



UNDERSTANDING LAND INVESTMENT DEALS IN AFRICA



COUNTRY REPORT: **ZAMBIA**

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Please email info@oaklandinstitute.org.

The Oakland Institute

PO Box 18978

Oakland, CA 94619, USA

www.oaklandinstitute.org

ABOUT THIS REPORT

This report is part of the Oakland Institute's (OI) seven-country case study project to document and examine land investment deals in Africa (Ethiopia, Mali, Mozambique, Sierra Leone, Sudan, Tanzania, and Zambia) in order to determine social, economic, and environmental implications of land acquisitions in the developing world.

This report is the product of research undertaken between May and October 2011. The research team conducted a thorough examination of the actual agreements and the extent and distribution of specific land deals. Through field research, involving extensive documentation and interviews with local informants, multiple aspects of commercial land investments were examined including their social, political, economic, and legal impacts. The team also met with government officials, civil society, investors, and the local communities that have been impacted by land investments.

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LIST OF ACRONYMS

AGOA	African Growth and Opportunity Act
COMESA	Common Market for Eastern and Southern Africa
DRC	Democratic Republic of Congo
ECZ	Environmental Council of Zambia
EIA	Environmental Impact Assessment
EU	European Union
FDI	Foreign Direct Investment
GRZ	Government of the Republic of Zambia
IPPA	Investment Promotion and Protection Agreement
IMF	International Monetary Fund
LBDP	Local Business Development Plan
LRWG	Land Resources Working Group
M&E	Monitoring and Evaluation
MMD	Movement for Multi-party democracy
PF	Patriotic Front
PIRC	Privatization and Industrial Reform Credit
PPP	Public Private Partnerships
PSDRP	Private Sector Development Reform Programme
RFP	Request for Proposals
SADC	Southern Africa Development Community
SAP	Structural Adjustment Program
SEIA	Strategic Environmental Impact Assessment
SSA	Sub Saharan Africa
STD	Sexually Transmitted Diseases
TMMC	Technical Multi-disciplinary and Multi-sectoral Committee
ton	Metric ton
WB	World Bank
ZDA	Zambia Development Agency
ZIC	Zambia Investment Center
ZMK	Zambian Kwacha

EXECUTIVE SUMMARY

Agricultural investment in Zambia is on the rise as the government of this Southern African country is quietly marketing and planning the development of at least 1.5 million hectares (ha) of its land. Abundant supplies of land and water, a “positive” investment climate, and political stability are all touted as incentives for investment. This report contains an analysis of agricultural investment trends in Zambia today. Some of the major findings of this research include:

A GRADUAL EROSION OF TRADITIONAL LAND RIGHTS IN FAVOR OF PRIVATE INVESTORS

Various legislative and institutional reforms have taken place since the 1990s that tend to erode the traditional land rights enjoyed by Zambia’s traditional chiefs (called “customary land”) at the expense of increasing the amount of land that can be transferred to private investors (called “state land”). Government committees have been set up to assist investors in acquiring land cheaply and efficiently from traditional chiefs only to then convert the land to “state land” - extinguishing the traditional rights and control that the chief had over this area. The moment chiefs give land to an outsider for agricultural investment a process is set in motion that takes land out of the customary system, the parcel becomes privatized, and its use is governed largely by the private investor subject to limited regulation, control, and management by the government. The net effect is that those Zambians that have traditionally farmed the land within these chiefdoms have little in the way of land tenure security, and little protection from expropriation.

PRIVATIZATION OF LAND: LEGACY OF STRUCTURAL ADJUSTMENT PROGRAMS

The gradual erosion of customary land rights, the numerous incentives offered to investors, and the lack of regulations are in line with the policies and measures strongly promoted over the past three decades by the World Bank (WB) and the International Monetary Fund (IMF). This is of particular concern as the historical impacts of privatization and other prescribed measures have been devastating for the average Zambian. While

Zambia may be in the early stages of the latest wave of large-scale agricultural development, the early signs do not look good in avoiding a repeat of the negative impacts seen during the implementation of the SAPs.

HEDGE FUNDS AND PENSION FUNDS ARE SIGNIFICANT AND GROWING PLAYERS

Given Zambia’s perception of being politically stable with ample supplies of land and water, several large hedge and equity funds are actively involved in acquiring agricultural land in Zambia including Chayton Atlas, Altima, Emergent, and the Silverland fund.

FARM BLOCK INTEGRATED DEVELOPMENT PLAGUED BY PROBLEMS

Compared to many other African countries, Zambia has initiated a unique approach to land investment, through its farm block development programs. Eight farm blocks of 967,150 ha are available through a competitive process due to complete by 2015. The concept is that government will provide the necessary infrastructure for the farm block, and private investors will then bid on a core venture of several large farms, and many smaller commercial farms/outgrowers. Agro-processing for the farms will be handled by the core venture. However the first farm block venture of Nansanga has been plagued by planning problems, delays in infrastructure development, controversies over displacement, and lower than expected interest from investors, with just two firms submitting final bids on the core venture/commercial farms.

LEGISLATIVE AND INSTITUTIONAL FRAMEWORK DOESN'T MATCH EXPERIENCES ON THE GROUND

Zambia has a legislative framework for agricultural investment that outlines procedures for consultation, Environmental Impact Assessment (EIA), and protection for traditional land users. The system on the ground, however, is quite different and marked by a lack of meaningful consultation, no transparency around EIA processes, and little in the way of protection for small-scale farmers and traditional land users.

AGROFUEL DEVELOPMENT INDUSTRY IN ITS INFANCY

Recent agricultural investments in Zambia have focused on sugar and jatropha for agrofuels. Zambia has, at present, little ability to refine these crops to meet domestic energy shortfalls. The conversion of land from food to agrofuel production for export is of serious concern for the food security of Zambians.

ENVIRONMENTAL IMPACTS

There are numerous environmental impacts from large-scale agricultural activities in Zambia including increased deforestation, biodiversity loss, damage to wildlife and fish (populations and habitat), increased pollution and numerous impacts to water. Some of these impacts could be minimized with proper leadership from government but many of the impacts are unavoidable and need to be balanced against the perceived benefits from investment.

ZAMBIA Land Pressures

Legend:

- Proposed New Farm Blocks (Yellow)
- Old Farm Blocks & Settlements (Orange)
- State Lands/Commercial Farms (Dark Red)
- Wetlands (Light Blue)
- Game Management Areas (Light Green)
- National Park (Dark Green)

Map Labels:

- Neighboring Countries: ANGOLA, DEMOCRATIC REPUBLIC OF CONGO, TANZANIA, MALAWI, MOZAMBIQUE, ZIMBABWE, NAMIBIA, BOTSWANA
- Lakes: LAKE MWERU, LAKE WANGWU, LAKE TANGANYIKA, LAKE BANGWEULU, LAKE KIRABA
- Cities/Towns: Solwezi, Kitwe, Ndola, Mpika, Kasama, Mongu, Chipata, Kabwe, Lusaka, Livingstone
- National Parks: WILKINGA NP, LUWA PLAINS NP, KAFUE NP, S. LUANGWA NP, N. LUANGWA NP, SIKOMA NP
- Roads: Great Northern Road, Great Eastern Road, Luangwa
- Scale: 100 Kilometers

Population per Square KM

Inset map showing population density in Zambia:

- <=10
- >10 and <=50
- >50 and <=100
- >100

Data Sources: Oak Ridge National Laboratory, Zambia Wildlife Authority, World Food Program (Zambia)
Design: Steve Longabaugh

1. COUNTRY CONTEXT

Social

POPULATION AND POVERTY

Zambia has a population of 11,470,234 as of 2011. With a land area of 752,000 km² and a population density of 15 people/km², it is one of the most sparsely populated countries in Sub-Saharan Africa (SSA). The population is predominantly rural (estimated at 65 percent in 2005).

Only three countries in the world have a lower score in the 2010 *UNDP Human Development Index* than they did in 1970. Zambia is one of them. The other two, Democratic Republic of Congo (DRC) and Zimbabwe have had extraordinary circumstances, such as war and international sanctions. There have, however, been steady gains since 2000. Zambia is currently ranked 150th (out of 183).¹

The GINI index, which measures income distribution, rates Zambia at 50.8, which puts it at 23rd out of 134 ranked countries.² 63.6 percent live under USD 1 a day (4th highest country), and the richest 10 percent make up 41 percent of the income (16th highest), which shows a large and increasing gap between the rich and poor.³

HIV/AIDS

One million Zambians live with HIV/AIDS, approximately 17 percent of the adult population between 15 and 49. Zambia is making progress. There is some evidence that the epidemic is reaching a plateau and Anti-Retroviral Therapy is available to more and more people. At the same time, HIV/AIDS has had and continues to have a devastating impact on the livelihoods of Zambians. The HIV/AIDS epidemic is far-reaching, and both a cause and effect of chronic poverty. It functions in a synergistic fashion to severely

curtail Zambia's development. Families have been decimated (an estimated 690,000 orphans),⁴ the social structure of communities/culture has been drastically altered, the impact on the public sector has been expansive, economic growth stunted, and agricultural productivity decreased.

HUMAN RIGHTS

Zambia's human rights records, while better than many of its SSA neighbors, is increasingly a cause for concern. In particular, there are growing concerns over human trafficking, with numerous sources reporting the occasional trafficking of women and children to Zambia for forced agricultural labor (mainly from Mozambique and Malawi). Reports also suggest that Zambia is seen as a transit point for trafficking (in particular from Angola to Namibia for agricultural labor). Human trafficking also occurs among children for employment in the fishing and domestic service sectors. Zambia is currently on the Tier 2 watch list.⁵

MEDIA

Internet usage (6.8 percent of the population) is still very low, particularly outside of Lusaka and regional urban centers. This limits the spread of information and perspectives.⁶ Most Zambians get their information from the print media (particularly in urban areas), television, or radio. While one major private newspaper and other private media outlets do exist, self-censorship appears to be common, and discussion of controversial political issues by these outlets is uncommon (defaming the president is a criminal offence).⁷

Political

Zambia fell under the control of Great Britain in 1888,

and was administered by the British South Africa Company (BSAC). In 1928, copper was discovered in the Copperbelt, and the country was then controlled by the Anglo American Corporation until independence in 1964. A multi-party democracy has been in place since 1991 and federal elections took place in September 2011, with the peaceful election of a new president. Zambia rightfully touts the lack of political violence in the country's 30 year independence, as an incentive, for potential investors. Yet the victory of the opposition party Patriotic Front (PF) was seen as a result of the previous President Rupiah Banda's overly-friendly approach to foreign investors.

CORRUPTION

Zambia ranks 123rd out of 179 in Transparency International's Corruption Perceptions Index.⁸ The Government of the Republic of Zambia (GRZ) has tried to tackle the issue and has made some progress. In 2006/2007 there were investigations against the

previous government on corruption charges and the former President Chiluba and others were found liable in a UK court for USD 41 million.⁹ It is a widely held perception that corruption is rampant at high levels (particularly the Ministry of Lands), and that many government officials cannot separate their business dealings from government responsibilities. In OI's interaction with government officials, while some emphasized corruption not being a consideration, others were quite open about the corruption that exists.

At the customary level, there is a general understanding that chiefs can be made open to "gifts" to facilitate transactions that transfer customary land to foreign investors (which are then converted to state land permanently). While the lands are the domain of the chief, and there is much debate about whether or not this constitutes corruption, there is a clear cause and effect between a "gift" (whiskey bottle, cash, etc.) and preferential treatment (i.e. "the land is yours").



Local communities watching foreign investors dropping in from the sky

FIGURE 1: COPPER PRICE HISTORY



Source: http://upload.wikimedia.org/wikipedia/en/thumb/7/7d/Copper_Price_History_USD.png/800px-Copper_Price_History_USD.png

Economic

The last few years have seen steady growth with real GDP growing at 6-8 percent between 2005 and 2010. At the same time there is concern that there are great inequalities in terms of the distribution of Zambia's GDP, and that despite this steady growth, poverty remains a serious problem.

The performance of Zambia's GDP is directly proportional to copper production/prices. Development assistance also makes a large contribution to Zambia's economy – with USD 1.27 billion in 2009.¹⁰

There is a recognition that Zambia needs to diversify its economy and not be so reliant on favorable copper prices to sustain growth. As a result, greater economic diversification has been a cornerstone of Zambia's macroeconomic planning (currently focused on strengthening agriculture, tourism, manufacturing, and hydropower sectors). At the same time, there are numerous calls for Zambia to benefit more favorably from the mining industry. As a result of the WB/IMF Structural Adjustment Programmes (SAP) of the early 1990s, taxes and royalties from mining activities contribute little to government coffers and government revenues from the mining industry are far lower than many other SSA countries. The SAPs have also ensured that very little of the profits of the mining industry stay in the country, with limited multiplier effects from Zambia's prime natural resource.

TRADE BALANCE

Zambia's main exports are copper (64 percent of total export value in 2008) and cobalt, although agricultural exports and electricity are becoming bigger earners.¹¹

Zambia is an importer of crude oil and fertilizer. Processed foods are also routinely imported (often from South Africa). As of 2008, Zambia's main import partner was South Africa at 52.8 percent of imports, with UAE at 8.9 percent, and China at 6.9 percent.¹² The need to import crude oil and fertilizer is seen as a constraint to large-scale agricultural development in the country and puts Zambia at a comparative disadvantage relative to its neighbors, many of whom, have easier and cheaper access to these inputs.

FOREIGN DEBT

Historically, Zambia's economy has often been crippled under the burden of heavy debt repayments to international lenders. This cycle began in the 1970s when the socialist Zambian government borrowed heavily to offset the drop in copper prices (and thus revenues) and never quite recovered. However, Zambia has benefited from debt service relief under the Heavily Indebted Poor Countries initiative (HIPC) – nearly USD 6 billion in debt relief. In July 2005, all outstanding debts were relieved, and a huge economic burden for Zambia was removed.

FOREIGN DIRECT INVESTMENT (FDI)

FDI came into Zambia in marginal amounts until 2002 when FDI inflows increased considerably. FDI continued to steadily increase with 2007 FDI numbers showing an almost 12 fold increase in comparison to 2000 statistics.¹³ China is the fastest growing investor, but Canada and the UK both make significant FDI contributions (mainly through the mining sector). While accurate 2010 numbers were not available, several sources indicate that pledged inflows might be at their highest level yet, with FDI pledges for 2010 (up to November) coming in at almost USD 4.3 billion.¹⁴

TABLE 1: ANNUAL FDI FLOWS

	TOTAL FDI	ANNUAL CHANGE
1999	3844	86
2000	3966	122
2001	4038	72
2002	4341	303
2003	4688	347
2004	5052	364
2005	5409	357
2006	6025	616
2007	7604	1579
2008	8545	941
2009	9504	959

In million USD at current prices and current exchange rates

Source: UNCTAD

MACROECONOMIC POLICY

More specifically, some of the key macroeconomic policies include:

- Privatization of state-run institutions Investment promotion, in particular for FDI (*ZDA Act, 2006*)
- Economic diversification
- Adoption and maintenance of flexible foreign exchange policies
- Promotion of the growth of capital and money markets

- Liberalization of interest rates
- Adoption of counter-inflationary measures including restricting the growth of the money supply
- Introduction of policies aimed at trade liberalization
- Abolishment of all forms of price controls
- Promotion of de-bureaucratized government procedures and reduction of the cost of doing business.¹⁵

STRENGTHS AND WEAKNESSES OF ZAMBIAN ECONOMY

Zambia has low labor productivity but high labor costs – a bad combination for remaining competitive in the region. This results in higher costs to customers for domestic goods, while the SAP ensured that duties and tariffs that protect domestic goods are kept to a minimum. The net effect is that locally produced goods cannot compete with cheaper imported goods, and many Zambian-made goods cannot compete in the export sector. Access to infrastructure is also a constraint, with only 1 percent of small farmers having access to electricity and just 28 percent having access to a public water supply, making irrigation beyond the reach of most.¹⁶

What Zambia has in abundance (relative to other SSA countries) are supplies of quality inputs that are critical but are not typically given a “formal” monetary value in the current financial system. Rich biodiversity, abundant quantities of water, and high quality agricultural land make Zambia very attractive to agricultural investors.

OTHER MACROECONOMIC FACTORS

Inflation has been a chronic problem, and while still a concern, has steadied itself in recent years. At the same time, lending rates have continued to increase. For example, even for a large-scale business such as Zambeef (Zambia’s largest beef producer), bank lending rates are currently approximately 20 percent.¹⁷

TABLE 2: SELECTED MACROECONOMIC INDICATORS

	1995	1999	2004	2005	2006	2007	2008	2009
GDP (USD bn)			5.4	7.3	10.9	11.4	14.7	12.3
GDP/capita	240	232	480	627	917	990	1248	1027
GDP/capita/PPP/USD			1099	1159	1242	1399	1482	1544
Real GDP Growth		-3.2	5.4	5.3	6.2	6.3	5.8	4.5
Inflation	46	21	18	18.3	9	10.7	12.4	14

Source: from Chapman and Walmsley (2003) from UN-HABITAT (2005). http://www.globalbioenergy.org/uploads/media/1005_Imperial_College_-_Mapping_food_and_bioenergy_in_Africa.pdf

The History of WB/IMF-led Liberalization and Privatization

Zambia's positive investment climate was ushered in through the 1991 transition from a one party state to a multiparty democracy. Since then, Zambia has endeavored to promote a liberal market economy through the privatization of state owned enterprises, trade liberalization, and the removal of trade barriers. These are the core tenets of the WB/IMF SAP that were forced upon Zambia as a condition of debt-servicing loans.

Historically, the Zambian economy has been overly reliant on copper exports and global copper prices – the volatility of which has led to boom-bust periods. Copper prices began falling in the 1970s, a key factor in the economic crises of the 1970s and 1980s.¹⁸ In 1973/74 GRZ accepted its first pre-conditioned loan from the IMF, and then in 1983 the GRZ entered into its first SAP with the IMF to assist the country with economic reform. This resulted in the removal of basic subsidies, leading to rapid increases in the price of *mealie meal* (i.e. maize – the staple food in Zambia) and fuel. The impacts on ordinary Zambians and the protests that followed resulted in the reinstatement of subsidies and an end to the relationship with the IMF in 1987.

In response, the international community drastically cut back on aid. The GRZ, faced with continuing and worsening economic conditions had no choice but to return to the IMF – subsidies were again removed, the currency was devalued, and the citizens once again revolted. More food riots and a coup attempt in 1990 led to severing ties with the IMF again. It was clear that the Zambians were not happy with the austerity measures but the government, as is so often the case, was caught

between doing something politically unpopular and complying with the international system of finance for a short-term economic lifeline.

The imposed SAP required Zambia to:

- 1. Liberalize trade practices and market based pricing** including elimination of customs duties, export tariffs, government subsidies, and other trade tariffs.

- 2. Privatize** the utilities (electricity, communications, etc), mining, and industry. By 1997, all state companies involved in agribusiness had been privatized.¹⁹ The Zambian government boasts that it has the speediest privatization program in Africa, but by 1999 half of the companies sold out of the state sector were bankrupt.²⁰ Zambia's qualification for debt relief under the HIPC initiative ensures that the most controversial economic reforms would be undertaken, including the privatization of the copper mines (with some of the lowest tax rates/royalties in Africa)²¹ (see Box 1). As of June 2011, ZDA's Privatization Report suggests that 21 out of the initial 280 parastatals are "under preparation" for privatization, while the remaining 259 have been privatized.²²

- 3. Limit government spending** involved cutbacks in education, health services, sanitation, water and irrigation, electric power supply, roads, and transportation, along with the privatization, and resultant focus on profit, for some of these services.²³

These policies proved to be devastating for the average Zambian and long standing. Employment numbers

fell, prices for basic staples increased dramatically, rural maize markets just disappeared,²⁴ and health care became inaccessible to the ordinary Zambian. The timing of the drop in Zambia's Human Development Index (HDI) ranking correlates perfectly with these austerity measures with the greatest drop occurring during the period of greatest liberalization (after 1991).²⁵ In addition, government revenues from copper dropped dramatically – for example in 1991 revenues to government from the copper industry were 240

million Zambian Kwacha (ZMK), as the privatization of mines occurred between 1997 and 2000 revenues fell to almost zero, and in the years just after full privatization (2000-2003), revenues were between ZMK 30-40 million just 15 percent of what they were 10 years earlier before privatization – a difficult situation for a government with limited access to other revenue sources.²⁶

Many interviewees had the perspective that the increase

BOX 1: THE PRIVATIZATION OF THE COPPER INDUSTRY

Zambia is the second largest producer of copper in the world, and has typically relied primarily on copper exports to drive its economy. From 1970-1975 no less than 93 percent of exports in any given year were copper.²⁷ The Zambian economy has performed relatively well since 2004 when copper prices began climbing steadily upwards, but there are many concerns over this over reliance on copper.

The privatization of copper mines that started in 1991 transferred the majority of new ownership to South African, Chinese, Indian, Canadian, and Swiss corporations. Protests occurred throughout the Copperbelt, and in 2006 elections, residents expressed their frustration with their ballots and voted in the PF in every urban seat in the Copperbelt, whose propositions involved deporting foreign investors, increasing corporate taxes, and limiting foreign ownership of mines.²⁸ Put simply, the benefits were not being realized as promised from government privatization, especially given the massive profits that copper prices were generating for mine owners. In attempting to privatize national assets, remove trade barriers, and create a positive investment atmosphere, regulation and control of their most prized national asset was side stepped. One study has identified six major problems with the privatization of the copper mines including:

- *One-sided deals*: mining companies did not need to pay many taxes, no liabilities from previous operations, and exemption from many national laws (including environmental pollution, transparency).
- *Inadequate regulation, illegal operations, and impunity*: this all came at the behest of the WB/IMF SAP. The *Investment Act* and the *Mining and Minerals Act* removed much of the control that the GRZ had over the industry. What regulations investors still needed to comply with, were usually ignored with the state's limited enforcement capacity.
- *Casualization of the workforce*: Work has become temporary, no pensions, no benefits, with some workers getting half of what they used to (and some documented cases of 10 percent), and the workforce has been dramatically reduced.
- *Deepening pensioner poverty*: mines no longer paid pensions, and with no alternative livelihood to fall back on and the decimation of family/community structure brought about by mining-led urbanization, poverty increased dramatically for pensioners.
- *Failure to protect the social infrastructure*: Before privatization, the mines provided social infrastructure (schools, clinics, housing, etc.). Despite some language in agreements, new investors have not picked up this responsibility. This has had significant social impacts.²⁹

Tackling each of these above issues results in a cost to the investor and a cut into profits. In the absence of adequate regulation, monitoring, and enforcement by GRZ it is not clear how mining companies will be held to account. This historical account of the privatization of Zambia's copper mines raises concerns about the conditions under which agricultural investment is happening today.

in agricultural land development and the institutional, legal, and policy reforms that are taking place to facilitate those transactions are just a continuation of the liberalization policies forced on Zambia as a precondition of debt relief.

Legal Basis for Land Tenure and Land Investment

The land tenure system in Zambia is the topic of much public and private debate, and its evolving structure is a critical component of the agricultural land investment context in the country. Essentially, there are two types of land in Zambia: customary land and state land. There is a definite trend of limiting the extent and power of the customary land system and a move towards a more private model of land tenure through changes to legislation inspired by the SAP. These incremental changes are likely to have a widespread impact on Zambia's development, along with the distribution of benefits and liabilities that accrue from development activities.

THE CONSTITUTION

The Constitution of Zambia provides the framework from which all other investment-related legislation flows. It does not explicitly mention land issues,

although there are several clauses (Article 16 in particular) related to property (includes land). At the same time, the Constitution allows for the president to take or acquire land from its owner or occupier for the purposes of using it for agricultural development or improvement (likely to apply to customary as well as state land).³² There have also been various attempts at constitutional amendments that would make explicit reference to land. The most recent proposed amendments were defeated in the national assembly in March 2011.

In the context of land tenure, these amendments were to provide for: (1) equitable access to land and associated resources; (2) equitable access to and ownership of land by women; (3) land tenure security; (4) sustainable and productive management of land resources; (5) transparent and cost-effective management of land; (6) conservation and protection of ecologically sensitive areas; and (7) cost-effective and efficient settlement of land disputes.³³ In addition, the draft constitutional amendments provided for the continuation of the customary and private (leasehold) tenure systems and called for revisions to legislation to be enacted to: revise existing land laws; prohibit land speculation; address imbalances in land alienation; provide for periodic land audits; provide means for securing customary land tenure; provide equitable access to state land; enable

BOX 2: THE ZAMBIA DEVELOPMENT AGENCY

ARTICLE 109 LAND

Formed in 1996, the Zambia Development Agency (ZDA) was formed to be a "one-stop shop" to facilitate private investment, to privatize state assets, and assist investors through various government processes. Its mission "is to promote development by providing effective and comprehensive facilitation and aftercare services, business development services and market information in order to attract investment and promote Zambian exports in a transparent, innovative, efficient and competitive manner that ensures stakeholder satisfaction. In relation to foreign direct investment, the ZDA:

- Ensures speedy approval of all licenses by all government agencies;
- Assists in obtaining work permits for expatriate staff; and,
- Assists in obtaining land for economic projects.³⁰

The ZDA is an amalgamation of the Zambia Investment Centre (ZIC), the Zambia Export Board (ZEB), the Zambia Privatization Agency (ZPA), the Zambia Export Processing Zone Authority (ZEPZA), and the Small Enterprise Development Board (SEDB).³¹ The creation of the ZIC was a requirement of the 1995 *Investment Act*, mandated by the WB/IMF's PIRC II loan. The ZDA is presently housed in Lusaka's aptly named, Privatization House.

settlement of landless people; and establish minimum and maximum holdings of arable land.³⁴

THE LANDS ACT OF 1995

During Zambia's economic crisis of the 1970s/80s, the key conditions for the debt restructuring were economic liberalization, privatization and land reform. In mid 1993 with the support of the World Bank/IMF and with funding from USAID, the MMD government

“Land Act of 1995 put value on land, allowing people to speculate on land.”

– Henry Sichembe, Deputy Director, Technical Services, Ministry of Ag. & Cooperatives

Source: Direct communication, February 2011.

convened a National Conference on Land Policy and Legal Reform. The Lands Act was passed by parliament in 1995.³⁵

The Lands Act facilitates investment in mining, agriculture, and tourism and with its passing, land could now be bought and sold freely like a commodity. Traditional leaders, civil society, church leaders, and other stakeholders expressed concern with the bill, arguing it would put poor people at a disadvantage and undermine the authority of traditional leaders with regard to administration of customary land.

The Lands Act combined reserve/trust land into customary land, strengthened state leasehold rights at the expense of customary rights, eased restrictions on foreign ownership of land, facilitated the conversion of land from customary to state, and removed the ability of the state to repossess undeveloped land. In addition, the Lands Act supersedes customary law in the case of a conflict. It also contained land dispute mechanisms and enabled the development of land tribunals to deal with land use conflicts.

In 2000, the Ministry of Lands drafted the “Land Policy” – in effect the implementation of the 1995 Lands

Act. However nation-wide concerns led to further consultations on the Draft Policy to ensure that it would not only open the country up to investment, but that investment would respect the customary system and not adversely impact the livelihoods of the poor and disadvantaged. While the Land Policy has not yet been passed, leases under the Lands Act continue to be handed out. The Land Policy debate is currently quiet in Zambia, as those involved in it are waiting for long-awaited constitutional amendments to pass.

POVERTY REDUCTION AND DEVELOPMENT PLANS

There are numerous poverty reduction and other development plans that provide the context in which land investment is being undertaken. The 6th National Development Plan (NDP), released in March 2011, is seen as the blueprint for the country's development for the 2011-2015 period. Its vision for the agriculture sector is as “an efficient, competitive, sustainable and export-led agriculture sector that assures food security and increased income by 2030.” Similarly, the goal is “to increase and diversify agriculture production and productivity so as to raise the share of its contribution to 20 percent of GDP.” These statements underscore the focus on export of agricultural production over local production. At the same time, there is a widely held perspective that the NDPs are merely a wish list – a plan to be given to donors to show that requests for financing fit with national development goals and plans.

THE LAND REFORM WORKING GROUP

The Private Sector Development Reform Programme (PSDRP) was developed under the 5th NDP and had as one of its agenda items to increase the amount of land available to investors. The PSDRP established the Land Reform Working Group (made up of representatives from ZDA and the Ministry of Lands). One of the group's key roles was to request chiefs to relinquish customary lands to state lands for inclusion in the government's land bank.³⁶

LAND USE PLANNING AND MANAGEMENT

While land use planning was carried out during British colonial times, it remains in its infancy in

BOX 3: A SELECTION OF LAND RELATED LEGISLATION

- *Lands Act*: the substantive land law in place. (no regulations have been drafted pursuant to the *Lands Act*)
- *Agricultural Lands Act* of 1960, consolidated in 1997
- *Housing [Statutory and Improvement Areas] Act* of 1975, consolidated in 1997
- *Lands Acquisition Act* of 1970, consolidated in 1997: allows for compulsory acquisition of land if in “national interest” and outlines procedures for compensation
- *Land Survey Act* of 1960, consolidated in 1997
- *Town and Country Planning Act* of 1962, consolidated in 1997, is land use planning law in Zambia. Significant amendments are expected to go through the legislative process imminently
- *Wildlife Act* of 1998, enabled the creation and management of Game Management Areas (GMAs)

post-independence Zambia. There is no legal basis to plan for customary land (although proposed changes to the Town and Country Planning Act could change that). Land use planning in Zambia appears to be rather fragmented, focused on urban areas or areas of intensive development (i.e. Copperbelt), and what land use controls are in place are not enforced or widely understood. The majority of civil society organizations (CSOs) we discussed this issue with were not sure if land use plans were in place, which speaks to the lack of knowledge and transparency regarding land use planning. Thus there is no mechanism in place to ensure that there is an appropriate mix and balance of land uses across the landscape. Almost all respondents spoke of the arbitrary way in which the vast majority of chiefs allocate land to investors – ensuring an appropriate mix of land uses does not seem to enter into the equation.

LAND ADMINISTRATION IN ZAMBIA

Despite the vast majority of land still under customary tenure and thus under the jurisdiction of the traditional chiefs, there are no resources available to manage these lands. There is no mechanism in place for land use planning, no land administration, or registration systems. Furthermore, there is little evidence to show that land is being allocated in an appropriate, equitable, and sustainable manner that would balance the needs

of the people and the interests of the investors. Land use decisions by the chief appear to be made in an ad-hoc manner with land acquisition processes that are ripe for corruption. Amendments to the new Town and Country Planning Act will provide a mechanism whereby customary areas can be planned by the government and the chief jointly if the chief so desires. While there are concerns about the extent to which this will further erode chiefs' rights and autonomy over their customary land, it may allow for a more appropriately planned and balanced landscape that considers the suite of different values, needs, and land uses across the landscape. Government land administration systems are inefficient, fragmented, and do not seem to aid decision-making on land based issues. Different and incomplete land information is collected by local authorities, land tribunals, and ministries, and data is maintained in different formats, scales, accuracies, extents, is often damaged or missing, and is kept in poor storage conditions with inadequate indexing.³⁷ Corruption is a concern regarding the administration of land, and it is widely perceived that political interference in the allocation of land is an increasing problem.

LAND DISPUTES

According to several informants, land disputes in Zambia seem to be occurring with greater frequency. They occur between traditional leaders and

government, among traditional leaders themselves, among villagers, as well as between communities and leaseholders/investors.³⁸ The causes of these disputes are numerous including lack of boundaries, ownership claims, or inheritance/succession issues. While formal land dispute mechanisms do exist (lands tribunals for instance), they are generally beyond the reach of most ordinary Zambians due to lack of knowledge about the processes, centralized nature of the process (i.e. Lusaka), high costs, and poor funding. As a result, either the land disputes continue or are dealt with at a traditional level.

CUSTOMARY AND STATE LAND

Customary land is under the control of the traditional chiefs, and makes up between 80-96 percent of the land base, although the actual figure is believed to be around 90 percent and steadily declining³⁹ (at the same time close to 40 percent of the customary land is administered by Wildlife and Forestry authorities as National Parks, Game Management Areas (GMAs), and Forest Reserves).⁴⁰ However, a 2009 Committee on Agriculture and Lands study claimed that only 37 percent of land in Zambia is effectively controlled by traditional authorities.⁴¹ Under customary tenure, Zambians within a given chiefdom receive land for no charge from the chief (or their village headmen), and the lands are “managed” by the chiefs (often through their village headmen). However there is no security of tenure – the continued ability to use the land depends on the chief, and the chief has limited accountability to his subjects as most chiefdoms are hereditary in nature (although there are considerable variations between different chiefdoms in terms of land management practices).

Under the customary system, landowners typically do not pay any land tax, communal/grazing areas are recognized, redistribution can occur, and there are typically no temporal limitations on use/ownership. Land is acquired through inheritance (most of Zambia is patrilineal, although some areas of the Northern Province are matrilineal), land allocation from chief/headmen (young man becoming of age, migrants with the blessing of chief, redistribution or by gift),⁴² or by purchase (usually within a community but increasingly involving outsiders).



Banana plantation

By contrast, state land is titled, is administered by the Ministry of Lands and other government bodies, and contains the rights and privileges that are features of private land tenure systems around the world. The amount of state land is steadily increasing as a variety of factors lead to the rise of a private formalized land market (including increased commercial agricultural operations). The majority of the state land is located close to major infrastructure and relatively near markets, focused along the North-South transportation corridor. More specifically, state land bisects the country in a narrow strip 30 to 50 km wide from Choma in Southern province to Kabwe in Central Province and northwards. There are also other smaller segments of state land around Chipata in Eastern province (for cotton and soybean) and in the north around Mbala (coffee). Zambians and non-Zambians apply to the Ministry of Lands for leasing of state land. The process can be long, and is open to corruption at various levels. The prohibitive costs, the focus on Lusaka, the technical nature (forms, etc.) and the uncertainties in the process are all barriers for rural Zambians to get title. The state grants four types of leases: (1) a 10-year Land Record Card (2) a 14-year lease for unsurveyed land (3) a 25- to 30-year Land Occupancy License for residential settlements and (4) a 99-year leasehold for surveyed land.⁴³

“The system of title deeds is bad. There was a Mr. Fischer in my area who I gave a very big piece of land. He was a very good man and we got along very well and he was also good to my people. Unfortunately he passed away some time back. His children have since taken over the land but they are very brutal. They do not respect me as their chief and they are very bad to my people. They do not even allow somebody to pass in their area. I want to grab back that land but I have failed because they have title deeds.”

– Senior Chief Kasempa

Source: Catholic Commission for Justice and Peace, “Impact of the Land Act 1995 on the Livelihoods of the Poor and Peasants in Zambia,” April 2003.

The historical basis for the customary-state divide came during British colonial rule when the British government developed state (or “Crown”) land for “whites” that was subject to British law, taxation, etc. This was the land that would be of greatest use to the British – generally most urban areas, mining areas, protected areas, land along rail lines, and land that was free of tsetse fly infestation.⁴⁴ The rest was for the “tribes” and they were free to govern themselves in whatever way they deemed fit. This land was divided into native reserves (37 percent) and trusts (57 percent). Native reserves were located on the edges of British state land in order to provide a home for the sixty thousand indigenous people who had been displaced in 1928/29 by this demarcation of state lands and to provide a ready supply of labor for agriculture.⁴⁵

CONVERSION FROM CUSTOMARY TO STATE LAND

As per the philosophy of the SAP, the Lands Act is designed to steadily decrease the amount of land held under customary tenure while increasing the amount of land held under private ownership. Individuals that acquire customary land from chiefs can convert those rights to state land (this does not imply state ownership, rather that the land is privately owned under a state land administration system) and thereby secure a lease. Once a lease is secure, customary rights are extinguished, the investor has increased access to credit, and what autonomy the chief continued to have over that parcel of land is eliminated. Once land is converted to privately owned state land, it may not be converted back – it remains state land regardless of who owns it, how it is used, or what the impact is on local citizens. This is leading to an erosion of the customary land base. The moment chiefs give land to an outsider for commercial agricultural purposes a process is set in motion that takes land out of the customary system, the parcel becomes privatized, and its use is governed largely by the private investor subject to limited regulation, control, and management by the GRZ.

LAND TENURE SECURITY IN ZAMBIA

The lack of security for smallholders in the customary land system results in increased fear of eviction (need to pay bribes, or maintain positive relationship with landlords/chief), less access to public infrastructure than titled land owners, the need to defend one’s property, little incentive to invest in their land (either housing, investment, long-term agricultural practices, tree planting, etc.), and perhaps most critically does not provide for easy and fair access to credit (land is usually used as collateral to secure credit). In Zambia, 95 percent of commercial bank loans to businesses are secured by land – so no title, no credit.⁴⁶ However, the customary system provides more security, as under the state land system failure to pay back on credit could result in seizure of your land, something that would not happen under the customary system (of course there are various ways in which the chief might decide to confiscate land).

Food Security

More than half of Zambians are classified as extremely poor and unable to meet minimum nutritional needs.⁴⁷ The situation is particularly endemic in the rural areas, where attaining appropriate levels of food security is an ongoing challenge.

LAND USE

420,000km² out of Zambia's 752,000km² of land area is classified as medium to high agricultural potential, but only 15 percent of the total land area is cultivated⁴⁸ and only 45,980km² (6 percent) is under crop production at one time, as the vast majority of Zambia's traditional farmers practice land rotation (estimates range that 6-9 percent of the country may actually be laying fallow). Of the total land area, 307,080 km² is forested⁴⁹ and Zambia has the 2nd highest area of forested lands with high population densities (<25 people/km²) in SSA (13,311,000 ha).⁵⁰

AGRICULTURE

Zambia's agricultural production focuses on three different agro-ecological zones. Zone 1 is the most prone to drought (receives <800 mm rain/year) and has more limited suitable crops relative to the other

areas. Zone 2 receives between 800-1,000 mm/year with very productive soils and various crops grown (maize, sugarcane, cotton, cereals, etc). Zone 3 receives >1,000 mm of rain/year, has very low pH, and is more ideal for late-maturing crops.⁵¹ Critical transportation infrastructure runs north-south bisecting these three zones.

Zambia has four categories of farmers:

1. Smallholders: The largest sector, making up 51 percent of agricultural GDP and 75 percent of the number of farmers (approximately 1.1 million). Farm sizes are small (between 0.5 ha and 9 ha). Most food is grown for subsistence purposes although there are occasional surpluses. Maize is the staple crop and all crops are rainfed. In 2004, 75 percent of small-scale farming households had average annual incomes of about USD 219, and 23 percent had incomes of approximately USD 514⁵², with an average household size of 6.6.⁵³

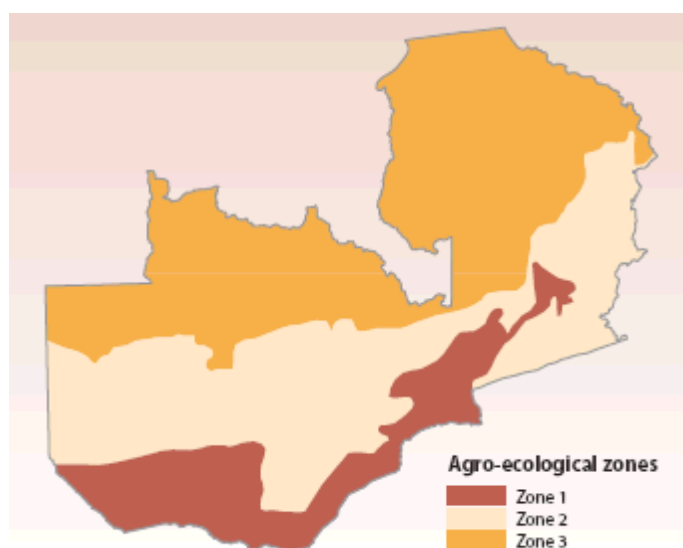
2. Emergent farmers: These farmers make up 20 percent of the total number and produce food and cash crops on their farms. Farm sizes are larger than smallholders - between 9 and 20 ha.

3. Medium-scale: Makes up 4 percent of the farmers - produce both food and cash crops. Farm sizes are between 20 ha and 60 ha. Together with the emergent farmers, they account for 25 percent of the agricultural GDP.

4. Large-scale: Makes up less than 1 percent of farmers and numbers less than 800 individuals /companies. Large farms (>60 ha) enjoy high mechanization and effective supply chain management⁵⁴

Low production yields among Zambian farmers have been attributed to four major factors: low access to technology and information, low access to markets (property rights, standards, contract law, adjudication, market facilities, market price and supply information, marketing extension), lack of infrastructure (roads, irrigation, rural electrical power, ports, communications), and poor access to inputs.⁵⁵ Generally speaking, the time of year with the highest

FIGURE 2: AGRO-ECOLOGICAL ZONES OF ZAMBIA



Source: http://www.globalbioenergy.org/uploads/media/1005_Imperial_College_-_Mapping_food_and_bioenergy_in_Africa.pdf



Baobab tree

rates of food insecurity is November to April as maize prices are usually high as low-producing households run out of food.⁵⁶

Technologies are very limited for the vast majority of Zambia's smallholders. Cattle diseases spread in 1990 wiped out half of the cattle stocks (after SAP led to the elimination of state services such as cattle dipping and veterinary services). This impacted herders, but also small-scale farmers, who rely on oxen to plow fields and on manure to fertilize their land. There were efforts to restore the cattle stocks, but the net effect is that farmers are now primarily using hoes to plow the fields, resulting in lower yields.

Other factors leading to food insecurity in Zambia include poor livestock husbandry practices, lack of social safety nets, drought prone areas (particularly the south and the west), focus on maize (in areas where other crops would be more suitable i.e. south), HIV/AIDS and government pricing policies.⁵⁷ Small plot sizes, the dominance of maize, and the focus on rainfed

agriculture in a region with erratic rainfall all increase vulnerabilities to food insecurity.

Zambia's smallholders have historically been very focused on maize production even in areas where other crops are more appropriate. Maize is the basic staple for Zambians, and the government has historically played a large role in the maize markets. The widespread monocropping of maize and its high use of external inputs (fertilizer, seed, etc.), supported by government policies has been criticized.⁵⁸ Government regularly bans the export of maize, lifting the ban only at times of massive surpluses. Recently, Zambia has become a net exporter of maize following a government program to provide subsidized pesticides and seed to farmers. In 2009/10 Zambia produced 2.7 million tons providing a surplus of 1.1 million tons, with exports intended to go to Zimbabwe, DRC, and Namibia.⁵⁹ Maize reserves in 2005 were enough to cover 1.5 months of consumption, 2.2 months in 2006, 2.5 in 2007 and 3.6 months in 2008.⁶⁰

Rural communities supplement their agricultural production with hunting and foraging in forests (insects, mushrooms, nuts, fruits, mammals, vegetables, birds, etc.). In addition, the sale of forest products supplements rural incomes (including edible caterpillars, mushrooms, bush meat, etc.) acting as an additional buffer against food insecurity. The majority of rural industries are based on forest resources, either as a raw material or as an energy source (including honey production, carving, carpentry, basketry, weaving and other craftworks that generate incomes). The importance of forest resources to rural households cannot be understated and can play a crucial role in poverty reduction.

COMMERCIAL FARMING HISTORY

Zambia has had a longer history of commercial agricultural production than many other African nations, due to a combination of factors including its colonial history, its relatively stable path to independence, and its location between the Zimbabwean and South African farming areas.

Before Zambia gained its independence in 1964, there was significant state involvement in agricultural production – often providing inputs and establishing institutions (marketing bodies, research, and extension services, etc.). Zambia had an increasing urban population, and relied on this commercial farm sector to feed its population and the labor force in the copper mines. Misguided government intervention, marketing policies that eroded profits, stringent regulations on

profit expatriation, and the increasing attractiveness of farming in neighboring Zimbabwe and South Africa led to the large-scale emigration of foreign farmers from Zambia to these countries.⁶¹ It is estimated that the number of European farms in Zambia had dwindled from 1,185 in 1961 to about 300 by 1980.⁶² However, after independence the number of “medium scale” and “emergent” commercial farms steadily increased, particularly along the North-South transportation corridor.

In the 1980/90s, Zambia’s economic crisis hit and the resulting structural adjustment and economic liberalization policies greatly reduced the government’s role in the agricultural sector. Reduced subsidies, reduction of protective trade barriers, privatization of parastatals companies and the reduction of government support made it more difficult for small and medium sized farmers to compete. Many medium and large farmers moved to the more attractive investment climates in Zimbabwe and South Africa.

Following the controversial land reform in Zimbabwe in the early 2000s, some white Zimbabwean farmers relocated to Zambia, as have a steady trickle of white South African farmers.

Investment Climate

Zambia has managed to create a very positive investment climate for foreign investors, largely inspired through the SAPs of the 1990s. Zambia offers an impressive package of investment incentives, some of which are sector-specific. The vast majority of incentives are available through the 1995 Investment Act (mandated as a pre-condition of the WB/IMF’s 1993 loan), and all investors who acquire an Investment License are eligible for these incentives (Investment License is “strongly encouraged, but not a requirement”).⁶³ In addition, the tax regime is investor friendly with no capital gains tax, but a property transfer tax is applicable on the transfer of immovable property and on stocks and shares in Zambian incorporated companies. Investors are free to repatriate capital investments as well as dividends, management fees, interest, technical fees, and royalties with no restrictions. There are no exchange

“There are multiple layers of protection for investors. Zambia attracts FDI since it is one of the most free countries, ...[it] has removed total exchange controls.”

– Valentine Chiatalu, Chairman, MTN (Zambia) Ltd., Chairman, Phatisa (Africa Agricultural Fund), formerly appointed by WB/IMF to oversee Zambia’s SAP in the 1990s.

Source: Direct communication, February 2011.

controls in Zambia and no limits on foreign ownership. The role of government is simply to create an effective regulatory environment as well as provide the basic infrastructure to enhance private sector participation with public-private partnerships being encouraged. There are also protections against the nationalization of leases and compensation payable in the unlikely event of expropriation. While these incentives are generic and available to all investors, there is also some room for negotiation of other investor-specific leases.⁶⁴ For example, the research team acquired a letter from the ZDA with an investor-specific incentive, providing assurances that 100 percent of production could be exported (not dependent on crop type) even in times of food insecurity.⁶⁵ Another large hedge-fund investor, Chayton Atlas Agricultural Company negotiated an Investment Promotion and Protection Agreement (IPPA) which contains a specific incentive that “permits us to export a certain proportion annually of all products produced, manufactured or stored in Zambia.”⁶⁶

Zambia is also a member of the World Bank’s Multilateral Investment Guarantee Agreement (MIGA) which protects investors against natural disaster, war, or expropriation. Chayton Atlas has secured a contract with MIGA that provides between USD 50-70 million (for Zambia and Botswana combined) of coverage against “the risks of war and civil disturbance, expropriation, transfer and inconvertibility and breach of contract.”⁶⁷

GRZ has also entered into double taxation agreements with numerous European, African, and Asian countries (with 21 countries, including South Africa and Zimbabwe), and has preferential access to export markets through trade agreements (COMESA, AGOA (US market-but just for certain products-horticulture, etc), SADC, and Cotonou (“Everything but Arms” (European Union (EU) agreements). COMESA and SADC alone constitute a favorable trading regime with 380 million people. Eleven bilateral trade agreements have also been signed (including with China).⁶⁸

The 2011 World Bank *Doing Business* report indicates that Zambia is among the top 10 economies that have improved their ranking in the 2010/2011 report (now ranked 76th out of 183 countries).⁶⁹

Numerous incentives are available to investors in the agriculture sector (as per the ZDA Act):

- Zero percent tax on profits for a period of 5 years from the first year the profits are made. From year 6 to 8 only 50 percent of the profits will be taxed, and from 9 to 10, 75 percent will be taxed
- Zero tax on dividends for a period of 5 years from the first year dividends are declared
- Customs duty exemption on capital equipment and machinery⁷⁰
- Reduced or free duty on imports of certain raw materials including organic and inorganic fertilizers and pesticides
- Numerous other tax incentives including:
 - ≈ Wear and tear allowance of 50 percent per year on machinery used for farming;
 - ≈ Capital expenditure allowance of 20 percent per year for the first 5 years on farming improvements;
 - ≈ Capital expenditure allowance on the growing of coffee, tea, bananas, citrus fruits or similar plants qualify for a development allowance of 10 percent per year up to the second year of production; and
 - ≈ Farm work allowance of 100 percent for expenditure on farm land such as stumping, clearing prevention of soil erosion, boreholes, wells water conservation and aerial or geophysical survey.
- 50 percent depreciation allowance per year for the first 2 years on machinery used for farming
- 20 percent capital expenditure allowance per year for the first 5 years on farm improvements
- 10 percent development allowance per year, up to the first year of production, on capital expenditure incurred for the purpose of growing coffee, tea, bananas, citrus fruits or similar plants⁷¹

2. CHARACTERISTICS OF LAND INVESTMENT

Extent of Land Investment

There is a distinct lack of information on the scale of agricultural land investment in Zambia. What information is available in the public domain is based on an aggregation of limited media reports about individual land deals. Information on the scale of investment from the various government bodies with agricultural land investment mandates was unavailable. These government departments told the research team that they themselves were unaware, that different government departments had different pieces of information, and that the information had not been collated in any meaningful way. The fact that even basic information on the scale of investment is not being collected, raises considerable doubts about management of land investments. It remains to be seen how the ZDA's vision of a "one-stop shop" will change this. Currently the mandate of this "one-stop shop" appears to be limited to awarding agricultural land concessions, rather than ongoing management.

According to GRZ documents, the commercial farming sector includes 2,000 large-scale farms located along major transportation routes/near population centers and occupy state land under long-term leases (>60 ha). It also states that approximately 100,000 emergent commercial farmers occupy state and customary land (21-60 ha), 119,200 medium-scale farmers (10-20 ha), and 480,800 small-scale farmers (0.5-0.9 ha).⁷² Other sources often quote outdated investment certificate numbers (for example, 240 granted between 1992 and 2002),⁷³ but many investors do not acquire these certificates (making them ineligible for many benefits), and many of these investors may be acquiring already existing farms. While these figures do not provide any insight about the time progression of investment in agricultural land, there is a general consensus that the pace of leasing since 2008 has not dramatically changed

– as Zambia has had a long history of commercial agriculture, and growth in this sector is generally constant. What does seem to be on the increase are the GRZ's plans and ambitions for future agricultural investment (including the 967,750 ha available for agricultural investment under the farm block program and the 500,000 ha of agricultural land in the GRZ land bank).⁷⁴ Should these concessions be awarded in the near future the pace of agricultural investment will most certainly increase dramatically.

Why is Land Investment Happening?

Zambia's move towards economic diversification is important to reduce reliance on a single commodity (copper). Other stated reasons for the agricultural investment focus include: to improve food security (at national and household level); to increase exports earnings; and to continue economic reforms required under the SAP.

Zambia has created an attractive investment climate through numerous incentives, including low levels of taxation. The relative low cost of land (particularly if obtained directly from chiefs) in the absence of a well-established land market, as well as the lack of limitations on water use also appear to be key reasons why investors are opting for Zambia. South African and Zimbabwean white farmers are able to acquire land and feel that Zambia is receptive to their interests. To them and other investors, Zambia is seen as politically stable, with a foreigner-friendly investment climate, and thus there is a low likelihood of nationalization/land reform (such as in Zimbabwe). Perceived abundance of land and water with favorable growing conditions, central location to Southern African markets, and political stability are also cited as reasons that make Zambia attractive to investors.

How much Land is Available?

The ZDA has approximately 500,000 ha (0.7 percent of Zambia's total, most of which is now "state land") in its land bank that is ready to be transferred to investors.⁷⁶ This is in addition to the 967,750 ha (1.3 percent of Zambia's total) that is to be developed through the farm block programs, as expressed in government planning documents.⁷⁷ This total is forever shifting as planning efforts become more advanced. More recent marketing efforts have suggested that presently there are approximately 644,000 ha available through the farm block program.⁷⁸ ZDA officials told us that they

"Zambia's lack of exchange controls and the fact that it had lots of land available make it an ideal place for agricultural investment. We are utilising only an estimated 14 percent of our land. We have well over 30 million hectares of land that is begging to be utilised."

— Agriculture Minister Brian Chituwo

Source: *Reuters*, 12 June 2009.

desire to have at least half of the farm blocks developed and operational by 2015.⁷⁹ The farm blocks are located throughout the country, with one in each province.

Marketing presentations from various government departments advertise the vast stretches of land that are "underutilized." One such presentation suggests that 43 million ha (58 percent) of the total of 75 million ha have medium to high potential for agricultural production, but that only 6 million ha are currently utilized (14 percent), and that of the 2.7 million ha land with irrigable potential just 156,000 ha are currently irrigated.⁸⁰ These figures can be misleading. One study suggests that 80 percent of Zambia's "available land" is greater than 6 hours from a market town, while there are large swaths of land where there is limited water available. In addition, it is not clear how

Zambia is defining "underutilized." Many Zambians practice shifting cultivation, while many more rely on the forests and rivers in these "underutilized" lands to provide food (fish, plants, mushrooms, caterpillars, etc), and other resources to supplement livelihoods (medicine, firewood, etc.). Many of these areas are considered "underutilized" and "available" by the GRZ. Many of the lands that are being marketed for the farm blocks have people that currently farm on them and should not be considered "available." This is backed up by the government EIA on the Nansanga farm block which states that approximately 2,500 people will be displaced.⁸¹

Given that land use planning is currently non-existent and chiefs are free to negotiate the transfer of land to investors, there does not appear to be a limit to the amount of customary land that may be available. The land available seems to be mainly dependent on demand side factors, as there is a large supply of land available with land managers (chiefs and government) quite open to investment. The availability of customary land varies greatly between different chiefdoms. For example, in Barotseland in Western Zambia, it is more difficult to acquire customary land because of cultural attachment to land, a more complex traditional hierarchy, no history of giving land to foreign investors, and a strong sense of ethnic identity.

The Farm Block Concept

The farm block concept has been reported in the media as a new planned out and investor friendly approach that maximizes the benefits and minimizes the risks for all involved in agricultural investment. Despite the suggestions of government marketing efforts and government plans, the farm block concept is not new in Zambia. Various farm blocks have been developed over time including the Mkushi farm block – most of which are along the North-South corridor (see Figure 2).⁸² What is new is the coordinated countrywide strategy of developing farm blocks. Whether this will be realized, only time will tell, but it is evident based on the nascent stages of the Nansanga farm block process, that despite some solid ideas and principles, the process is a long way off from being the sustainable development opportunity that the GRZ hopes it can be.

The stated objectives of farm block development are:

- To commercialize agricultural land and exploit its full potential in order to attain economic diversification and growth;
- To enhance food security through production of adequate food for the nation and export;
- To open up undeveloped rural areas, reduce poverty, and minimize rural to urban migration.⁸³

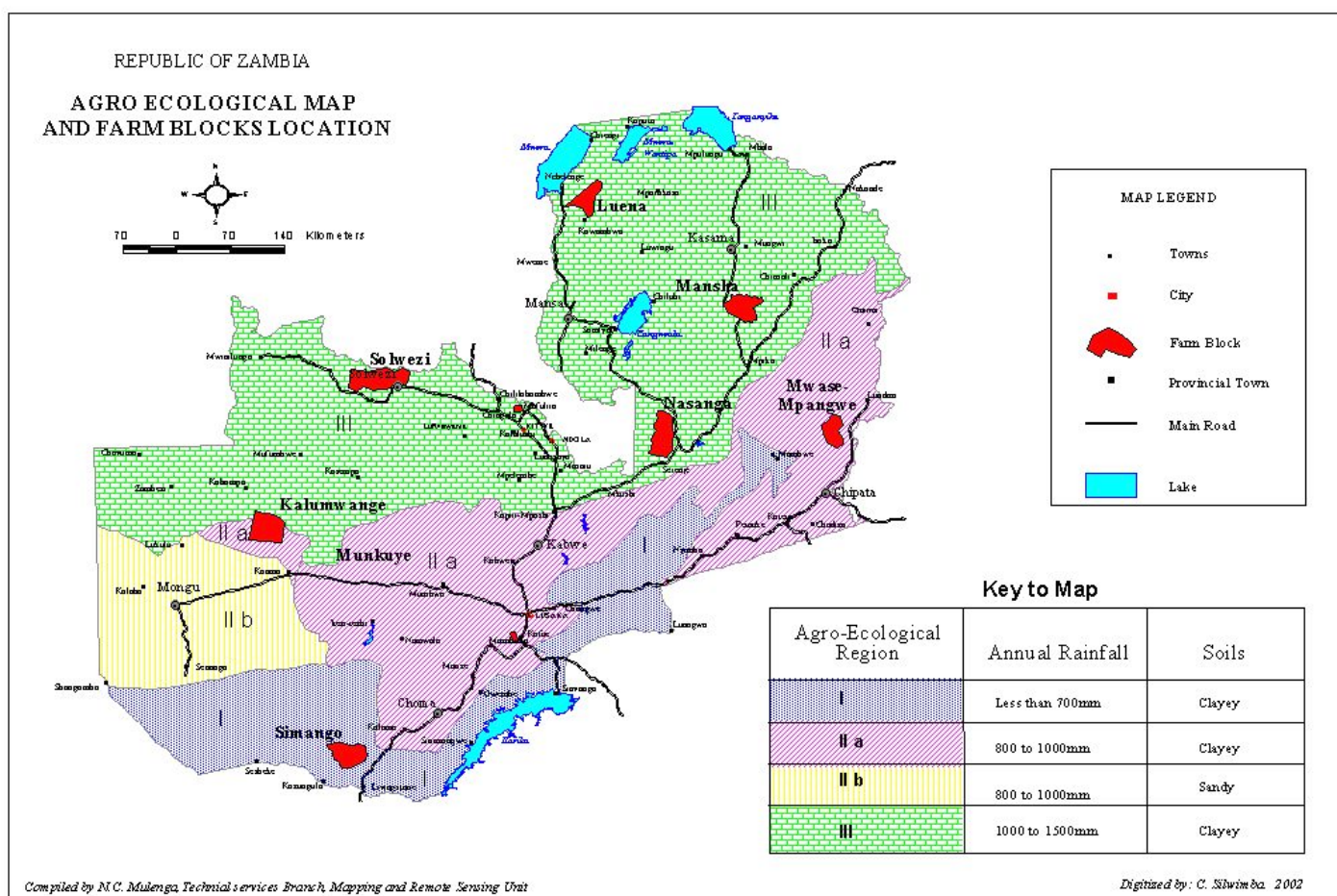
As the GRZ Farm Block Development Plan states, a farm block is:

“Envisaged to be a large agricultural area where basic infrastructure for agriculture such as feeder roads, electricity, water for irrigation and communication facilities are provided. To justify

the large expense involved in infrastructure development in the farm block, the area involved must be sufficiently large so as to achieve economies of scale.”

The farm blocks are at least 100,000 ha, although additional planning efforts are refining (reducing) those numbers. Various farm blocks already exist throughout Zambia, but this latest round of farm block development (started in 2008) has hit various snags and delays. Presently, only the Nansanga farm block has had the bulk of its infrastructure development put in place (over USD 4 million spent to date)⁸⁴ and the ZDA is presently in the process of awarding parcels of land) for that block. The next blocks slated for development are Kalumwange farm block in Kaoma District, Western Province and Luena farm block in Kawambwa District, Luapula Province.⁸⁵

FIGURE 3: PROPOSED FARM BLOCK DEVELOPMENTS



Crops to be grown are “intended for export,” although food crops “will also receive strong support.” Some farm blocks are intended for specific crops, while for other farm blocks it will be up to the discretion of the investors.

The concept for a farm block’s layout is intended to be the same between different farm blocks. There will be one core venture (for Nansanga it is 9,350 ha), who in addition to production will be responsible for developing the agro-processing infrastructure, and for carrying out agro-processing for all ventures on the farm block. There would also be several medium size commercial farms (in Nansanga, the sizes are 1,620 ha, 2,571 ha, and 3,959 ha each) whose production would feed into the core ventures, and a series of small farms and/or outgrowers (310 for Nansanga), all managed by the core venture. The concept is that all infrastructures would be in place prior to the awarding of the lands, however ZDA officials have told OI that they are looking for more creative approaches to infrastructure development on farm blocks in order to speed processes up (including Public Private Partnerships).

The management of the farm block process is carried out by the Technical Multi-Disciplinary and Multi-Sectoral Committee (TMMC), responsible for agricultural land identification and land advocacy including sensitization, dissemination of information on farming blocks, conducting an agricultural land baseline data, designing layout plans and undertaking a Strategic Environmental Impact Assessment (SEIA).

In the Nansanga farm block development, there appears to have been little detailed planning or consultation with impacted stakeholders or communities. At the same time, ZDA officials insist that SEIAs (high level/general) are being carried out prior to infrastructure development (none of which were available from the Environmental Council of Zambia (ECZ)—the government body mandated to carry out EIA processes, and our contacts there were not sure if these SEIAs had been completed or not), and that lessons learned from the Nansanga process will be used to tweak the farm block process over time. Officials at the Ministry of Agriculture told OI that

one of the key criteria in identifying these areas was the availability of 100,000 ha of contiguous land⁸⁶ (although Nansanga is not 100,000 ha of contiguous land with various smallholders and soft infrastructure located on the site). ZDA officials also told OI that the process for awarding these lands would ensure that serious, experienced investors would receive land, eliminating land speculation, and ensuring that the benefits of the investments accrue to as many stakeholders in Zambia as possible.⁸⁷

“[Am] not excited by the farm block development: [They need to] fix existing farm blocks. The way it is championed, it attracts a certain kind of investor—Chinese...all incentives are for investors to come to Zambia but nothing for existing farmers.”

— Ndambo E. M Ndambo, Executive Director, Zambia Farmers Union, February 2011.
Source: Direct communication, February 2011.

THE OUTGROWER CONCEPT - AN OPTION?

Zambian commercial agriculture is characterized by numerous outgrower schemes, and the farm block development has the outgrower concept as a key component. While outgrower schemes are promoted as enabling smallholders’ participation in the agricultural development of the country through realization of some of the benefits that would otherwise be unavailable to them, one of the drawbacks is the over-reliance of the outgrowers on the investor. There are many models and variations of the outgrower scheme, but one key tenet of the Zambian model is this reliance. The investor usually sets the prices received for the product, controls all aspects of input provision, and if the investor decides to sell, abandon the farm, stop production/processing/etc. for any reason, the outgrower is usually left out in the cold. Government oversight of the outgrower program to ensure there is

TABLE 3: PROPOSED FARM BLOCKS (AS OF 2007)

	FARM BLOCK	AREA (ha)	DISTRICT	PROVINCE
01	Nasanga	155,000	Serenje	Central
02	Kalumwange	100,000	Kaoma	Western
03	Luena	100,000	Kawambwa	Luapula
04	Manshya	147,750	Mpika	Northern
05	Solwezi	100,000	Solwezi	N/Western
06	Simango	100,000	Kazungula	Southern
07	Luwanyama	100,000	Lufwanyama	C/belt
08	Chongwe	65,000	Chongwe	Lusaka
09	Mwase-Mphangwe	100,000	Lundazi	Eastern

Source: Ministry of Finance and National Planning, “Farm Block Development Plan 2005-2007,” August 2005.

increased certainty and protection for the outgrowers could mitigate some of these concerns. If managed correctly, outgrower schemes could ensure that local smallholders receive some benefit from commercial agricultural activities, potentially offsetting some of the adverse impacts.

One example of an agrofuel outgrower scheme in Zambia sheds light on some of the concerns over poorly administered outgrower schemes. Marli Investment, who has been awarded 18,500 ha for agrofuels (see Box 4) manages an outgrower scheme for local farmers to produce jatropha. This scheme does not guarantee a market for the farmers, determines the prices of all seeds/services, and the product must be sold to Marli. The above minimizes the potential positive aspects of the outgrower scheme in this area.⁸⁸

THE NANSANGA FARM BLOCK

Nansanga is the first of the farm blocks to be developed under the “2005-2006 Farm Block Development Plan.” The key infrastructure has been developed (dams, upgrading of roads, etc. funded by the GRZ), and lands are currently in the process of being awarded. This particular farm block concept consists of one 9,350 ha core venture. This core venture “will be the center for industrial development of the area as it will provide the marketing thrust by purchasing the major products in

the farm block and adding value for local and export markets” and “is expected to operate an outgrower scheme with the expected 310 small to medium scale farms.”⁸⁹ Three commercial farms of 1,620 ha, 2,571 ha, and 3,959 ha each are also planned. Several sources suggest that there is also one additional commercial farm that is owned by the local chief. In addition, there are 51 medium farms (mostly from 51-250 ha but as high as 900 ha), and 310 smaller farms (including 43 displaced households of 10-15 ha, and other small farms between 10-50 ha). The intention is that the small and medium farms will act as part of outgrower schemes. The exact mechanics of the outgrower scheme will be based on the proposal of the successful core venture bidder. The expectation is that all production will go for agro-processing by the core venture. There is currently

“We would like to “encourage large investors to propose different ideas for infrastructure/agricultural development, etc.”

– Noah Ndumingu, ZDA

Source: Direct communication, March 2011.

no restriction on the crops to be grown. The land is suitable for a wide variety of crops and what will be grown will be largely dependent on the desires of the successful bidder.

A number of interesting issues have emerged during the planning phase. Government surveyors showed up to demarcate the land without the notice or consent of local people – in many cases this boundary demarcation completely ignored current land use, in some cases cutting houses in two. In one incident, the community laid logs across the road to prevent further access by government officials. Subsequent meetings with the community have tried to build support from the community through promises of employment, infrastructure development, business links, or involvement in outgrower schemes. At the same time there are reports that the slow pace of development is leading to some frustration.⁹⁰ A recent Newsnight program on BBC, met with the community to be displaced who shared their grievances around the lack of consultation, about being displaced from their homes and lands against their will and with no compensation being offered.⁹¹

Over time, there have been some shifts in the farm block boundaries. The initial plan was to have Nansanga buffering Kasanka National Park to the north. In some cases the buffer was planned to be as little as 200 meters.⁹² The northern portion of the farm block was also overlapping with the Kapinda Game Management Area (GMA).⁹³ Portions of Nansanga also overlap with key elephant migration corridors, which among other things, can result in increased human-elephant conflict and the destruction of crops and property (and often the elephants). Dam construction and water/pesticide/herbicide use was also likely to have significant downstream impacts on sensitive wetland habitat in the National Park. In addition, portions of Nansanga are considered prime habitat for the straw-colored fruit bat (*Eidolon helvum*), whose appearance in numbers every evening are one of the world's great bat agglomerations. This bat is currently listed as "Near Threatened" on IUCN's Red List.⁹⁴

Most of these issues were identified in the strategic EIA that was conducted in 2005/6 by the federal

government. However, to this day, very few of the stakeholders have ever seen this document.⁹⁵ Based on these concerns and subsequent discussions with the chief, the community, and other selected stakeholders, the northern portion of Nansanga was removed to provide more of a buffer between the park and the farm block, there was a reduction in lands to be awarded from 155,000 ha to 100,000 ha, there was a redesign of the land parcels, and the Nyakanyaka dam was removed. Other concerns voiced by residents included the loss of trees that provide locals with edible caterpillars (loss of income), loss of sacred sites, concern that chiefdoms may shrink, concern that residents may be left to unproductive areas, loss of a way of life,⁹⁶ loss of livelihood from displacement (approximately 2,500 people in the farm block area),⁹⁷ and loss of access to communal harvesting areas (through deforestation and fencing). ZDA officials insist that with the changes brought about through the EIA process ensure that no displacement will take place. However, recent reports suggest that displacement has occurred.⁹⁸ This raises serious questions about how GRZ is determining the availability of land and the level of planning and analysis that is being undertaken prior to land disposition.

"Commercial farmers are welcome but they should not touch my field or my house."

– 47 year old Joseph Mwila, a resident in the Nansanga farm block.

Source: <http://www.daily-mail.co.zm/media/news/viewnews.cgi?category=19&id=1234776088>

Who is Investing?

As no government body seems to have accurate numbers on the extent of land investment, it is difficult to ascertain with any certainty who the investors are. There is a strong perception among Zambians that Chinese investment is growing, and while Chinese investment in Zambia is significant, it is not evident how much of this is in the agricultural sector.

The number of white South African farms has also been steadily increasing,⁹⁹ as has the number of white Zimbabwean owned farms. Over the past several years, 130 to 200 Zimbabweans have purchased farms in Zambia.¹⁰⁰ At the same time, there has not been the massive influx that many people had feared after President Mugabe's land reforms in Zimbabwe. It has been suggested that this might be related to the nationalization process Zambia underwent (then Northern Rhodesia) at the time of independence.

Scanning the limited list of investors that is available, the Gulf States and India, huge players elsewhere on the continent, appear to be somewhat limited in their presence. Various Southern African investors, European investors, and Chinese investors seem at least anecdotally to be present in increasing numbers. The geographic distribution of the Nansanga pre-

qualified bidders is varied with three Zambian firms, two UK firms and single firms from South Africa, Hungary, Mauritius, China, and Egypt.

Risk-adverse hedge funds are investing quite heavily in Zambia, given the perception of stability and low-risk that Zambia enjoys relative to other SSA nations. Major investment funds investing in Zambia include UK-based Chayton Atlas, Altima, Emergent Asset Management, and Danish-based Silverland Fund (with USD 450 million of planned market capitalization in six SSA countries).

Chayton Atlas is in the process of setting up a USD 50 million agribusiness venture, and expects to develop up to 10,000 ha of annual production cropped twice a year.¹⁰¹ Emergent Asset Management Ltd set up the African Agricultural Land Fund in 2008 as a private

Under the assumption that the OI researcher was a potential investor, Henry Sichembe, Deputy Director of Technical Services at the Ministry of Agriculture & Cooperatives, who is very involved in the farm block scheme, provided a crude illustration of an official's flexibility and openness towards foreign investors. In March, 2011, he explained that the main purpose of the Nansanga Farm Block Scheme is poverty alleviation and economic development. In response he was questioned about how this would be accomplished:

OI: "For instance, is the government asking the investor for infrastructure?"

HS: "Infrastructure already put in by the government."

OI: "Will the investors have to make a commitment in terms of livelihood creation?"

HS: "Some general language around employment generation will suffice."

OI: "Is the government hoping to earn money through the sale of land?"

HS: "The investor does not have to pay for land. To put in a tender, they pay USD 5,000 application fees."

OI: "Is the investor required to do an ESIA?"

HS: "Yes but dealt with easily. We understand that you cannot do the green thing with 20,000 ha. You can do the Brazilian thing and burn it down."

OI: So given all this, how does poverty alleviation and economic development get accomplished?"

HS: "Well you and I both know that there is no such thing as a good investor and no investment will be without trouble. People and government will not be 101 percent in agreement.

Here is my card with gmail account. If I can be of assistance to help you secure your tender, please be in touch."

equity strategy that has as its long-term objective “to secure food production across a diverse range of soft commodities managed across sub-Saharan Africa and throughout the value chain,” targeting returns of 25 percent+ annually.¹⁰² In March 2010, Emergent purchased the existing 1,710 ha Kalonga farm in the Livingstone area that was initially acquired from the traditional chief (Chief Sekute) in 2005. According to Emergent an additional 1,020 ha of the land is still in dispute with the local chief. Emergent’s strategy at present seems to focus on the development of crops for export to neighboring countries.

The Silverland fund aims to “improve the management of farms by using a hub-outgrowers model.” They aim to provide inputs and extension services to 100,000 outgrowers in the next 10 years in each of the countries in which they operate.¹⁰³

Pension funds are also investing in Zambia with Denmark’s PKA (Pensionskassernes Administration) making a USD 50 million investment with the Silverland fund in June 2011.¹⁰⁴

“Zambians working abroad must not only be seen in terms of brain drain. This view blinds us to benefits that can be derived from citizens abroad. There is need to open up to resources that can come in from the Diaspora. This calls for the creation of systems that can facilitate the flow of such resources.”

– ZDA’s Manager Planning and Policy,
Mr. Chola Mwitwa

Source: ZDA Spotlight #6.

Investors are acquiring agricultural land in Zambia through five different processes outlined below.

BOX 4: AGROFUELS IN ZAMBIA

Agrofuel development is increasingly controversial internationally and there is a growing debate over its role as a sustainable alternative to petroleum. Its proponents suggest that the adverse impacts are overstated in comparison to those of conventional fossil fuels. Detractors point to the evidence of increased greenhouse gas emissions, decreases in biodiversity, increased deforestation and the substitution of food producing cropland for agrofuel development. The “food vs. fuel” debate continues in Zambia.

Zambia is landlocked, does not produce its own oil/gas, and suffers from high and volatile fuel prices (and thus high prices for imports and frequent fuel shortages). Several sources have suggested that the development of an agrofuel industry may be one such solution to these problems, although significant barriers would exist in regards to a domestic agrofuel production market. Furthermore, EU requirements (and to a degree US and other Western nations) have mandated minimum ethanol content in vehicle fuels, and provide large-scale subsidies to facilitate the development of agrofuels.

It is challenging to get accurate numbers on either the land presently devoted to agrofuel development or on the amount of agrofuel produced but it is clear that the industry is in its nascent stages in Zambia, and that the demand is increasing. In 2009, media reports garnered the attention of many in Zambia when it was revealed that China had requested 2,000,000 ha for jatropha cultivation,¹⁰⁵ although GRZ officials would not confirm nor deny that this request had been made.

Two main types of agrofuels exist: ethanol (made from crops like sugarcane or maize) and biodiesel (made from oil crops such as palm oil and jatropha), with both showing potential for development in Zambia.

“I never saw cotton replace maize, so I think the farmers will continue to grow food alongside their Jatropha crops.”

– Dr Judith Lungu – the Dean of the School of Agriculture at the University of Zambia.

Source: <http://www.zambian-economist.com/2009/09/land-deals-2nd-edition.html>

There have been numerous land awards for agrofuel development, although not many have begun widespread production. The main two agrofuel investors in Zambia are UK based D1 Oils (awarded 155,000 ha,¹⁰⁶ and Marli Investments (awarded 18,500 ha). Both are implementing outgrower schemes for jatropha cultivation.

D1 Oils began in Zambia as a partnership with the GRZ to plant 15,000 ha of jatropha in Northern Zambia. In 2006, they were allocated nearly 155,000 ha of land, and one year later, had a managed plantation of 2,411 ha, with contract farming on an additional 20,760 ha.¹⁰⁷ There have been some suggestions that companies such as D1 are promoting agrofuels as part of a domestic energy strategy in order to secure more “amenable legislation,” while their eventual production will actually focus on the export market. D1 Oils is currently building a refinery in South Africa.¹⁰⁸

Jatropha is a water-intensive crop, and there are many environmental concerns regarding disposal of residues, etc. Despite the hype, yields thus far have been low, and have not delivered the returns that have been promised.

The GRZ has recognized the potential investment opportunities for agrofuel development and sees large amounts of arable land, abundant water supplies, and the need to reduce fuel imports as a positive combination that could result in the creation of a viable industry. According to the Department of Energy, the GRZ is committed to agrofuel development in order to secure supplies, stabilize prices of transport fuels, increase investment in the agricultural sector, and contribute to socioeconomic development.¹⁰⁹ Outside of facilitating land investments, the government seems to be largely involved in creating an institutional and policy environment in which agrofuel development can be undertaken. Activities to date include the creation of the Foundation of the Biofuels Association of Zambia (BAZ), development of agrofuel standards through the Energy Regulation Board, research activities, and the drafting of agrofuel legislation (although this draft legislation has not been passed into law).¹¹⁰ Government has also set a 5 percent target to blend bioethanol with conventional fuels, and a target of 10 percent for biodiesel (by 2011).¹¹¹ One study suggests that these targets translate into 56,286 ha of land being used for agrofuel development.¹¹² Still, the government is treading slowly into the agrofuels world. As President Mwanawasa, stated in 2007: “We are still researching the issue. If we discover that there is more harm than good to be caused, the nation should understand why we may distance ourselves from growing jatropha and palm oil.” He also expressed concerns over large land requirements, environmental impacts, and displacement of indigenous people.¹¹³

“This jatropha reminds me of cotton. Many years ago, when Dunavant came here, they promised that if we grew cotton, we would be paid lots of money. We stopped growing our maize to make more money from cotton. But when the time to sell it came we were paid very little. We went hungry because we had neglected growing our traditional crop maize.”

– Josam Ndaabona, small-scale farmer, Choma.

Source: International Land Coalition, “Agrofuels in Zambia”, http://www.commercialpressuresonland.org/wp-content/uploads/case_studies_16.pdf (accessed August 2011).

“The increase in this type of plantation production will certainly affect the already unstable food production in Zambia where farming and food crises are common. Zambia will have to choose between feeding its population... or its ever growing number of cars and industries.”

– Clement Chipokolo of PELUM on the two sides of the agrofuel debate.

Source: FARA, “Mapping Food and Bioenergy in Africa,” http://www.globalbioenergy.org/uploads/media/1005_Imperial_College_-_Mapping_food_and_bioenergy_in_Africa.pdf (accessed April 2011).

Chayton combines good land and secure water assets to grow its Atlas Agricultural operation

Neil Crowder and his Chayton team create world-class farming operations around the continent and balance investment risk in their 'Feed Africa' model

Chayton Atlas Agricultural Company is a private equity fund focused on agriculture, agri-business and related infrastructure investment in Sub-Saharan Africa.

The fund launched in 2009 and, with approximately US\$10 million under management and a demonstrable track record, Chayton is looking to raise \$150 million for a further close in the second quarter of this year.

"Our plan was to start with friends and family money so that we could show the concepts at work to investors," says co-founder Neil Crowder from the team's Cape Town offices. "After our first acquisition, people started to take us seriously and we have seen



records as commercial farmers in Zimbabwe where they were involved in various agri-businesses that earned groundbreaking accolades over the years, from introducing new crops to achieving productivity targets.

Part of the team is COO Dabney Tonelli, also ex-Goldman; head of finance Johann Strauss, previously with Close Fund Services; and portfolio manager Zaida Adams, previously in property investments with the Old Mutual Group.

With food security a growing global concern, Chayton is certainly not the only land and agriculture fund in Africa. Yet it believes it has a distinct approach, aiming to create world-class farming operations and integrated

3. HOW LAND IS ACQUIRED

Farm Blocks

The most celebrated and promoted method by the GRZ is the farm block concept. Farm blocks have been identified in each of the nine provinces. Land parcels in the first of these farm blocks (Nansanga near Serenje) are currently being awarded. The Zambia Development Agency (ZDA) claims that the process for awarding land in Nansanga will be similar for the other farm blocks, but it was also evident during OI research that the farm block processes are a “work in progress” – and several issues have developed that will likely be changed in future farm block land disposition processes.

The processes for awarding the four key land parcels (core venture and the three commercial farms) in the Nansanga farm block were handled by the ZDA, while the process for awarding the 310 small outgrower farms was handled by the Ministry of Lands. For the four larger parcels, the first step was a pre-qualification stage where ZDA asked prospective investors to pre-qualify for the bidding stage. The criteria to pre-qualify for the bidding stage was both technical and financial (including a USD 5,000 non-refundable application fee for core venture, USD 1,000 for commercial farms). On the technical side, they were seeking investors who had “experience in development of agricultural infrastructure, large-scale agriculture, commercialization and management of outgrower schemes,” including a minimum of 5,000 ha of agri-business operations. Financial requirements for the core venture included >USD 100 million of market capitalization if publicly traded, and >USD 20 million in shareholder’s equity if private.¹¹⁴ Financial requirements for the commercial farms are similar, but prorated based on farm size. ZDA told the research team that for all of the investments they award they want to ensure that the financing is in place prior to land awards rather than the land being used to raise the necessary startup capital. Once bidders have pre-

qualified each is asked to provide a detailed proposal.¹¹⁵ As of the research team’s visit in March 2011, the pre-qualification stage was complete. Fifteen firms had applied for pre-qualification, including six that were Zambian owned. Of these 15, 10 were eventually selected for the bidding stage (three from Zambia, two from the UK, and one each from Hungary, Egypt, South Africa, China, and Mauritius).¹¹⁶ Interestingly enough, of these 10 potential bidders the ZDA only received final bids from two firms: one Zambian firm and one Hungarian firm.¹¹⁷

The process from here on has not been strongly developed, and it was evident that, as one ZDA employee told OI, “there is an element of making it up as we go along at this point.” We were told that the successful bidder would be largely based in Zambia (through employment, business links, and ownership) and that it was not simply a case of “highest bidder wins” (the RFP issued in May 2011 substantiates this). Outstanding items in the process that had yet to be determined and were causing some internal controversy included the length of the lease (law says 99 years, but may be special clauses for farm blocks) and who would be responsible for clearing of the land (RFP provides some clarification, stating essentially that it is not government’s responsibility).¹¹⁸

Given the difficulties the GRZ had in developing the infrastructure for Nansanga farm block, future farm block developments will include increased focus on public-private partnerships (PPP) for infrastructure development and future bidding processes would place increased importance on infrastructure provision. The ZDA will “encourage large investors to propose different ideas for infrastructure and agricultural development.” The Ministry of Lands process on the award of the 310 smaller farms was focused more on a qualitative

TABLE 4: SHORTLIST OF INVESTORS INVITED FOR NANSANGA RFP STAGE

		Land shortlisted for:			
		1620 ha	2571 ha	3959 ha	Core venture
Crooks Brothers Limited	South Africa			x	
Sable Transport Limited	Zambia		x	x	
Polyserve Fertilizers and Chemicals	Egypt	x			
Bonafarm Group	Hungary	x	x	x	x
AFGRI Corporation	Zambia	x	x	x	x
SCZ International (Seed Co Zambia) Limited	Zambia			x	
Chayton Capital LLP	UK	x	x		
Sea Agriculture Consortium	UK			x	x
Pro Alia Investments	Mauritius				x
Yuan Longping Hightech Agriculture	China				x

evaluation, and successful bidders are determined after an interview along with a review of their “technical and financial capabilities.” All Zambians will be treated equally with no preference given to local applicants. All interviews are to be held in Lusaka, a potential barrier for some of the local potential small-scale holders.

It remains to be seen whether the Nansanga process lives up to its billing as a “sustainable model” for African agriculture. Investor interest in the Nansanga block has been lower than many expected, and it has been plagued by infrastructure development delays, poor planning, lack of transparency, and growing concerns over displacement of local populations. Furthermore, it is at the discretion of the core venture what crops will be processed, and outgrowers and commercial farms are being awarded without an understanding of

whether those investors have the ability and desire to grow the crops for which agro-processing infrastructure will have been developed. Emphasis for this farm block development is also strongly put on cash crops (for export) thereby potentially undermining local food security. As ZDA officials have acknowledged, there will be “growing pains,” and it is hoped that future

“We want to stretch the minds of the private sector to come up with creative solutions that benefit Zambians.”

– ZDA

Source: Direct communication, March 2011.

BOX 5: THE NANSANGA PROCESS (AS OUTLINED IN THE RFP)

Task	Date
RFP issued	10 May 2011
Submission of Bids	10 June 2011
Selection of Preferred Bidder	By end of June 2011
Negotiation	End June/early July 2011
Signature of Sales Agreement	July 2011
Further facilitation of investment by ZDA	On going

Source: Nansanga RFP

Note: this is a “flexible” schedule. At each stage in the process, a new timeline seems to be issued with different, updated, more realistic timelines.

BOX 6: CONTENTS OF NANSANGA RFP

- There is an opportunity for bidder to propose something alternative to what is currently being planned (socio-economic impact of alternative to be submitted along with proposal).
- Bidder must indicate how it will use local labor and how “Zambian human resource will be developed.”
- Must submit a land-clearing plan – schedules, methods, and measures used to avoid soil erosion, vegetation degradation, and adversities to wildlife habitat.
- Must submit a plan for outgrower establishment including technology transfer, input financing, technical assistance, market guarantees, and draft outgrower contract.
- Must submit a business development plan for local businesses that outlines how local businesses will benefit from the operations for activities such as supply contracts, input supply, service provision, etc.
- Financial proposal includes a per hectare bid price for the land offered.
- Selection is based on the proposal that will yield broader socio-economic benefits to Zambia and not necessarily the highest land sale proceeds.
- Governing agreements will be the Sale and Purchase agreement (“with enforceable investment and land development commitments”) and land leasehold agreement.

farm block processes will run smoother and lessons will be learned from the Nansanga experience. ZDA officials also told OI that future farm blocks would focus increasingly on public-private partnerships (PPP) in an effort to address the delays in infrastructure development. Other concerns include the focus on export-oriented crops and the numerous clauses and incentives that will serve to attract investment but will limit macro level benefits once FDI has been secured.

There are also concerns that farm block developments will undermine local food security through displacement, loss of local livelihoods, and conversion of arable land focused on local food production to export-oriented food production.

On the positive side, the focus on agro-processing, efforts to avoid land speculation, the desire to attract investors with financial/technical capabilities, the competitive bidding process, and the more comprehensive planned development are all steps in the right direction that could maximize macroeconomic benefits and limit risks.

Other Ways of Acquiring Land

ACQUIRING STATE LAND FROM LAND BANK

In anticipation of the increased demand for agricultural land from foreign investors, the ZDA has been quietly assembling land that is “ready for lease.” The “land bank” as it is called contains some 500,000 ha of land throughout the country. The majority of land in the bank is now state-owned, having been converted from customary land before inclusion in the land bank.¹¹⁹ The lands in the bank are not actively marketed. “We do this in order to avoid land speculation. We would rather have investors come to us with a well thought out plan and then we match up their needs with our database,” says Noah Ndumingu at the ZDA. The land bank appears to be a relatively new concept, and it was not readily clear at the time of the research how many investments, if any, had actually been granted from this database.

ACQUIRING OTHER STATE LAND FROM GOVERNMENT

There are a few variations here. In some cases, investors may identify specific parcels of land they wish to acquire. In other cases they may approach the ZDA who may match up their needs with available state land. In still other cases, parcels of state land are issued through a competitive bidding process, including a proposed 60,000 ha cotton farm and a proposed 2,500 ha pineapple plantation (being promoted as of March 2011).¹²⁰

For all processes involving the ZDA, costs and fees associated with the land investment are borne by the investor (including allowances for community meetings). The processes themselves take between several months and several years, depending on the complexity of the proposal.

ACQUIRING CUSTOMARY LAND

As discussed earlier, there is little management or administration of the 90-94 percent of Zambia's land base that are customary lands, so it is difficult to assess the scale of agricultural investment on customary lands. However, in the majority of cases, customary land acquired by investors is converted to state land, as it is only then that the land has "title" and can thus be used as collateral to access credit, etc. Conservative estimates of land that has been converted from customary to state land is approximately 6 percent of the country's total land mass which amounts to approximately 450,000 ha (which is not solely for agricultural land use, but likely the majority, also this includes some land that has been converted but is not actively being used i.e. land bank). ZDA told the research team that they strongly discourage investors dealing directly with chiefs as it opens up the potential for corruption, lack of transparency, lack of central planning, increases uncertainties, and limits government's role.

"Banks cannot lend money to farmers. But land can be secured for free from the chief. All you need to do is bring a bottle of whiskey. Once you secure land, banks will lend."

– Valentine Chiatalu, Chairman, MTN (Zambia) Ltd., Chairman, Phatisa (Africa Agricultural Fund)-appointed to oversee privatization of Zambian firms during the WB/IMF mandated SAP.

Source: Direct communication, February 2011.

Chiefs will often give land to foreign investors at a fraction of the cost of going through the ZDA sanctioned process. As the land technically has no value until it is converted into a sellable asset (i.e. until it is converted to state land), many chiefs dramatically underestimate the value of this land. More than once we were told that a new car, upgrades to the chief's house, or other gifts, were all that was required to secure the chief's blessing to the land.

Some chiefs also responded very positively to some of the promised benefits that would accrue to their

chiefdom from the development including jobs, infrastructure development, etc. These grants in land often involve displacement of the chief's subjects to marginal lands. Once the land has been granted to the investor, it is converted to state land (and thus has a realized value – can be bought and sold), and ceases to be customary land or under the jurisdiction of the chief anymore as per the Lands Act.

One study suggests that the Land Reform Working Group may play a significant role in facilitating investor acquisition of customary land. It suggests that in half of the cases studied the LRWG assisted investors in identifying appropriate land and facilitating the negotiations with the chiefs. One investor in Mpike District acquired 302,749 ha in this manner from five different chiefdoms in order to cultivate jatropha, while another company was in the final stages of securing 79,300 ha in Kasama and Isoka District.¹²¹

PURCHASE FROM OTHER OWNER

Given the existence of a fledgling land market for the 6-10 percent of lands that are currently state land, there are more and more transactions involving the direct sale of lands from their owner. Anecdotally, these seem to be from medium-size farmers to large-scale investors. In many cases these transactions have involved sales to South African or Zimbabwean farmers.

Content of Deals

PERMITS AND AGREEMENTS REQUIRED FOR ALL COMMERCIAL OPERATIONS

For larger investments (over USD 10 million) an IPPA is required that outlines a Local Business Development Program (LBDP), employment statistics, and reporting requirements. In addition, farm block land awards will require the signing of a "Sales and Purchase Agreement" that will have terms more specific to the individual investment granted including monitoring and evaluation, clauses relating to minimum work requirements, cancellation clauses, etc. This agreement will be the mechanism through which the ZDA will ensure that the proponent is carrying out their project as designed, and not merely engaging in land speculation.

While an investment license is not a legal requirement per se, the ZDA strongly encourages investors to get this license as it allows investors to access the lucrative incentives available under the ZDA Act.

Individual components of the investor's agricultural operations may require additional permits including water permits (application fee: ZMK 50,000 (USD 10)) and annual payment dependent on water quantity used.

These are the most common ways through which land is acquired for commercial agricultural purposes, but there are numerous reports of other methods of acquiring land, with little transparency, no formal process, and high likelihood of corruption, although it is difficult to say how widespread this phenomenon is.

The research team was able to gain access to several IPPAs. The agreements are fairly similar, with seemingly most terms standard but with some discretionary terms. The majority of incentives and tax clauses are not

contained in the agreement per se (which implies that these incentives and fiscal clauses are fairly standard across investments), but rather all incentive and fiscal clauses refer to the ZDA Act. At the same time, we were informed that there is the potential to negotiate more incentives through the process.¹²²

It is also important to point out that an IPPA is only negotiated if the total investment is greater than USD 10 million. It does not contain any references to the land parcel itself (outside of a general reference to the lands required specified in the annex). This is contained in the title deed between the Ministry of Lands (or designated organization) and the investor.

The IPPA is very general in nature; more specific investor obligations are contained in the various permits required. We were also told by the ZDA that additional "Sales and Purchase Agreements" will be negotiated on the farm block developments that would "add more teeth" to the various agreements and provide more clauses to hold the investors accountable.



Failed corn crops

The agreements can be renewed if both parties agree, and the lease can be transferred to another investor (ZDA cannot “reasonably withhold”) if the new investor can demonstrate financial and technical capability. Once the lease is transferred the original investor is relieved of all future liability.

In terms of monitoring, quarterly reports are required (IPPA Section 9.4), along with annual progress reports under the “Local Business Development Programme” (IPPA Section 6.1.2.4). In addition, the company is to meet with ZDA at least twice a year to discuss progress on the development plan. As the IPPAs are relatively new agreements, this reporting and monitoring is not happening very often.

The only clauses referring to benefits for ordinary Zambians include a general clause about transferring relevant skills to Zambians, the right of first refusal for sale of any equipment, and the “Local Business Development Programme.” The LBDP (“with a view to encouraging and assisting businesses within Zambia”) contained details on the outgrower programs, including expenditure commitments on inputs and training, outlining direct contributions through diesel supply, with profit projections for outgrowers, and infrastructure commitments (school, enrollment and expenditure), clinic expenditure, levies payable to council, staff housing, and community services (church and community hall). In addition to the LBDP, employment targets are included in the agreement (Zambian and foreigner) with very basic salary information.

All notices regarding the IPPA are sent to the ZDA and several other national government departments, with no copies to lower levels of government or chiefs. There are also arbitration procedures in case of conflict, an outline of ZDA commitments to facilitate the granting of other permits required to undertake the project, and recognition in the agreement of the requirement of a completed EIA.

WHO CARRIES OUT THE RESETTLEMENT PROCESS?

The investor pays costs related to relocation and any compensation that is paid out. The Department of Resettlement under the Office of the Vice President generally carries out the actual resettlement, although

experience shows that there is no uniform process, and that government and/or investor involvement in resettlement processes ranges widely. Varying levels of government identify lands to be moved to, and there is no involvement of local people in this process, although in many cases the chief is involved in delineation of these lands.

Transparency

Levels of transparency surrounding Zambia’s agriculture investments are very low. Government departments not directly involved in negotiations did not seem to be aware of the content of any of the deals, and no one we spoke to had ever seen any of the agreements. Media coverage of these deals focuses on general aspects with no understanding of either the process or the content of these deals/agreements. Various other sources quote similar perspectives regarding the secrecy surrounding the state sale of assets associated with the copper mining industry – the development agreements negotiated between investors and the GRZ between 1997 and 2000 were not seen by anyone until 2007.¹²³

There are general clauses in the IPPA that require confidentiality, but it is noteworthy that, as per the Agreements, notices relating to the IPPA are to be sent to various national government departments, but no involvement or copies to junior levels of governments or the chief who owns the land in question.

While government touts “transparency” as one of the key components of the Nansanga farm development, outside of elements of the land disposition process and some limited interaction with impacted Serenje area stakeholders, there does not appear to be a meaningful level of transparency. Despite the legal requirements for the EIA to be publicly available, civil society groups OI had been in contact with had never seen a copy.

Consultation

There are numerous consultation requirements for agricultural development in Zambia as laid out in various laws, regulations, and policies (Lands Act, etc). In practice, very few examples were found where meaningful consultation was carried out. It seems there are regular “consultation efforts” between

different levels of government involved in land use or agricultural development, and that what is often touted as “meaningful consultation” with local people, is merely a discussion with the chief. There are no clear or explicit goals for “consultation” efforts.

There are numerous EIA requirements for consultation (usually to be carried out by a consultant hired by the investor and recommended by ECZ). In the very few agricultural EIAs that were available to OI, there was some evidence of consultation but no apparent efforts to address the concerns of local people. It seems to be the case that consultation with the chief suffices as a proxy for consultation with local people. Given the prevalence of land use conflicts between chiefs and local subjects, it is absurd to suggest that the needs, desires and perspectives of local people (who may be displaced or experience other adverse/beneficial impacts from agricultural development) will be the same concerns as the chief. There is no evidence of consultation with other stakeholders, NGOs, etc. and consultation with women is virtually non-existent.

The majority of government representatives the research team met with told us of the extensive consultation that was carried out at all levels of program planning, design, and implementation, and yet, none of these representatives were able to produce any minutes or written documentation about the outcomes of these consultations. The only documented example available to us whereby consultation was carried out with communities was in the Nansanga farm block development. While consultation was almost non-existent in the early planning stages and EIA formulation, presentation of the EIA results to the chief and community resulted in substantive changes being made. Various changes to the farm block layout and design were made after the results of the EIA were presented (along with concerns raised by a variety of government departments and stakeholders).

“Witnesses that appeared before your Committee stated that the Government has not consulted local communities in some areas where farm blocks have been created. The farm blocks identified where local communities were aggrieved include the Nansanga, and Kalumwange farm blocks in Central and Western Provinces respectively. Your Committee was further informed that in Madziatuwa

BOX 7: CONSULTATION REQUIREMENTS FOR EIAs FROM THE ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS, 1997:

10. (1) The developer shall, prior to the submission of the environmental impact statement to the Council, take all measures necessary to seek the views of the people in the communities, which will be affected by the project.

2) In seeking the views of the community in accordance with subregulation (1), the developer shall: publicize the intended project, its effects and benefits, in the mass media, in a language understood by the community, for a period not less than fifteen days and subsequently at regular intervals throughout the process; and after the expiration of the period of fifteen days, referred to in paragraph (a), hold meetings with the affected communities to present information on the project and to obtain the views of those consulted.

area in Chipata District, the Government resettlement office had resettled retirees and issued them with title deeds on customary land without consulting the local people.”

Enforcement and Monitoring

For existing projects, the extent of enforcement and monitoring is quite low. At the same time, given the lack of regulations in place on agricultural projects the ECZ told OI researchers “there is not a lot to monitor.”¹²⁴

There does appear to be recognition of the need to monitor future large-scale projects to ensure that developments are being undertaken as proposed. To this end, various techniques are in the process of being developed, including the “Sales and Purchase Agreements” that would contain terms and conditions of the lease that will be specific to the investor, will ensure regular monitoring/evaluation, ensure that workplans are carried out, eliminate land speculation, and outline lease-specific termination clauses (at this



Zambeze River

time these agreements are likely only to be developed for farm block leases).¹²⁵ Whether or not they will actually be monitored and enforced, and not merely paper requirements remains to be seen. There are also various reporting clauses in the agreements, which provide a one-way flow of information to government bodies on the status of the projects. The way agreements are worded, it seems that any monitoring and enforcement would largely be limited to ensuring that the investor is carrying out their project as proposed. This is of particular importance given the concern over “land speculators.” There are widespread concerns that numerous individuals in the past (and present) are engaged in this activity, particularly in the context of a growing private land market. Government officials told us numerous times of their desire to curb

this behavior and to attract investors that are interested in development not speculation.

Enforcement of other permit terms and conditions seem to happen sporadically, more so if the complaint is along the transportation corridor, and much of the Monitoring and Evaluation (M&E) that does occur is complaint-driven. According to the GRZ, given limited inspection/enforcement resources (for example, the ECZ has just 12 inspectors for the entire country)¹²⁶ most of their monitoring/enforcement efforts are on the mining sector in the Copperbelt.¹²⁷

4. IMPACTS

What Benefits for Zambia?

The oft-quoted benefits for Zambia from large-scale agricultural investment are an improved macroeconomic environment (direct investment and multiplier effects), increase in foreign exchange reserves, transfer of technology, infrastructure development, wage employment and other macroeconomic benefits. At the same time, there is little in the investment agreements that will ensure that these benefits are realized and maximized. ECZ insist that EIA approvals contain terms and conditions to maximize the benefits (in addition to the more traditional minimizing of adverse effects), but the approval letters OI saw had little meaningful terms to that effect. The ZDA told the research team that “local benefits are strongly encouraged, but not a legal requirement.”¹²⁸

TECHNOLOGY TRANSFER

Of all the communities, farmers, and CSOs that the research team interviewed, virtually no one believed that transfer of technology would result from large-scale land investment. It is unclear how large-scale mechanized agriculture with its large machinery, etc. would trickle down to a farmer that presently uses very simple technologies. Extension services and training provided to outgrowers may result in some knowledge transfer but that this seems like a fairly limited transfer of technology and know-how. Some respondents felt that the one area where technology might be transferred was through the basic concepts of irrigation.¹²⁹

INFRASTRUCTURE IMPROVEMENTS

The slow pace of infrastructure development on the Nansanga farm block has been a critical barrier in its development and implementation. GRZ hopes that future farm blocks will be developed using more innovative techniques including PPP in order to

speed up the process of infrastructure/farm block development.

“Skill/technology transfer does not really happen. That idea is like a fourth year university project. I know it just happens on paper. In reality that never happens.”

– Zambia Land Alliance

Source: Direct communication, March 2011.

Various large-scale investors have, in the past, provided infrastructure for their workers (schools, clinics, housing, etc.), and most agreements seem to provide for that requirement. There is evidence that large-scale investors (who were producing as opposed to being involved in land speculation) had the capital and long term vision to provide this infrastructure, while small and medium size investors with less capital and long term vision relied primarily on state infrastructure. In the documented cases we found that infrastructure is both *provided* and *operated* by the investor. The shifting role of critical service delivery from public to private hands has both positive and negative impacts for the country.

WAGE EMPLOYMENT

Many farm and mine laborers are women, particularly on cotton farms. Women typically get paid less than men, and are less protected by labor laws. They also typically bring their children along with them, many of whom work, and get paid little to nothing. Work that involves more strenuous labor (on sugar plantations for example) is performed mostly by men.

Most farm laborers are protected under the Minimum Wages Conditions Act which states that laborers must be paid a minimum of ZMK 265,000 per month (USD 65). Management gets on average 38 times this amount, according to the ZDA figures – a huge disparity. This does not include food, transport, allowances which can also be negotiated. However, there is little enforcement of these regulations and many laborers are not protected by this law or any other labor legislation and have little job security.

ECONOMIC BENEFITS

Some of the claims about multiplier effects and direct and indirect business spin-offs are of marginal impact at best. Certainly, the increased focus on agro-processing in the farm block developments are a positive step towards maximizing macroeconomic benefits from agricultural investment. If experiences from the copper industry are anything to go by, there have been few significant benefits to local businesses from the massive expenditures of the industry. While the increase in Copperbelt urban disposable income has likely had some positive spinoffs, supply contracts and the like do not often go to local businesses. In the agricultural sector to date, experiences are varied. For example in Mazabuka, local businessmen and government officials suggested that despite its close proximity to the town local businesses receive very few direct contracts, and that the main contribution for the town was through direct taxation (ZMK 1.2 billion/year (USD 250,000)) from taxation for municipal council).¹³⁰ The issue over the awarding of contracts has been very controversial in Mazabuka with protests and widespread concerns over the lack of locally awarded contracts and the perception that this would be exacerbated by the recent relocation of the tendering office to Lusaka.

Furthermore, while Zambia's numerous tax breaks and incentives may attract FDI, the lack of revenues and direct benefits to Zambia's economy may serve to limit the macroeconomic benefits.

INDICATIVE MONTHLY WAGES

1. Management Workers – USD 2,500
2. Fresh Graduates – USD 1,400
3. Technical Staff – USD 1,000
4. Manual Labour – USD 250
5. Non skilled workers- USD 65

Source: ZDA Investment Guide

ENERGY SECURITY

One of Zambia's barriers to its development is its need to import all of its fuel. The high cost of electricity is an additional barrier to development, and the use of charcoal as a fuel source is the source of many. There is the potential to reduce Zambia's over reliance on expensive conventional sources of fuel. Zambia is starting to realize the potential for agrofuel development, but indications are that the industry has not yet taken off.¹³¹

Some sugar plantations are already using crop residues to power their processing operations, and it may very well be that these second generation technologies will have more uptake in Zambia. One investor claims that their planned jatropha operation will produce between 11.4 and 16.2 million liters of biodiesel at full capacity, which based on current prices would "annually save the country on foreign exchange between USD 22.8 million and USD 32.4 million."¹³² However, at present, given limited refining abilities, agrofuel development does not contribute to Zambia's energy security. Should Zambia's refining abilities increase, there is still the possibility that fuel will be exported. Of course any potential energy security gains will be offset by the adverse impacts that come from this land use change.

BOX 8: THE MAZABUKA STORY

The 30+ year experience of Zambia Sugar Plc, a 10,000 ha plantation adjacent to the town of Mazabuka exemplifies many of the concerns raised by agricultural investment.

Much of the sugar is processed on site, and shipped to various local and export markets. Exports to the EU have grown considerably in recent years due to incentives and lack of trade barriers (largely to the UK, Belgium, and Scandinavia). The company now accounts for 94 percent of the sugar output in Zambia's sugar industry.¹³³

Zambia Sugar Plc supplies a variety of services including schooling, churches, and clinics and has a much lauded HIV workplace policy. It even has its own professional soccer stadium. Despite the plantation's proximity to Mazabuka, all workers are housed on the plantation, and from anecdotal reports, the 4,000 seasonal workers (more during cutting season) appear to be paid well, quite a bit above national averages.

For most of its history the plantation was a state-owned enterprise, but was fully privatized in July 1995 (40 percent to Tate and Lyle (UK), 30 percent to CDC, and 30 percent publicly traded shares). Now Zambia Sugar Plc is 81.6 percent owned by Illovo sugar (predominantly South African), and the remainder publicly traded on the Lusaka Stock Exchange.¹³⁴ As sugarcane increasingly loses its sucrose content after cutting, all cane is processed on site. Residues from the plantation are used for cattle feed and to power the processing plants that process the cane into various products.

Most people that were available to be interviewed suggest that no one was displaced when the original factory and plantation were developed but that ongoing expansions have resulted in the displacement of many people. The research team was also told by several different residents of a traditional place of worship that has remained from the original plantation development (1970s). Villagers from the area were upset that this special area would become part of the plantation. Since that time, local workers have refused to clear the area, as the power of witchcraft is a powerful force in Zambia, and there is a strong desire to avoid bringing bad luck. There are many stories about the different spirits that are seen when people have attempted to clear the area, both local and foreign. To this day, the area has still not been cleared.

Environmental concerns from the Mazabuka sugar plantations include decreased soil fertility, siltation of rivers, and excessive water use. There have been some conflicts between Zambia Sugar's Nakambala Sugar Estate (which gets water from the nearby Kafue River) and other industrial users of the river, namely the Zambia Electricity Supply Company (ZESCO), which diverts huge amounts of water from the Kafue and Zambezi rivers for electricity generation.¹³⁵

Staff from the local municipal council told us that while taxes from Zambia Sugar plc are by far the Council's main source of revenue (ZMK 1.2 billion /year, USD 250,000), there are not many other benefits for the community: "When you look at how much money they make, it is very little benefit for the community." There are some benefits in terms of economic spin-offs and numerous outgrower schemes (on titled land), but the vast majority of contracts are awarded to non-local businesses.

Food Security

In general, most of the communities and respondents had not yet seen widespread food security impacts on smallholders from commercial agricultural activities. There were numerous examples of displacement that occurred from investment which interrupted food production for a season, but regular production seemed to resume shortly thereafter. What people worry about is long-term food security should rates of commercial agriculture continue to increase as projected. Currently, there is adequate land and water available in most

areas so that displaced local people have somewhere to go, forests to harvest from, and clean water to use. But as land pressures increase and more awarded leases are cleared and developed, displaced farmers will move to more and more marginal lands, communal resources will be diminished, climate-related variability will increase periods of extreme food insecurity and food/land-related conflict will increase.

Most respondents spoke of the larger impact that other factors had on food security, but certainly impacts from commercial agriculture were being felt

“Chinese delegation came in 2001 to talk about agriculture. The vision for small-scale farmers is “we will use them as laborers, this will generate income, then with this finance they can start their own economic activities.” She told them “this seems to be exploiting people who are already overworked. What our women farmers need is animal draft power, tools, finance to secure inputs. That would be their spring board to emerge from subsistence.”

– Mr. Makota, ZNFU

Source: Deborah Brautigam, *The Dragon's Gift: the Real Story of China in Africa*.

in some areas. There was an awareness that things could reach a “tipping point” and that different factors that lead to food insecurity could act cumulatively and synergistically (climate change, pest outbreaks, changing diets, growing populations, government interventions, shifting politics of food aid, etc.).

Most smallholders in Zambia supplement their diets and incomes with non-timber related products from nearby forests. While deforestation (largely for charcoal production) is an increasing concern, forests are still largely intact (relatively speaking) in Zambia, and these forests provide numerous edible products including mushrooms, various nuts/fruits, and edible caterpillars. Game and/or fish are also harvested. Not only do these products supplement diets with nutritional variety (particularly given the focus on nutritionally poor maize production/consumption), they often provide a supplement to rural incomes (mushrooms and edible caterpillars in particular). In addition, during period of increased food insecurity, these food sources provide an important and necessary buffer against food insecurity. Smallholder agriculture and largely intact-forested areas often exist side by side,

but large-scale commercial agriculture usually involves large-scale clearing. In addition to the environmental consequences of large-scale clearings, traditional buffers against food insecurity will also be eliminated. Changes to microclimate, increased soil erosion, and hydrological changes brought about by deforestation will also lead to diminishing levels of food security in the future. The reduction of water supplies will impact fish populations, another invaluable food and income source. In short, the sources of food that comprise a food secure household become more insecure as the scale of agriculture increases. Vulnerability to food insecurity from “natural” variations in climate will increase. This will be felt most acutely by those along the transportation corridors – the most-likely candidates for agricultural land development. As a result, it is expected that rural-urban migration will increase, which has numerous impacts.

Government officials contend that this loss of livelihood is offset by involvement in the wage economy and that food can now be bought. But as experience has shown in Zambia and throughout Africa, there is no substitute for one’s food sovereignty. In the same way that many countries are taking agricultural land to be in control of their own food security, smallholders also have the same need to control their food security and not be dependent on the goodwill of an employer, on wages that may or may not provide enough to live on, on a market that may not supply enough familiar affordable food, or on a food market that is focused largely on production for more affluent urban markets (relative to rural markets). These factors are all exacerbated in the context of WB/IMF prescribed austerity measures that ensured the removal of regulations and state institutions that would ensure a living wage, appropriate food provision, and decreased likelihoods of poverty.

Government policy and land agreements focus on the growth of cash crops for export, which by definition will not increase local food supplies. For example, Chayton Atlas’ IPPA guarantees that 80 percent of food can be exported.¹³⁶ Incentives available are all for investors, and not for local farmers, and the lack of tenure security makes it virtually impossible for smallholders to access credit and improve their farms. In addition, increasing interest in agrofuel development converts land that was

BOX 9: GMOS IN ZAMBIA

Zambia is one of a few countries that have banned the use of or sale of Genetically Modified Organisms (GMOs) in agriculture.

The ban is based on the precautionary principles/Cartagena protocol¹³⁷ and concerns over the health, environmental, and trade impacts.¹³⁸

However, whereas the Zambian government is very active in showing that they are “open for business,” nowhere have we seen any efforts to notify or educate prospective investors about Zambia’s policy regarding GMOs. There are no clauses in any of the agreements that we saw that reflect this position, nor is there mention in any of the EIA or policy initiatives on monitoring or enforcement of the GMO restrictions in agriculture. Several organizations we discussed the issue with expressed the concern that when large foreign corporations are acquiring large amounts of land to grow monocrops for export, the likelihood of GMO seed being used is very high. The nature of these enterprises entails huge investment, large-scale irrigation, unspecific herbicides, and likely GM seed. This is made all the more likely by the lack of oversight and enforcement that presently typifies Zambian government regulation and the reduction of “unnecessary” regulations and trade barriers in recent decades.

“I will not allow Zambians to be turned into guinea pigs no matter the levels of hunger in the country.”

– President Mwanawasa in 2002/3

Source: From <http://www.un.org/ecosocdev/geninfo/afrec/vol16no4/164food2.htm>

producing food (either through agricultural production or through forested areas that provide forest products) to land that is not producing food. While there are some valid arguments in favor of agrofuel development, increased food security is not one of them.

The GRZ has put emphasis on agro-processing as critical to the farm block development concept. While there are macroeconomic (and other) benefits to this, given high transport and input costs (including labor) in Zambia, it is difficult to see how processed foods will compete with the flood of cheap food imports from South Africa and elsewhere that fill urban supermarket shelves. GRZ’s hands are largely tied because of the SAP to ensure that Zambian products are competitive within the country (difficult to reinstate subsidies, protectionist trade barriers, etc.).

An increase in agricultural output in Zambia may increase the food supply globally, but it could have a detrimental effect on the food security of Zambians living within the vicinity of the land investments, many of whom live close to the line of food insecurity. While impacts may not have a high magnitude in the short term, a tipping point may eventually be reached at current rates of land development. When that tipping point is reached, local people will be pushed into higher rates of food insecurity - all for a very marginal increase in regional/global food supplies, and an uncertain but likely negligible impact on the food supply in Zambia.

Displacement

In almost every land investment some displacement is reported, however, it appears to be seen as “a cost of doing business” or “for the greater good of the country.” The reason behind the open discussion on displacement may come from industry standards in Zambia’s copper mining industry. EIAs in this sector are thorough and a requirement that a “Resettlement Action Plan” (RAP) be developed as part of the EIA process. This RAP outlines in detail who is to be resettled, an inventory of assets for compensation (including fruit trees, etc.), and an illustration of how all other options have been investigated and exhausted.¹³⁹ While there are gaps between the commitments in the RAP and what actually occurs, anecdotally, there is a reasonable level of compliance in the copper industry. The legal basis for displacement (including international Best Management Practices) is largely the same whether for mining, agriculture, or any other land use. What seems to differ in the case of Zambia between copper and agriculture is what actually transpires when displacement occurs.

The ECZ, the government department responsible for EIAs and RAPs was unable to show OI any RAPs for any of the agricultural projects. It is not obvious if RAPs are not carried out for agriculture and if EIAs themselves are regularly completed for agricultural projects or if the record management systems are inadequate. While government insists that adequate consultation

“IFC expects all people affected by a project to be compensated for loss of physical assets, revenue, and income resulting from economic displacement or physical relocation.”

From IFC’s Handbook on Resettlement, which is considered the best management practice worldwide, and referenced in most resettlement planning exercises undertaken in Zambia.

[http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_resettle/\\$FILE/ResettlementHandbook.PDF](http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_resettle/$FILE/ResettlementHandbook.PDF)

and compensation is being provided to displaced farmers, there is little evidence of it. NGOs told OI that compensation that is given is either inadequate or has to be fought for.

Any compensation is usually in the form of resettlement on different land, assistance with inputs, occasional compensation for crops or dwellings, support with community projects, etc. As is often the case, farmers without legal title or those that utilize communal areas critical to stable livelihoods (for which there is no formal title) receive no compensation.¹⁴⁰

Displacement seems to occur primarily when the land is given from the chief to an investor and is then converted to state land. There is some debate as to whether this really falls under the term displacement as technically it is the chief’s decision on how to use the land. Other displacements seem to occur from land that has been owned for some time by an investor but has not been used or cleared. Local farmers may have been there when the investor received title or may have moved onto the land while the investors (who in many cases are absentee landlords) owns the parcel but was not actively farming.

A case that illustrates this, involved a 33,000 ha tobacco farm given to MADCO (a Zimbabwean/British joint venture) in 2002. The chief gave his permission to convert 26,000 ha from customary to state land for this investment and in the process 2,000 people in five villages were impacted. Local villagers had two choices:

stay in the area and be offered jobs on the farm, or leave. In the case of MADCO, compensation offered was only for the structures on the land. This amount was expected to be between ZMK 500,000 and ZMK 1,000,000 (USD 100-USD 200). This underlines one of the inherent problems in the compensation system. Given that most people are relocated from customary land which is not part of any land market system, it technically has limited value, and it is this figure that any compensation that is paid out is based on. However, the moment the land is given to an investor the process converts it to state land and thus becomes land with a sizeable market value.¹⁴¹

In another case, in Chief Sipatunyana’s area of Kalomo district, villages had been displaced in 1979 to make way for state farms/ranches. With the push for privatization these farms were transferred back to the municipal council as they were not being fully utilized (they remained state land). In the interim, the villagers that had been displaced began to resettle on the land and used it for both farming and grazing. They have renamed the area *Makalanguzu*, which means “staying in the area by use of force” in the local language (incidentally the chief has asked for the land to be returned to his jurisdiction i.e. customary land, but there is not mechanism in the Lands Act or anywhere else for this to happen.)¹⁴²

NANSANGA DISPLACEMENT

There are approximately 2,500 people currently living within the Nansanga farm block area. The Ministry of Agriculture told the OI research team that residents in the block will continue to have their farms and the Ministry’s hope is that they will join the outgrower schemes, and will be able to access the infrastructure and improved marketing that goes along with the farm block development. The Ministry insists that there is to be no displacement... “unless the core venture investor proposes to add another dam in which case there will be some families displaced. The chief has given his permission for this and there is an area already identified adjacent to the past resettlement scheme.”¹⁴³ At the same time, a June 2011 report suggests that no alternative settlement had been found for the “9,000 affected Zambians” who had been displaced.

As group spokesperson Dickson Chibuye states:

"We have some of our parents who are 70 years old; they were born in this land and grew up here. ... Now, you can imagine a situation where all these people have lived here for many years; and without any notice from the government we just find that this land has been sold as part of the Nansanga Farm Block. All we see are advertisements in the newspapers that the buyers of this land have been given offer letters, meaning that we have to vacate this land. So, where shall we go all of us? We are talking about a population of over 9,000 people, not animals. We have children, the aged and we also have pregnant mothers; so where shall all these go now? So what development has this government been talking about? As far as we are concerned, there is no MMD [government]. You cannot have a government that wants to send its own people in exile. They are talking about development which we can't see here."

Ernest Chanda, *The Post*, 17 August 2011.

IMPACTS OF DISPLACEMENT

When displacement does happen, usually there is an interruption to the growing season, and infrastructure is often not in place at new locations so children do not go to school, it takes longer to walk to get health services, etc. All of this further undermines the ability to tend fields and leads to further food insecurity. In the interim period after crops are lost people are often desperate and need to go to work in the mines or as farm labor. People often go to town to find wage employment, and for women typical child rearing patterns are interrupted.

Connections to the land built up over generations are lost and families (if they are fortunate enough to get replacement land) are forced to adjust farming and other practices to a new location. Gravesites and cultural/historic places of importance are lost. Yields drop in the interim period where planting and/or harvesting seasons are disrupted, although in many cases yields return to near normal levels after one season. One study considered yields before and after displacement occurred. 7 of the 12 families interviewed went from producing reasonable quantities (i.e. 20-200 90 kg bags of maize/year) to producing nothing (as they did not receive land in compensation), while others typically produced 25 percent-50 percent of what they originally did (with less variety). For example, one of the more productive households went from producing 105 bags of maize, 20 bags of groundnuts, and 2 bags of beans before displacement to 56 bags of maize and 10 bags of groundnuts after displacement.¹⁴⁴

BOX 10: KARIBA DAM DISPLACEMENT HISTORY

Displacement from mining and agriculture is just the latest in a lengthy history of forced displacement in Zambia, no single displacement is more poignant than the 1950s construction of the Kariba Dam on the Zambezi River, a point of contention even today. It has often been labeled the worst dam resettlement project in Africa's history.

57,000 Tonga were displaced from their traditional lands from the rising floodwaters – many went to marginal lands, many went to cities, and most received little compensation. The reservoir covered their farmlands, their forests, their villages, their graveyards, their sacred sites, and their livelihoods were gone. In addition, the Tonga are now split between Zimbabwe and Zambia due to the presence of this reservoir. There are different opinions on how much assistance was given to Tonga on the Zambian (then Northern Rhodesian) side of the Zambezi, but Thayer Scudder, a prominent anthropologist who studies the Tonga suggests that "Today, most are still 'development refugees.' Many live in less-productive, problem-prone areas, some of which have been so seriously degraded within the last generation that they resemble lands on the edge of the Sahara Desert."¹⁴⁵

Various advocacy efforts are underway to attempt to repair the damage done to the Tonga culture and livelihoods on both sides of the border. Chief David Siankusule sums up the current situation of the Tonga (as of 2007): "We are now in the region of 250,000 [people], and the land we were put on can no longer support us. We need to be compensated for what was done, and with that money we can rebuild our own lives and culture. So, our noise [complaints] to the government will continue until our lives are improved."¹⁴⁶



Zambia with its water resources is very attractive to investors

Other Social Impacts

Other social impacts resulting from agricultural investment in Zambia include the loss of cultural identity, a consequence of the loss of traditional lands and the shift towards wage employment. Examples from other Southern African countries provide evidence of the other social impacts that will likely result from this sudden shift from self-sufficiency to wage employment including rapid changes to community/family structure, social problems (alcohol, prostitution, drugs, etc.), increase in HIV/AIDS, other STDs, and lifestyle/dietary changes.

MIGRATION

Labor migration is often associated with large-scale commercial agriculture. Experiences throughout Zambia have taught us that while many of these laborers will be local, some will come from other parts of Zambia and neighboring countries. Labor migrants are poorly paid, have little job security, and human trafficking, often associated with labor migration, is already one of Zambia's key human rights issues. One documented case of agriculture labor migration is the cotton ginneries in and around Katete. Laborers

here are from eight different Zambian provinces, as well as from Malawi, Zimbabwe, and Mozambique. Families did not come along with the laborers (in most cases), and focus group discussions revealed that housing conditions are poor and that management sometimes used their authority to engage in forced sex with female workers: "...if you don't accept, they will tell you that next year you will not have a job."¹⁴⁷ Social problems in this area are typically of migrant labor areas and include increased rates of substance abuse, violence, sex workers, crime, etc. Other impacts from labor migration on hosting communities include an increase in poaching and the resultant decrease in fish/wildlife populations, increased deforestation (though increased charcoal production to supplement incomes), increased conflict between local people and laborers, greater stresses on ecological systems (including water), greater pressure on community infrastructure (particularly if the farm does not provide its own schools/clinics/etc), and perhaps most critically for Zambia, an increase in the rates of HIV/AIDS. Labor migration has been determined to be one of the key drivers in Zambia's HIV/AIDS epidemic.¹⁴⁸ In addition, experiences from other countries show us that long after the jobs are gone (because of technology

led redundancies, farm closure/seizure, or land use changes) that many laborers stay behind to farm the land in that area.

LOSS OF ACCESS TO LAND, MARKETS, AND PUBLIC SERVICES

Many large farms have portions of their land area fenced off – whether the land is being farmed or not, restricting access to local people. Even if local people are not displaced, enclosure of areas limits traditional paths and routes of access, and in many cases dramatically increases the amount of time to get to desired areas and services such as schools, clinics, etc. In some cases access to land is lost all together (in the case of many grazing areas, forests, or wetlands being completely enclosed within fenced off plantations. This can result in decreased school enrolment and access to health care as well as loss of various important resources such as wood and fodder. This particularly impacts women, who most often use transportation routes to water points (laundry, drinking, cooking, etc.) and are the primary care givers and child rearers.

An example is the ETC Bioenergy's 55,000 ha farm (of which only 8,000 ha is currently under cultivation), which has cut off access to critical infrastructure. The displaced communities are on the outer edge of the farm while schools and other communal facilities are on the other side resulting in a circuitous route to reach school, with many students no longer attending. In addition, there are two other large farms adjacent to ETC's farm (65,000 ha DA International Farms and 38,000 ha Sumwu Farms - both of which are largely idle) that have long been rumored for amalgamation which could further restrict access (to school and to grazing areas in particular). To further local frustration, some of the areas that are fenced off do not appear to be being used at this time, and there are concerns that these companies are engaged in land speculation.¹⁴⁹ The June 2011 announcement by Zambeef that it seeks funds to purchase, among other things, "123,550 acres of prime farming land in Zambia, currently owned by ETC Bio-Energy" lends credence to this speculation.¹⁵⁰

Other examples of this exist along the Zambezi and Kafue rivers where game lodges and agricultural

development has led to a significant loss of riparian access. This issue has even been raised at a parliamentary level.¹⁵¹

Environmental Impacts

DEFORESTATION

Deforestation is becoming a large problem in Zambia, increasing at a rate of 4,600 km² per year (as of 2005),¹⁵² particularly in the more urban provinces (2 percent per year compared to <1 percent/year in rural provinces). Many smallholders supplement their livelihoods by producing charcoal as 70 percent of the total energy consumption in Zambia is from charcoal. In 2010, an incredible 1.21 million tons of charcoal was produced and used, requiring 5.4 million tons of wood. Charcoal use continues to grow (the amount of wood used for charcoal has increased from 3 million tons in 1990 to 5.4 million tons in 2010), while fuel and electricity remains out of reach for ordinary Zambians.¹⁵³

Charcoal production and clearance for agriculture are the two primary sources of deforestation in Zambia. Land clearing due to agriculture reduces biodiversity, increases carbon emissions, results in loss of wildlife habitat, increases soil erosion, decreases soil fertility, and results in loss of non-forest timber products that can supplement and sustain livelihoods during times of food insecurity (edible caterpillars (*finkubala* or *Gonimbrasia belina*), mushrooms, nuts, fruits). Land clearing is not solely limited to large-scale agriculture as many smallholder agricultural practices involve slash and burn techniques (including the *chitemene* system).¹⁵⁴ Deforestation related to ubiquitous charcoal production is more localized in nature, and while not downplaying its significance, does not involve the clearance of large contiguous swaths of forest. Furthermore, it leaves stumps, roots and seed stocks, resulting in more rapid reforestation, and lower losses of biodiversity compared to large-scale clearing. In the majority of large-scale operations, forest is completely cleared of native trees and vegetation in order to plant largely single-crop plantations. At present large farmers and agribusinesses have shown little interest in adopting more sustainable approaches to agriculture but there are some signs that these perspectives are

beginning to change. Small and medium commercial farmers are far more likely to engage in more sustainable farming techniques that typically do not involve large-scale clearance, along with less chemical/water use, zero tillage, etc.

CLIMATE CHANGE IN ZAMBIA

Zambia has experienced an increase in drought frequency and intensity in the last 20 years and the food insecurity brought about from the droughts of the 1990s and early 2000s remain a vivid memory for Zambians.¹⁵⁵

Zambia's annual mean temperature has increased by 1.3° since 1960, a rate of change which is confidently projected to continue. This has the effect of increasing the frequency of days and nights which are particularly warm, a trend which constrains crop yields in tropical latitudes.¹⁵⁶ The current complexity of climate change models struggle with rainfall projections, but it is likely that rainfall variability will increase and extreme climatic events will increase (floods and drought). The variability of rainfall is of particular concern in Zambia, as maize production is particularly dependent on rainfall. The intensity of both flooding and drought events are exacerbated by the deforestation that accompanies large-scale agriculture.

Large-scale agriculture will also likely lead to changes in climate at a more micro level. An important but often overlooked impact is that rapid clearance of forest and woodland can dramatically increase temperatures and decrease precipitation.¹⁵⁷

LOSS OF BIODIVERSITY

Large-scale clearing of land or conversion of small farms into large plantations entails biodiversity loss, which in turn leads to loss of future pharmaceutical discoveries, reduction in ecosystem services and resilience, increased climate change, and more. What is of particular concern is the cumulative impact of large-scale clearance of land (i.e. impact from the clearing of one farm may not be significant but the clearance of many lands could have a significant effect on biodiversity loss).

Major threats to biodiversity in Zambia include runoff from agricultural land use (herbicides, pesticides), encroachment into forested headwater areas, charcoal production, and illegal logging.¹⁵⁸



River crossing

WILDLIFE AND FISH POPULATIONS

Zambia is known for its abundant wildlife, with the famous “big five” available in relative abundance and accessible to tourists. The country is also home to a number of endemic and at-risk species. Already, the Nansanga farm block has been re-planned to avoid disruption to the straw-colored fruit bat.

BOX 11: ZAMBIA'S ENVIRONMENTAL LEGISLATION

- *Environmental Protection and Pollution Control Act* (1990)
- *Water Pollution Control Regulations* (Stat #72 of 1993)
- *Pesticides and Toxic Substances Regulations* (1994) (#20, 1994)
- *Water Act* (1996)
- *Wildlife Act* (1998): Enables Game Management Areas (GMA)

International Agreements

- *Convention on Biological Diversity (CBD)*
- *Ramsar Convention on Wetlands*
- *UNF Convention on Climate Change*
- *African Convention on the Conservation of Nature and Natural Resources*

Game parks and wildlife viewing and hunting provides an invaluable source of revenue for government and local businesses alike. Generally speaking wildlife and large-scale agriculture are not compatible. There are many cases of conflict between elephants and farmers (elephants destroy crops). In the short term, it should be possible for large farms to avoid critical wildlife habitat, but as more and more land is converted to agriculture, this conflict will become unavoidable. The lack of involvement of stakeholders and government departments with mandates for environmental/wildlife issues in combination with the reduction of regulations could lead to a situation in which wildlife populations, critical habitats, and protected areas will not be spared the devastations associated with agricultural land clearing.

ENVIRONMENTAL IMPACT ASSESSMENT

Environmental Impact Assessment (EIA) in Zambia is still largely in its infancy. While the EIAs that were viewed were generally up to international standards, the lack of transparency and consultation, and their limited implementation restrict their use as a tool that could lead to more sustainable agriculture developments in Zambia.

As per the EIA regulations, full EIAs are to be completed for any development that involves land clearance for large-scale agriculture, introduction and use of agrochemicals or crops new to Zambia, development of resettlement schemes, irrigation schemes covering an area ≥ 50 ha, or aerial and ground spraying. No definition of what constitutes large-scale agriculture is available in the EIA regulations, but outgrower schemes are not subject to EIAs. In addition, any food processing plant involving more than 400 tons/year are subject to a full EIA. Any investor who does not comply with the EIA regulations (including undertaking an activity without carrying out an EIA) is "liable, upon conviction, to a fine not exceeding ZMK one hundred thousand (USD 20) or to imprisonment for a period not exceeding three years or to both."

The end product is a letter of approval that outlines binding terms and conditions (sometimes merely mitigations identified in an EIA, sometimes with terms and conditions added by ECZ). According to ECZ, non-compliance with these terms and conditions results in termination without notice. The determination of non-compliance is based largely on inspections and environmental audits. ECZ told the research team that agricultural audits are very rare (focus is mainly on mining), and that the ECZ hardly ever turns down a project with significant adverse impacts, because "there is always a mitigation or alternative available that will allow the project to go ahead."¹⁵⁹

Copies of the EIA are required to go to local government and chiefs and all documents created in conjunction with an assessment are to be publicly available. Yet research could not find any indication that this happens in practice.¹⁶⁰ The research team was only able to access certain assessments, that were made available with permission from senior officials with ECZ and no list of assessments that had been completed was available.

One report suggests that only 15 percent of listed agricultural projects had an EIA.¹⁶¹ Despite ECZ claims that social impacts such as displacement are assessed, OI's research found little evidence to show that they are undertaken in any meaningful way. The tools are in place for an effective EIA system but because of a

lack of consistency, transparency, consultation, and implementation the effectiveness of EIA in Zambia is greatly limited. Barriers to implementing a more effective EIA system include a lack of political will, a lack of capacity, and a lack of awareness among civil society and the public about what EIA is.

Water

With forty-two percent of the water in Southern Africa, Zambia is blessed with abundant water supplies.¹⁶² It is the host of major transboundary rivers, including the Zambezi and the headwaters of several major rivers such as the Congo River.¹⁶³ Surface water resources are estimated to cover 45,000 km², and its annual runoff is estimated at 90 billion m³.¹⁶⁴

Despite relative low rates of industrial development, water pollution remains a concern (largely from the mining industry – for example, Konkola Copper Mine discharges some 300,000 m³ of water and mining effluent per day into the Kafue River, one of Zambia's key watersheds).¹⁶⁵ Deforestation, nutrient loading (from agriculture and urbanization), falling groundwater tables (in urban areas), and increased contamination of groundwater/surface water all exacerbate the water pollution situation.

While most of the international discourse on agricultural investment focuses on the land aspects (hence the term “land grab”) there is an increasing awareness of the equally important role that water is playing (i.e. “water grabs”). Water is one critical input that realistically cannot be substituted or imported – land without water is worthless. A UN report suggests that 1kg of wheat needs about 1,000 liters of water.¹⁶⁶ Exports of these products are in effect exports of water.

Despite attempts since 1993 to streamline water management in Zambia, it remains highly fragmented, poorly regulated, and weakly enforced. Though many of the development plans talk of the desire to focus efforts on improved irrigation, there does not appear to be any explicit limitations on water use in any of the agreements that we had access to. Water use permits are required under the Water Act, but once again, there is a significant gap between what is required and what

actually happens as many civil society organizations told OI that water permits are rarely applied for. Still, the legal foundation is in place to put in restrictions on water use. Furthermore, the Water Act draws a distinction between public and private. Ownership of all waters is vested with the president, but land owners have the right to water located on their property. This has implications for downstream users and for smallholders who previously accessed water on newly converted state land.¹⁶⁷

“The availability of water is the most important of the criteria in our selection process for primary production assets. We believe that the more traditional focus on land value appreciation is outdated. Access to water, water rights, and the ability to develop and carefully expand irrigation schemes drives our asset selection process at the primary production level: the land is of value only to the extent that water is available.”

– Chayton Atlas Agricultural Company, direct communication, December 2010.

Large-scale agriculture impacts both water quantity and quality, particularly given the GRZ's focus on export crops (rice, cotton, sugar, etc.), many of which use large amounts of water. Other impacts include water pollution (including groundwater), increased sedimentation (due in part to deforestation and removal of riparian areas), excessive nutrient loading and eutrophication of waterways from runoff (fertilizers, etc).

The Future

In Zambia 2011 was an election year. Several key pieces of legislation and policy were shelved prior to the elections including the Town and Country Planning Act. Constitutional amendments (many related to land)

were defeated in Parliament in March, 2011, and it is not clear what the next step is for the new Constitution.

While chiefs have very little accountability towards their subjects, and have almost complete autonomy over their lands, there are indications that frustration is increasing from residents within chiefdoms where land is being transferred to investors and thus leads to displacement and permanent conversion of customary to state land. The increasing drive away from customary land toward state-owned private land is facing opposition from rural Zambians, with conflicts over land becoming more and more frequent as competition for land increases. Forms of opposition and resistance are relatively small-scale and local in nature. The majority of conflicts are between chiefs and their subjects, and the vast majority of these conflicts are never heard about outside of the chiefdom. One report suggests that villagers are engaged in “everyday forms of resistance” against those who have acquired private title to communal lands. Resistance has included the cutting of fences surrounding privatized lands, releasing livestock on enclosed fields, destroying or sabotaging farm machinery and irrigation systems, and “bewitching” of private land owners.¹⁶⁸ A more volatile conflict occurred between Mbeza’s Chief, Bright Nalumamba and his subjects. The chief wanted a key area of the Kafue River floodplain to be developed into an irrigated rice farm by an Italian investor. The community was opposed because of the potential loss of their agro-pastoral way of life. Conflicts erupted with

various court cases taking place, the firing of several village headman, public protests, and police were posted in the area to keep the peace.¹⁶⁹

Zambia has more experience with large-scale agriculture than many other nations in SSA, but with the quantity of land available through the land bank, and in some cases marketed, the rate of agricultural land investment is projected to increase in the future. Zambia has abundant water and land, is stable politically, and has undertaken investment-friendly economic reforms. At the same time, input costs are high, labor productivity is low, land is largely uncleared, infrastructure outside of the North-South corridor is limited and the latest processes for large-scale land concessions (i.e. farm block) are time consuming.

Land use conflicts have been, relatively speaking, fairly minor so far. But if a lack of comprehensive planning continues, the amount of quality and centrally located land will decrease. More people will be displaced and moved to marginal lands, resulting in increased intensity and frequency of conflict between large-scale and smallholder agriculture.

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