the agricultural sector need to consider the option of placing a two-year moratorium on all export/import bans, after consultation with industry stakeholders, in order to provide confidence to domestic and international trading partners alike.

Priority: High
Term: Long
Difficulty: Medium

Strengthen PQPS to support current and future trade in perishable products. PQPS' funding levels and fluctuations do not provide a platform for consistent quality service to the agricultural sector. Government, donors, and other interested groups need to prioritize greater and less variable financing of PQPS' operations. A review of the revolving fund concept as proposed by the World Bank should be a top government and donor priority. Second, donors should support PQPS by doing a specific "needs assessment" to determine the necessary number of vehicles and sufficient maintenance budget to fund surveillance of all agricultural zones in the country. Third, the government should hire a consultant to review PQPS' procurement processes for equipment and services and set up an internal board with sufficient authority to implement process-related recommendations proposed by the consultant. Fourth, there must be increased information dissemination efforts among donors and government bodies dealing with pest identification and/or control. Fifth, starting with major border posts, all border posts must be able to connect to the Internet during working hours for the identification of pests and diseases and to communicate key information with other border agencies. Sixth, and perhaps most important, a mandatory course on proper conduct for PQPS inspectors, especially as it relates to service provision at the farm level, must be developed and implemented.

Priority: High
Term: Medium
Difficulty: Low

Increase the potential for the duty drawback program to become an effective, efficient export incentive scheme. First and foremost, the government, with the support of donors, needs to perform an expert review of current drawback program to determine where simplification of the existing program can be made while protecting current revenue levels. Consultation with current and prospective users must be included in the reform process. Second, priority should be given to completion of the current IT efforts to connect users with the system although the declaration forms will require modification with any adopted revisions. Third, IT efforts must be expanded and expedited to develop an

electronic interface between Customs and the users, and users should be instructed on its use. Fourth, an analysis of export agribusiness sector should be performed to determine the universe of potential users and develop an outreach strategy to inform them of the benefits and participation requirements. After such an analysis is completed, a training program that targets this groups needs to be developed. Fifth, the government needs to implement a simplified drawback program and issue modifications to the legal framework and regulations as required. The process must involve stakeholder input as well as experts in drawback processing. Sixth, the government, with the support of donors, should develop and implement a training in accounting practices for businesses unable to participate in drawback program due to lack of proper business record-keeping. Seventh, outreach training should be emphasized for exporters identified to be potentially significant beneficiaries of program. The program should be publicized at public forums hosted by agricultural sector groups. Last, the current two members of the Customs drawback staff will need substantial support to accomplish these reform priorities. Assistance by outside drawback experts will need to be extended beyond program simplification to the outreach program as well.

Priority: Medium
Term: Short
Difficulty: Medium

Benchmark fees and duties related to trade in agricultural goods and improve dissemination to small agribusinesses. To better inform policy makers' decisions in setting tax, duty, and levy rates, the government, with the support of donors or institutions such as ZNFU, should benchmark all formal and informal fees and duties, licensing fees, and taxes, for maize, wheat, soy meat, and dairy products. Comparisons should include a comparison of fuel and other transport-related costs across no less than five countries in the region.

Priority: High
Term: Short
Difficulty: Low

TRADE FACILITATION

Improve overall professional level of Customs Clearance Sector. Training opportunities need to be expanded for customs clearance agents. This would give those interested the opportunity to increase their expertise and meet their obligation to provide quality service both to their clients and to the public agencies operating at the border. When this effort is combined with the increased oversight by Customs, the result should be a sector that can be depended upon to be an effective partner in improving trade facilitation.

Such a training program should include the following program, at a minimum. First, the Customs Clearance Agents should be professionalized by developing training opportunities and promoting use of modern business practices. Second, clearance agent sector representatives in the East African Community (EAC) should be interviewed to learn from their experience in developing and conducting industry-wide training program. Third, a comprehensive training curriculum should be developed through coordinated efforts by the three Customs clearance agents sector organizations. Fourth, individuals should be identified and provided with instruction to teach trainer courses. Fifth, a training schedule that will offer opportunities for the entire sector to participate should be established. Sixth, an examination must be successfully taken at the end of course to ensure attendance and proof that the material was understood. Seventh, training should include sites outside Lusaka using, where possible, ZRA training facilities. Eighth, transition to DTI should begin by having the sector establish independent service centers and understand the timeline for full compliance to the DTI mandate. Ninth, capacity-building within the sector should occur for advocacy and development of practical proposals for change. Tenth, to qualify as a licensed member of the sector, each individual must either successfully complete a training course or receive a passing grade on an

examination prepared and administered by the ZRA Customs department.

A few of the larger companies within the sector are seeking to establish for their employees a training curriculum certified by Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA). The EAC clearance agents have also developed a comprehensive training program that has had a significant impact on increasing professional and ethical standards. This should be reviewed to see its adaptability to Zambia and eventually to COMESA or SADC. Assistance should be given to integrate these initiatives into a practical training syllabus for the sector, successful completion of which would ultimately be required for license renewal. Once the course has been prepared, Customs should partner with the sector to provide training facilities and instructors where appropriate.

The three sector organizations that represent the agents have various degrees of advocacy capabilities. Training for the leadership in how to effectively engage the government in discussion of pertinent issues is needed so that thoughtful and practical proposals that will receive proper consideration are put forth.

Priority: High
Term: Medium
Difficulty: Moderate

Customs clearance agents must employ modern business practices to be able to operate successfully. This is true not only in the current border environment but in the improved one being designed. Many do not even have offices and depend on Necor service bureaus for data input and linkage to the Customs IT system. To encourage conversion to updated business applications, Customs must mandate DTI rather than use of service bureaus. Although migration must be gradual, a firm final deadline for "automate or perish" must be stated. Initial steps would include allowance for multiple service center operators so that the industry could establish its own bureau to be better acquainted with the transmission and connectivity requirements. The need to acquire hardware from Necor at a more expensive cost than on the open market and to connect solely through its network must be eliminated. To accomplish this, assistance should be given Customs to purchase and install its own security firewall. To encourage DTI, Customs should reduce processing fees for users, if possible by more than Necor's $4 fee.

Priority: Medium
Term: Medium
Difficulty: Low

Increase use of IT applications to facilitate regional trade. Customs should begin to use more features of the AYSCUDA++ application to target high-risk commodities for intervention and to cut down on unnecessary review or inspection. The latter would encompass many of food staple shipments that could be released on only presentation of the documents and payment. Customs has a dedicated risk management (RM) unit that works under the ASYCUDA manager but to date the staff has only had training on how the automated selectivity module operates. Representatives should be sent to view the operations of their counterparts in the Republic of South Africa (RSA) where a more-developed unit is in operation. An on-site advisor in RM should also be assigned to work with the group on how to identify and weigh risks and develop criteria to target higher-risk shipments. Effective monitoring systems must also be developed so that Customs' limited resources are directed to only suspect shipment, and compliant traders can be cleared without Customs' intervention.

An annual plan setting forth sequenced tasks, timelines, and measurable goals, which must include increased detections and reduction in clearance times, must be put in place. Field staff must be trained in conducting quality examination and inputting the results in ASYCUDA, an action that must be mandatory. To accommodate this training need, updated equipment must be

purchased for the ZRA training center and the RM staff given training in the trainer courses.

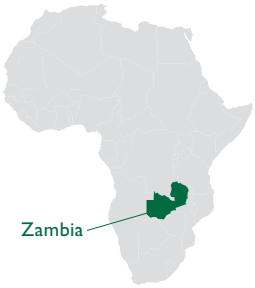
Customs must also revise its scanning policy as full RM implementation proceeds. The current policy of scanning all shipments is delaying or has the potential to delay release of cargo. Risk profiles should be used to identify which shipments must be scanned and all others, except those selected at random for additional scanning, should be released without this procedure.

Priority: Medium
Term: Short
Difficulty: Moderate

Develop a plan for interagency cooperation/integration of all border agencies. The GRZ has yet to develop a plan for interagency cooperation/integration of the border agencies that will result in a simple, seamless border process ultimately conducted through application of the single window concept. Many efforts have been directed at resolving the issue but little progress in process integration has occurred. The designation of Customs as the lead border agency at Chirundu as a first step must be replicated at the other border sites. Also, true one-stop shops, a best practice used effectively at Mombasa port where all border agencies sit collectively and review one set of documents, should be instituted where current infrastructure allows.

Although these actions would improve facilitation, they are only the first steps in integrating border agency processes. The completed study of each agency's border actions should be used to implement a more harmonized system with stakeholder involvement, a critical component in its development. A strategic plan must be devised, most likely with the support of donors, to detail how and when this integration will occur with the ultimate goal of a single window process. Zambia will need extensive assistance to realize this goal both in technical capacity and in organizing the required players needed for effective participation. The experience of Senegal, which is progressing steadily toward a full single window concept modeled after Singapore but adapted to the African environment, would be helpful in drafting this plan.

Priority: High
Term: Medium
Difficulty: Low



APPENDIX A: KEY PROVISIONS OF ZAMBIA'S COMPETITION LAW

Zambia's Competition and Consumer Protection Act (the Act or Competition Act), enacted in 2010, replaces the country's earlier Competition and Fair Trading Act. The new Act applies to the Zambian economy in general, including all economic activity within, or having an effect within, Zambia. The Act contains no specific exemptions for the agricultural sector, although it contains a number of exemptions that may apply to some parts of the agricultural sector. Key aspects of the Act include the following:

- **General exemptions.** Section 3 of the Act includes a broad exemption for concerted conduct designed to achieve a noncommercial socioeconomic objective or similar purpose. While this language could cover many things, interviewees stated during this diagnostic that it is intended to cover collective humanitarian efforts in aid of disaster relief.[96]
- **Exemptions from specific conduct.** Section 18 allows parties to horizontal and vertical agreements not subject to per se treatment (i.e., not including price-fixing or market-division agreements) to apply for an exemption, and it requires the Competition Commission to grant the exemption if the agreement is likely to promote exports from Zambia, maintain efficient production, promote the competitiveness of micro and small enterprises, or to obtain a public benefit that is likely to outweigh the lessening of competition that would result from the agreement, among others.[97] Similarly, the Act allows the commission, in reviewing a proposed merger, to take these same factors into account in addition to any other factor bearing on the public interest.
- **Prohibited conduct.** To achieve the objectives of promoting competition, the Act prohibits conduct in the principal areas of concern in competition policy: **cartels and other anticompetitive agreements, single-firm conduct amounting to an abuse of dominance,** and anticompetitive mergers. Section 9 of the Act prohibits horizontal agreements per se, and specifically lists agreements to fix prices, divide markets or customers, rig bids, limit output, and to collectively refuse to deal. Section 10 adds vertical price maintenance to the category of conduct prohibited per se, but the Act treats other agreements, both horizontal and vertical, under a rule of reason, or all-facts-and-circumstances, analysis. These are prohibited if the commission determines that the agreement has the effect of preventing, distorting, or restricting competition or substantially lessening competition.[98]

Sections 15 and 16 of the Act then prohibit **abuse of a dominant position**, defined as one firm having a 30 percent market share in the supply of a good or service, or three firms having a 60 percent share. Firms meeting these thresholds are held to abuse their dominant position if they engage in conduct that limits access to competition or otherwise unduly restrains competition.[99] The Act then more specifically sets out several practices that constitute abuse of dominant position: (1) charging an unfair price, an excessive price, or a price below marginal or variable cost;[100] (2) limiting market access in a manner that affects competition or denies access to an essential facility;[101] (3) applying dissimilar conditions to equivalent transactions;[102] or (4) conditioning contracts on the acceptance of supplementary conditions not

96 The other general exemptions would seem to apply to the agricultural sector only tangentially. These include agreements relating to the protection or exploitation of intellectual property rights, agreements among employers relating to employee compensation, trade union activities related to working conditions, and activities of statutory monopolies, of which, there are none in the agricultural sector.

97 Other jurisdictions' competition laws also expressly exempt conduct that advances other social goals such as the protection of small enterprises, see, e.g., South Africa Competition Act §2, or where the net public benefit is likely to outweigh the harm to competition. See, e.g., Tanzania Fair Competition Act §§12 and 13 (allowing authorities to approve an otherwise anticompetitive merger.

98 Competition and Consumer Protection Act §12(a).

99 Competition and Consumer Protection Act §16(1).

100 See Competition and Consumer Protection Act §§16(2)(a) (imposing an unfair price), 16(2)(f) (charging an excessive price to the detriment of consumers), and 16(2)(g) (prohibiting sales below marginal or variable cost).

101 Compare Competition and Consumer Protection Act §6(2)(b) (limiting market access in a manner that effects competition) with §16(2)(e) (denying access to an essential facility).

102 Competition and Consumer Protection Act §16(2)(c).

commercially connected to the subject matter of the contract (e.g., a tying arrangement).[103]

These provisions on abuse of dominance are problematic in a few respects. First, the threshold requirements may prove difficult to apply. In the area of competition law, one of the most contentious and litigated issues is in defining the product market, that is, defining what goods and services are close substitutes for one another. Without knowing in advance precisely what goods or services are in the relevant product market, even firms with sophisticated sales and market data might be unsure of the share of the market they supply, and thus uncertain as to the legality of their conduct. However, interviewees said that one of the purposes of the threshold requirement was to help conserve commission resources by allowing it to take a "quick-look investigation" of complaints it receives.[104]

Second, the Act may make it difficult for firms to determine how to price their goods or services. With three provisions relating to price, the Act in effect at the same time prohibits prices that are too high and too low. Although such provisions are often found in other jurisdictions' competition laws, determining a fair or competitive price is not something easily done with scientific precision.[105] Firms in a dominant position may thus be caught not knowing if their prices are lawful until after the fact. Finally, while the remaining prohibitions listed as abuse of dominance may be common, the conduct listed often has a pro-competitive effect, and any enforcement involving these provisions should proceed with that consideration in mind.

- **Mergers.** In Section 26, the Act gives the commission power to review proposed mergers. It establishes both mandatory and discretionary review procedures. Under the mandatory review procedures, parties to a proposed merger must file for approval of the merger if the transaction meets a yet-to-be-determined threshold. The Act does not define the thresholds; however, it provides that the Minister for Commerce, Trade, and Industry may, after consultation with the commission, seek further legislation prescribing the threshold to be applied.[106] If the proposed merger falls below that threshold, the commission may nevertheless review a proposed merger if it reasonably believes that it is likely to create a dominant position, that the merger may substantially prevent or lessen competition, that the merger is to be concluded outside of Zambia but having consequences inside of Zambia that require further consideration, or that the merger may result in competition or public interest factors that need to be taken into account.[107] In either case, upon receipt of the proposed merger notification, the Act directs the commission to carry out a market assessment of the competitive effects in the relevant market. The Act then lists eight specific factors for the commission to consider in making that assessment, all of which one could expect to find in any well-considered merger-review policy.[108] Included are the levels of concentration in the relevant market, the effect on barriers to entry, and the availability of a substitute in the relevant market, among others. At the end of its review, the commission may approve the merger, approve the merger with conditions, or reject it in its entirety.
- **Consumer protection.** The consumer protection provisions of the Act, found at Sections 45–50, prohibit unfair trading practices, which it defines as anything that misleads consumers, compromises reasonable standards of honesty and good faith, or places pressure on consumers by use of harassment or coercion.[109] In addition, the Act prohibits false or misleading representations as to the quality or price of goods, the availability of repair facilities, or any conditions or limitations of any warranties.[110] It also prevents shop owners from displaying any signs that purport to disclaim warranties under the Act or contract law, and prohibits

103 Competition and Consumer Protection Act §16(2)(d).

104 The commission's mandate is to is take some investigatory action on each complaint it receives, although the Act does give the commission discretion to refuse to investigate complaints that are frivolous or vexatious.

105 In the United States, prices that are below some measure of cost, the precise measure to be determined as appropriate under the circumstance, can be found to be anticompetitive. But a plaintiff can prevail only by showing that there is some possibility, because of entry or other market conditions, that the amount lost on the below-cost pricing can be recouped through subsequent pricing above a competitive level. The United States has no prohibition on prices that are too high, although many jurisdictions, including the EU, do.

106 Competition and Consumer Protection Act §26.

107 Competition and Consumer Protection Act §27.

108 Competition and Consumer Protection Act §30.

109 Competition and Consumer Protection Act §45.

110 Competition and Consumer Protection Act §47.

the sale of any defective goods or goods that are not fit for their normal purpose.[111]

- **Investigatory and remedial provisions.** Section 55 of the Act allows the commission to open an investigation on its own initiative, or on the complaint of any person, if it has reasonable grounds to believe the Act has been violated. After the investigation has opened, the commission may carry out public consultations as it deems appropriate;[112] compel the production of information, documents, and testimony;[113] and conduct dawn raids.[114] The Act also allows for a leniency program that would permit violators to volunteer information in exchange for partial or full relief from the penalty that would apply to their own conduct.[115] This program could become a valuable source of information for the commission.

The commission's remedial provisions for competition violations are found in Sections 57–65. Section 57 allows the commission to enter into consent agreements at the conclusion of any investigation.[116] Section 58 allows the commission to give directions to remedy violations of horizontal and vertical conduct that violates the per se rule or the rule of reason, and provides in addition that the commission may impose financial penalties for violations of those provisions not to exceed 10 percent of the violating enterprise's annual turnover (sales) for the period of the violation, not to exceed five years' worth. Before the commission may impose a penalty, however, it must be satisfied that the violation was either intentional or negligent. Section 59 allows for additional remedial provisions and applies to not only conduct covered by Section 58 but also to conduct that constitutes abuse of dominance. It contains no additional financial-penalty provisions, so abuse of dominance carries no financial penalty.

Remedies in merger investigations are found in Section 61 and include remedying or preventing past or future harm from a merger found to be anticompetitive, preventing the completion of a merger pending commission investigation, and ordering divestiture or other remedial action in the case of a completed merger.

- **Enforcement.** Sections 67–78 of the Act creates a Competition and Consumer Protection Tribunal, allowing parties aggrieved by a commission decision to appeal adverse determinations within 30 days.[117] The tribunal members work part time and are to be appointed by the minister and shall include a legal practitioner of not less than 10 years of legal experience, a representative of the Attorney General, and three other experts with at least 5 years of experience or knowledge relating to matters relevant to the Act.[118]
- **Advocacy.** Among the commission's most important missions is that of advocacy. The Act charges the commission to undertake and publish general studies on the effectiveness of competition, to act as a primary advocate for competition and effective consumer protection, to advise the government and the minister on laws affecting competition and consumer protection, and to provide consumers information and guidance regarding their rights under the Act, among other duties.[119] The Act further provides that the commission may conduct market inquiries of each relevant sector and of each type of agreement that may have the effect of restricting competition, and publish its findings in a daily newspaper of general circulation.[120] The advocacy mandate is important, because it provides a check on, among other things, overly restrictive governmental regulations that may otherwise hinder the competitive process.

111 Competition and Consumer Protection Act §§48–49.
112 Competition and Consumer Protection Act §55(2).
113 Competition and Consumer Protection Act §55(4). The provision relating to information is written broadly and would seem to include the creation of reports and answers to interrogatories.
114 Competition and Fair Trading Act §7(4).
115 Competition and Consumer Protection Act §79.
116 Competition and Consumer Protection Act §57.
117 Competition and Consumer Protection Act §60.
118 Competition and Consumer Protection Act §67.
119 Competition and Fair Trading Act §5.
120 Competition and Fair Trading Act §41.

APPENDIX B: MATRIX OF RECOMMENDATIONS

	PRIORITY	TERM	DIFFICULTY	CHAPTER
Launch a multipronged campaign on the importance of rural road infrastructure as a way for the government to support poor rural constituents.	High	Short	Low	Accessing Market Infrastructure
Refine the language in the draft Agriculture Marketing Act to include a clear mandate for AMIC.	High	Short	Low	Accessing Market Infrastructure
Develop a plan for interagency cooperation/integration of all border agencies.	High	Medium	Low	Trading Across Borders
Benchmark fees and duties related to trade in agricultural goods and improve dissemination to small agribusinesses.	High	Short	Low	Trading Across Borders
Support the MFI sector with a focus on developing risk-analysis capacity.	High	Medium	Low	Getting Credit
Fix the finance leasing tax deduction.	High	Short	Low	Getting Credit
Work with the Competition Commission to study specific agricultural subsectors.	High	Short	Low	Competing Fairly
Ensure that AMIC has adequate technical and financial resources.	High	Medium	Low	Accessing Marketing Infrastructure
Strengthen PQPS to support current and future trade in perishable products.	High	Medium	Low	Trading Across Borders
Investigate the possibility of opening a third agricultural laboratory.	High	Medium	Moderate	Dealing with Licenses
Combine advocacy efforts on topics of constraints to agribusiness competition with those of the Competition Commission.	High	Medium	Moderate	Competing Fairly
Improve the working relationship between farmers associations, DACO staff, and the district councils.	High	Short	Moderate	Accessing Market Infrastructure
Increase the predictability of Zambia's trade regime as a way to reduce risk for small-scale producers, stimulate commercial agribusiness, and incentivize infrastructure investment.	High	Long	Moderate	Trading Across Borders
Investigate the possibility of creating a collateral registry.	High	Short	Moderate	Getting Credit
Review ECZ's portfolio with an eye towards capacity-building.	High	Medium	Moderate	Dealing with Licenses
Make annual financial reports of the FRA and FISP publicly available.	High	Short	Moderate	Competing Fairly
Following legal reform, advocate for performance-based evaluation of civil servants, and greater transparency and effectiveness generally at the district level.	High	Medium	Moderate	Accessing Market Infrastructure

	PRIORITY	TERM	DIFFICULTY	CHAPTER
Improve the overall professional level of the Customs Clearance Sector.	High	Medium	Moderate	Trading Across Borders
Encourage planners and decision-makers in the road sector to incorporate feeder road maintenance in a serious way.	High	Medium	High	Accessing Market Infrastructure
Secure technical assistance and support to SCCL.	Medium	Short	Low	Dealing with Licenses
Secure technical assistance to PACRA and encourage the geographical extension of services, particularly in securing the needs of rural small businesses.	Medium	Medium	Low	Dealing with Licenses
Provide basic skills training to selected SMEs that are agribusinesses, particularly small processors and emergent farmers.	Medium	Medium	Low	Getting Credit
Customs clearance agents must employ modern business practices to be able to operate successfully.	Medium	Medium	Low	Trading Across Borders
Support ongoing efforts by various donors and advocacy groups to improve the Decentralization and Local Government clauses in the new draft constitution, in order to ensure that the voices of individual smallholders are heard.	Medium	Short	Low	Accessing Marketing Infrastructure
Encourage the government of Zambia to bolster the Competition Commission.	Medium	Short	Moderate	Competing Fairly
Undertake a comprehensive review of Zambia's overall legal framework to determine its secondary impact on competition and consumer welfare, with a focus on smallholder inclusion in the market.	Medium	Short	Moderate	Competing Fairly
Increase the potential for the duty drawback program to become an effective, efficient export incentive scheme.	Medium	Short	Moderate	Trading Across Borders
Increase use of IT applications to facilitate regional trade.	Medium	Short	Moderate	Trading Across Borders
Help the banking sector increase its support to small and medium agribusiness.	Medium	Medium	Moderate	Getting Credit
Support a gap analysis of agroprocessing, with a particular focus on capital-intensive agroprocessing.	Low	Short	Low	Getting Credit
Support a public-private partnership to improve chemical container management.	Low	Medium	Low	Dealing with Licenses
Investigate credit systems in agricultural supply chains, especially input supply chains, with an eye towards improving access to commercial credit, particularly to smallholder farms.	Low	Short	Low	Getting Credit
Review the Output and Performance Based Road Contracting (OPRC) system for district procurement of public works.	Low	Medium	Low	Accessing Marketing Infrastructure
Help develop a fertilizer law.	Low	Medium	Moderate	Dealing with Licenses
Coordinate and support a long-term capacity-building program for the Competition Commission.	Low	Long	High	Competing Fairly

David Fischer
EAT/Fintrac
202.621.7349
dfischer@fintrac.com

Wade Channell
USAID/EGAT
202.712.1909
wchannell@usaid.gov

Elizabeth Diebold
USAID/BFS
202.712.1867
mdiebold@usaid.gov

Mark Huisenga
USAID/BFS
202.521.2638
mhuisenga@usaid.gov