This paper examines the recent and increasing trend of large-scale land acquisitions in the developing world. With a focus on sub-Saharan Africa, where the conditions for destabilization are prolific and a majority of the land deals occur, the objectives of this report are threefold: first, within the context of U.S. national security, foreign policy, and military strategy, demonstrate the relevance and significance of large-scale land acquisitions; second, highlight the countries of concern that have the most potential to destabilize under the conditions of large-scale land acquisitions and are of particular strategic interest to the United States; and third, using a case study in Ethiopia, demonstrate a geospatial analysis methodology that can be replicated by the intelligence community, NGOs, or governmental organizations to analyze the effects of particular acquisitions.
TITLE: Large-Scale Land Acquisitions in Sub-Saharan Africa: The Intersection of American Strategic Interests, Economics, Security, and Politics

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MILITARY STUDIES

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AY 11-12
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Executive Summary

Title: Large-Scale Land Acquisitions in Sub-Saharan Africa: The Intersection of American Strategic Interests, Economics, Security, and Politics

Author: Michael Keirstead, National Geospatial Intelligence Agency

Thesis: With United States strategic interests at stake, the rapidly growing trend of large-scale land acquisitions deserves closer examination by the Department of State, Department of Defense, and intelligence community.

Discussion: Following the global food crisis of 2007 and 2008, food insecure nations with surplus capital began to look towards Africa, and its rare surfeit of unfarmed, arable land, in order to ensure a steady food supply for their citizens, rather than trust to volatile food markets. The result is a dangerous trend towards large-scale land acquisitions in the developing world, with potentially dire consequences for countries already plagued with food shortages, malnutrition and land ownership issues. The trend towards “land grabs” receives significant scrutiny in the press and from non-governmental organizations (NGOs), due to concerns over local land rights, population displacement, food security, water security, environmental impact, corruption, and conflict. The research conducted to date by NGOs such as GRAIN and Oxfam, as well as intergovernmental organizations like the World Bank and the Food and Agriculture Organization of the United Nations (FAO), focuses on the impact to local populations, food security, and the environment. Little attention has thus far been given to the potentially destabilizing effect of large-scale land acquisitions in developing countries and the resulting possibility of local and regional conflict. With a focus on sub-Saharan Africa, where the conditions for destabilization are prolific and a majority of the land deals occur, the objectives of this report are threefold: first, within the context of U.S. national security, foreign policy, and military strategy, demonstrate the relevance and significance of large-scale land acquisitions; second, highlight the countries of concern that have the most potential to destabilize under the conditions of large-scale land acquisitions and are of particular strategic interest to the United States; and third, using a case study in Ethiopia, demonstrate a geospatial analysis methodology that can be replicated by the intelligence community, NGOs, or governmental organizations to analyze the effects of particular acquisitions.

Conclusion: In sub-Saharan Africa, the evidence suggests that large-scale land acquisitions, if continued on their present track, will negatively impact U.S. national security and strategic interests. As such, applicable U.S. government agencies must broaden their understanding of large-scale land acquisitions in order to properly inform policy makers and determine a way forward.
Preface

I first became interested in large-scale land acquisitions in Africa, and the possibilities of geospatial analysis providing insight into the issue, while assigned to the U.S. Africa Command National Geospatial Intelligence Agency (NGA) Support Team (NST) in 2009. The initial idea to take a look at the issue must be credited to an NGA colleague of mine at the NST, David Grimes. At the time, information was scarce and time to work on such projects extremely short. We discussed general concepts for analysis, but were never able to really get started. After receiving a civilian interagency slot to attend the U.S. Marine Corps Command and Staff College, the Masters in Military Studies thesis gave me the perfect opportunity to research large-scale land acquisitions. I hope the report may be useful and further a dialogue within the U.S. government.

I would like to thank the following individuals: Dave Grimes, for allowing me to use his idea and for giving me advice along the way; Dr. Adam Cobb, for his patience and useful insight; David Vargo, for providing me the workspace necessary to complete the project; and my fiancée, Jamie Kovarna, for her incredible patience and editorial abilities.
Introduction

Following the global food crisis of 2007 and 2008, food insecure nations with surplus capital began to look towards Africa, and its rare surfeit of unfarmed, arable land, in order to ensure a steady food supply for their citizens, rather than trust to volatile food markets. The result is a dangerous trend towards large-scale land acquisitions in the developing world, with potentially dire consequences for countries already plagued with food shortages, malnutrition and land ownership issues. The trend towards “land grabs” receives significant scrutiny in the press and from non-governmental organizations (NGOs), due to concerns over local land rights, population displacement, food security, water security, environmental impact, corruption, and conflict. The research conducted to date by NGOs such as GRAIN and Oxfam, as well as intergovernmental organizations like the World Bank and the Food and Agriculture Organization of the United Nations (FAO), focuses on the impact to local populations, food security, and the environment. Little attention has thus far been given to the potentially de-stabilizing effect of large-scale land acquisitions in developing countries and the resulting possibility of local and regional conflict. With United States strategic interests at stake, the rapidly growing trend of large-scale land acquisitions deserves closer examination by the Department of State, Department of Defense, and intelligence community. With a focus on sub-Saharan Africa, where the conditions for destabilization are prolific and a majority of the land deals occur, the objectives of this report are threefold: first, within the context of U.S. national security, foreign policy, and military strategy, demonstrate the relevance and significance of large-scale land acquisitions; second, highlight the countries of concern that have the most potential to destabilize under the conditions of large-scale land acquisitions and are of particular strategic interest to the United States; and third, using a case study in Ethiopia, demonstrate a geospatial analysis methodology that can be
replicated by the intelligence community, NGOs, or governmental organizations to analyze the effects of particular acquisitions.

### Background

The following section will outline the drivers behind large-scale land acquisitions, their scale, the research conducted to date, and will also explain the general concerns inherent to the argument against large-scale land acquisitions.

### Drivers

While the recession eased some of the pressures on supply that led to the global food crisis of 2007 and 2008, allowing prices to fall from their peak in August 2008, the foundational drivers behind the crisis remain and are very strong, which explains the continued explosion of large-scale agricultural investment in Africa. Thomas Friedman refers to these drivers in his book “Hot, Flat, and Crowded.” Without specifically referring to agricultural investment, he explains the how the titular conditions lead towards insecurity: Hot: the increasing strain placed on the environment by global warming. Long term changes to weather patterns, as well as an increase in severe weather, will likely challenge farmers to increase their yields to the degree necessary to feed the world. Flat: the expansion of the worldwide middle class due to globalization. As populations in developing countries, such as China and India, rise out of poverty and into the middle-class, their consumption patterns change. Specific to food, they incorporate more meat into their diets, which places greater demand on the world food supply in the form of feed for farm animals. Crowded: the rapidly growing global population.\(^1\) In a 2007 report, the United Nations Population Division stated that “the world population will likely increase by 2.5 billion
over the next 43 years, passing from the current 6.7 billion to 9.2 billion in 2050. This increase is equivalent to the total size of the world population in 1950.”^2 The World Bank states

Expansion of cultivated area seems unlikely to slow. Population growth, rising incomes, and urbanization will continue to drive demand growth for some food products, especially oilseed and livestock, and related demands for feed and industrial products. A conservative estimate is that, in developing countries, 6 million hectares of additional land will be brought into production each year to 2030. Two-thirds of this expansion will be in Sub-Saharan Africa and Latin America, where potential farmland is most plentiful.\(^3\)

These drivers place enormous and increasing pressure on countries to feed their populations and are not short-lived.

Beyond these very foundational factors, there are other reasons behind the trend towards large-scale agricultural investment. One, as mentioned in the introduction, is food security. Following the food crisis, food insecure nations with large amounts of capital, e.g., oil rich nations in the Middle East and wealthy nations in the Far East with growing populations and insufficient arable land, began to look to investment in foreign land, rather than the wildly fluctuating global market, to feed their populations. Countries like Saudi Arabia, United Arab Emirates, and South Korea, through direct acquisition, sovereign wealth funds, state owned enterprises, or support to private business, now have a stake in enormous amounts of agricultural land in countries such as Sudan, Ethiopia, Mozambique, and Madagascar.\(^4\)

A second factor is the explosion of biofuels in the energy sector. Because of government consumption targets of renewable energy in the European Union and United States, investment in biofuels is increasingly lucrative, causing a competition between land utilization for biofuels and land used for food production, which is often not as profitable.\(^5\) Huge palm oil tree plantations have popped up or are planned in Ghana, the Democratic Republic of the Congo, and Indonesia. According to the FAO, “given the projections of diminishing supplies of non-renewables, biofuels are likely to remain and increase as an option in the longer-term,” which
will likely encourage many African farmers to plant biofuel crops instead of food crops, furthering concern over food insecurity.⁶

Investment firms in the West are now a driving factor in large-scale land acquisition as well. As with food insecure nations, investors took great interest in the food crisis, especially when soft commodities overtook hard commodities as prime performers.⁷ “Some agribusiness players traditionally involved in food processing and distribution are pursuing vertical integration strategies to move upstream and enter direct production.” ⁸ Investment firms such as Morgan Stanley, Goldman Sachs, and BlackRock, Inc., were all involved in the acquisition of farmland.⁹ This trend is also unlikely to slow, with food prices continuing to climb, surpassing the highs of 2007 and 2008 in fall of 2011.

A final factor of the trend towards large scale land acquisition is recent policy reforms in sub-Saharan African countries that make foreign investment in land more attractive. Sub-Saharan Africa has always been a very risky place for investment. Further, until the 1990’s, investment in agriculture was difficult and expensive, with strict laws governing foreign acquisition of land and high export taxes discouraging investment.¹⁰ Recent legislation has eased restrictions and lowered taxes, encouraging new investments in land.

Scale

Due to the lack of transparency and general secrecy in most large-scale land acquisition contracts, exact data regarding the number of deals and amount of land transferred are difficult to come by. The general consensus of interested NGOs and intergovernmental organizations is that the scale is very great and increasing. The most comprehensive cataloguing of completed contracts conducted to date is through the Land Matrix Partnership, a joint venture led by the
International Land Coalition and comprised of the Centre de Coopération International en Recherche Agronomique pour le Développement (Cirad), the Centre for Development and Environment (CDE) at the University of Bern, GIGA at the University of Hamburg, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and Oxfam. The report has not been released to the public yet, but a September 2011 report from Oxfam quoted the following:

Preliminary research by the Land Matrix Partnership indicates that as many as 227 million hectares have been sold, leased, licensed, or are under negotiation in large-scale land deals since 2001, mostly since 2008 and mostly to international investors. Finding out exactly how much land has changed hands is incredibly difficult due to the lack of transparency and secrecy that often surrounds the deals. The Partnership’s figures are pulled together from a range of sources, including government reports, academic research, company websites, media reports, and the few contracts that are available. To date, 1,100 of these deals, amounting to 67 million hectares, have been crosschecked by the Partnership. Half of the land is in Africa, covering an area almost the size of Germany. Over 70 percent of the total number of cross-checked deals are in agriculture. While work continues to cross-check all the data, what is clear is that the scale of the phenomenon is much greater than previously thought.11

Map 1 represents data in Africa from a worldwide dataset released in February 2012 by GRAIN, a small international NGO that works to support small farmers and social movements. This dataset focused only on deals initiated after 2006 that have not been cancelled, are led by foreign investors, are for the production of food crops, and involve large areas of land.12 The dataset and map will serve as a baseline for further analysis in the report. From these limited data, however, it is clear that a very large amount of land is involved and the trend is quite widespread throughout sub-Saharan Africa.

Current Research

To date, NGOs have conducted the preponderance of research on large-scale land acquisitions. In a briefing paper for Chatham House, Jason Mosley states, “The issue of foreign investment in land in the developing world is an emotive topic, both internationally and locally.” This seems an understatement. Recent research paper titles include Oxfam’s Land and Power: The growing scandal surrounding the new wave of investments in land, The Oakland Institute’s
Large-Scale Land Acquisitions in Sub-Saharan Africa

Number of Contracts and Total Hectares of Investment

Total Number of Contracts*
- 1
- 2 - 8
- 9 - 12
- 13 - 18
- 19 - 25

Total Hectares of Foreign Investment*
- 0
- 1 - 300000
- 300001 - 500000
- 500001 - 900000
- 900001 - 1500000
- 1500001 - 3500000

*Database compiled by GRAIN, www.grain.org. Focuses on those deals initiated after 2006, have not been cancelled, led by foreign investors, for the production of food crops, and involve large areas of land.
The Great Land Grab: Rush for world’s farmland threatens food security for the poor, and

Human Rights Watch’s Waiting Here for Death: Displacement and “Villagization” in Ethiopia’s Gambella region. Reports such as these highlight very real concerns over local land rights, population displacement, food security, water security, government corruption, and environmental impact. While not total, current research suggests many large-scale land acquisition contracts are characterized by the following:

…some contracts underpinning the recent wave of land acquisitions may not be fit for purpose. A number of the contracts reviewed appear to be short, unspecific documents that grant long-term rights to extensive areas of land, and in some cases priority rights over water, in exchange for seemingly little public revenue and/or apparently vague promises of investment and/or jobs. Also, a number of the deals are being negotiated in legal contexts where safeguards for local interests are weak, and some contracts appear not to properly address social and environmental issues. As a result, there is a substantial risk that local people may internalise costs without adequately participating in benefits, and that environmental issues are not properly factored in.13

Studies conducted by FAO and the World Bank attempt to weigh the negatives of large-scale land acquisition against the potential benefits of agricultural investment. Both studies acknowledge the reality of the above concerns and suggest best practices to all parties involved in order to realize benefits, such as sustainability, higher yields, and local food security.

Concerns Over Large-Scale Land Acquisitions

As previously stated, the following concerns are associated with large-scale land acquisitions in sub-Saharan Africa; local land rights, population displacement, local food and water security, negative environmental impact, corruption, and instability leading to conflict. Given the secretive nature of most deals and general poor governance in the sub-Saharan African nations where these deals transpire, concerns such as these come as no surprise.

For many NGOs concerned with “land grabs”, the issue at the heart of the debate is formal land tenure and the customary land rights of local peoples. According to the World Bank, only
between 2 and 10 percent of land in Africa is held under formal tenure, and almost all of that in urban areas. The rest is under customary tenure, lacking legal protection in most countries, and officially owned by the state. Liz Alden Wily, of The Rights and Resources Initiative, defines customary tenure as the following,

Customary land tenure refers to the systems that most rural African communities operate to express and order ownership, possession, and access, and to regulate use and transfer. Unlike introduced landholding regimes, the norms of customary tenure derive from and are sustained by the community itself rather than the state or state law (statutory land tenure). Although the rules which a particular local community follows are known as customary law, they are rarely binding beyond that community.

Because almost all of the rural land is officially owned by the state, large-scale land acquisitions invariably involve host governments at the national level instead of the farmers who tend the land. It is therefore the state’s responsibility to respect customary land rights, which often does not happen in Africa countries. Under the law, compensation for the loss of land under customary rights usually only amounts to compensation for lost standing crops or houses. Promise of future employment on large farms may also be offered, but compensation is inconsistent and not guaranteed.

With legal rights to land so tenuous, population displacement is a possibility. The World Bank cited displacement due to large-scale land acquisitions has happened in Mozambique and Zambia. Human Rights Watch reported forced displacement is the Gambella region of Ethiopia, the area used for a case study later in this report. As a pertinent example, the Ethiopian government claims that villagers are being relocated to allow for better access to services, not to make room for large private farms. No matter the reason, population displacement often causes instability that can lead to violence.

Food security at the local level can be threatened by large-scale land acquisitions if locals lose their smallholder farms or access to common land used for grazing or gathering. Food
security is also an issue at the national level. Over ninety percent of the countries reported to have large-scale land acquisitions on Map 1 are net food importers. Most of those countries receive food aid from the United States. Many governments are almost giving away quality farmland to private companies to grow food for export.

Water security can also be threatened at the local level. Whereas rain fed crops are the norm for smallholder farmers in Africa, irrigation will likely play a role in new massive farms. An environmental impact study carried out in Mali ahead of several new large-scale land acquisitions noted that while there is sufficient water supply for current users, shortages many ensue if the deals go forward as planned. State to state water issues may also arise as a second or third order effect of agricultural investment. As greater strain is placed upon river systems to irrigate large farms, downstream countries could be affected. In 1959, Egypt and Sudan signed the bilateral Nile Waters Agreement, granting Egypt a large majority of the Nile waters. However, only fifteen percent of the downstream Nile waters come from the White Nile in Sudan, the rest originates in Ethiopia from the Blue Nile and its tributaries. Ethiopia is not party to any agreements on water sharing. As the agricultural sector in Ethiopia grows, with major dam projects already in the works, Egypt is worried that its downstream supply may be threatened.

Impact to the environment is often in question with large-scale land acquisitions. In its study of the phenomenon, the World Bank found that environmental impact statements often were not required, and if they were, there was very little ability for local governments to monitor compliance with environmental law. Gambella National Park, Ethiopia, home of the second largest mammal migration in Africa, is adjacent and downstream from two 100,000 plus hectare
farms.24 If the amount of land granted in those leases is cleared and used, encroachment into the national park is inevitable.

According to Transparency International, Africa has some of the most corrupt governments in the world.25 “Lack of checks and balances and of transparency in negotiations creates the breeding ground for corruption and for deals not in the best public interest. Some recently reported land deals were associated with allegations that investors had paid cash or in-kind contributions to business or other activities run by high government officials or even the president in a personal capacity.”26

Due to the potentially destabilizing effects (displacement, local food insecurity) of large-scale land acquisitions, many organizations have expressed concern over the possibility of conflict. Previous attempts “to jump-start agricultural growth through large-scale farming, as in Sudan, Tanzania, and Zambia, were largely unsuccessful. In some of these, neglect of existing rights prompted conflict over land and further undermined investment incentives.”27 Human rights organizations report recent violence in the Gambella region of Ethiopia due to very large acquisitions there. In a recent paper on the linkages between food security and conflict, the World Bank reported,

A vicious circle of conflict and food insecurity makes alleviation of poverty in rural areas of the most vulnerable countries especially intractable. The root cause of conflict is often to be found in competition over the factors of food production, primarily land and water, exacerbated by other troubling trends. Having more people to feed, with less land and water, more variable climate, and greater food price volatility increases stress on livelihoods and food systems.28

With many regions in sub-Saharan Africa already having a history of conflict over limited resources, the fear is that large-scale land acquisitions, if not properly implemented with local land rights taken into account, could spark local and regional unrest.
U.S. Strategic Interest

From the national level to the regional combatant command, there are three common themes that make large-scale land acquisitions relevant to U.S. strategic policy: sustainable development, democratic values and human rights, and conflict prevention. Therefore, the United States government should be concerned about the upward trend in large scale land acquisition in Africa and its implications for U.S. national security and strategic interests.

Sustainable Development

The promotion of sustainable development abroad is a component of the National Security Strategy (NSS) and is featured prominently in the 2010 Quadrennial Diplomacy and Development Review (QDDR). The *Accelerate Sustainable Development* section of the NSS reads:

> The United States will initiate long-term investments that recognize and reward governments that demonstrate the capacity and political will to pursue sustainable development strategies and ensure that all policy instruments at our disposal are harnessed to these ends. And we will provide our support in multiple ways—by strengthening the ability of governments and communities to manage development challenges and investing in strong institutions that foster the democratic accountability that helps sustain development. This will expand the circle of nations—particularly in Africa—who are capable of reaping the benefits of the global economy, while contributing to global security and prosperity.29

In the wake of the global food crisis of 2007-2008, the Department of State recognized the need for a paradigm shift in how it approaches food security, specifically noting

> American assistance has saved millions of lives and helped people around the world provide a better future for their children, but we have too often focused on service delivery rather than systematic change. We are modernizing State and USAID to promote high-impact development. We are changing the way we do business, shifting from aid to investment—with more emphasis on helping host nations build sustainable systems.30

Without careful monitoring and support of host governments, large-scale land acquisitions in Africa to grow food for export or to produce biofuels may undermine the State Department and USAID’s efforts to support sustainable farming in Africa.
The Feed the Future Initiative is at the forefront of the Obama administration’s focus on sustainable development. The Department of State fact sheet on the program reads:

In response to the spike in global food prices in 2007-2008, President Obama pledged $3.5 billion to help poor countries fight hunger by investing in agricultural development. The U.S. Government’s Feed the Future Initiative utilizes innovation, research, and development to improve agricultural productivity, link farmers to local and regional markets, enhance nutrition, and build safety nets. These investments will increase the supply of food where it is needed and help vulnerable people withstand price shocks better.31

Of the eleven countries in Africa chosen to participate in the Feed the Future Initiative, all but one are heavily involved in large-scale transfers of land to foreign entities (Map 2). In effect, the United States is investing billions of dollars in aid so African nations can develop their agriculture sectors while those same nations are leasing arable land for crop export. Further, twenty-three of the twenty-nine countries with reported large-scale land acquisitions received some level of aid from the United States in 2010 (Map 3). Eight of those countries received food aid in excess of $20 million, and Ethiopia, a country heavily involved in large-scale land transfers, received $446 million.32 In its study on the issue, the World Bank offers principals for responsible agro-investment: respecting land and resource rights, ensuring food security, ensuring transparency, good governance, and a proper enabling environment, consultation and participation, responsible agro-investing, social sustainability, and environmental sustainability.33 Were these principles followed, large-scale land acquisition would not run counter to U.S. promotion of sustainable development; however, the preponderance of evidence suggests that they are not. As it stands, large-scale land acquisitions are an impediment to this national security objective.

Democratic Values and Human Rights

The promotion of democratic values and human rights is also a recurring theme throughout the NSS and QDDR. The NSS reads:
Ensuring that New and Fragile Democracies Deliver Tangible Improvements for Their Citizens: The United States must support democracy, human rights, and development together, as they are mutually reinforcing. We are working closely with citizens, communities, and political and civil society leaders to strengthen key institutions of democratic accountability—free and fair electoral processes, strong legislatures, civilian control of militaries, honest police forces, independent and fair judiciaries, a free and independent press, a vibrant private sector, and a robust civil society. To do so, we are harnessing our bilateral and multilateral capabilities to help nascent democracies deliver services that respond to the needs and preferences of their citizens, since democracies without development rarely survive.

Practicing Principled Engagement with Non-Democratic Regimes: Even when we are focused on interests such as counterterrorism, nonproliferation, or enhancing economic ties, we will always seek in parallel to expand individual rights and opportunities through our bilateral engagement. The United States is pursuing a dual-track approach in which we seek to improve government-to-government relations and use this dialogue to advance human rights, while engaging civil society and peaceful political opposition, and encouraging U.S. nongovernmental actors to do the same.

Allegations of disrespect of local land rights and forced displacement are often tied to large-scale land acquisitions. Whether it’s coddling a new democracy, such as South Sudan, or practicing principled engagement with a non-democratic regime, such as Ethiopia (a close partner in countering violent extremism in the Horn of Africa), large-scale land acquisitions will run counter to the promotion of democratic values and human rights.

Promoting democratic values and human rights is also part of the U.S. Africa Command (AFRICOM) mission. The second half of the AFRICOM commander’s intent states, “[our purpose is] through sustained engagement, to enable our African partners to create a security environment that promotes stability, improved governance, and continued development.” Additionally, one of the end states within the AFRICOM theater campaign plan reads, “African militaries operate under civilian authorities, respect the rule of law, abide by international human rights norms, and contribute to stability in their respective states.” Forced displacement at the hands of local security forces and national militaries—to make way for large-scale land acquisitions—was reported in Ethiopia and Uganda. In order to effectively promote democratic values and human rights, AFRICOM must be aware of partner nations that engage in such activities.
Conflict Prevention

After over ten years of war, conflict prevention is paramount to the national security strategy of the United States and is embedded within U.S. foreign policy and the National Military Strategy (NMS). The NSS reads:

*Prevent the Emergence of Conflict:* Our strategy goes beyond meeting the challenges of today, and includes preventing the challenges and seizing the opportunities of tomorrow. This requires investing now in the capable partners of the future; building today the capacity to strengthen the foundations of our common security, and modernizing our capabilities in order to ensure that we are agile in the face of change. We have already begun to reorient and strengthen our development agenda; to take stock of and enhance our capabilities; and to forge new and more effective means of applying the skills of our military, diplomats, and development experts. These kinds of measures will help us diminish military risk, act before crises and conflicts erupt, and ensure that governments are better able to serve their people.37

The QDDR reports:

Successfully responding to the dangers presented by fragile states begins with a clear civilian mission: prevent conflict, save lives, and build sustainable peace by resolving underlying grievances fairly and helping to build government institutions that can provide basic but effective security and justice systems.38

The Department of Defense and AFRICOM seek to prevent conflict in Africa through military-to-military engagement and capacity building. The AFRICOM commander’s intent states:

Africa Command’s activities, plans, and operations are centered on two guiding principles: A safe, secure, and stable Africa is in our national interest.

Over the long run, it will be Africans who will best be able to address African security challenges and that AFRICOM most effectively advances U.S. security interests through focused security engagement with our African partners.39

As previously stated, local conflict is possible as a second or third order effect unless large-scale land acquisitions are fairly and democratically administered. It is especially probable in those regions of the continent already strained by limited resources. Marginalized populations could turn to violence if their livelihoods are threatened and state on state conflict is possible if transnational water rights are threatened.
Countries of Concern

To identify countries of concern, this report analyzed five issues in relation to the large-scale land acquisitions depicted on Map 1: first, those nations selected to participate in the *Feed the Future Initiative* (Map 2); second, those nations receiving more than $20 million in U.S. food aid (Map 3); third, the top 20 nations on Foreign Policy’s 2011 Failed State Index (Map 4); fourth, the bottom 20 countries on the 2011 Ibrahim African Governance Index (Map 5); and fifth, U.S. partner nations on the continent (Map 6). The report deems those countries with at least two intersecting issues to be of sufficient concern to warrant U.S. government attention (Map 7).

African Countries with Two Intersecting Issues

**Liberia:** Liberia has transferred over 650,000 hectares of land to foreign entities. Conflict over large palm plantation contracts and the associated displacement of locals is possible, according to journalists at The Guardian, a British newspaper. Liberia is also a *Feed the Future Initiative* country. It ranked 18th from the bottom on the African Governance Index, scoring very low in sustainable economic opportunity and human development.

**Mali:** Mali has transferred over 400,000 hectares of land to foreign entities. While the land deals are south of the current conflict zone with the Tuareg rebellion in Northern Mali, the uncertain control of the Malian government after the March coup d’état could create problems for investors. Further, Mali is a *Feed the Future Initiative* country. It is not represented on the Failed State Index and is 32nd from the bottom on the African Governance Index, but likely would score higher on the former and lower on the latter in the wake of the rebellion and subsequent coup. Mali is an important partner in Operation Enduring Freedom Trans-Sahara (OEF-TF) and the fight against Al Qaeda in the Islamic Maghreb (AQIM).
**Mozambique:** Mozambique has transferred over 1.5 million hectares of land to foreign entities, making it one of the most prolific large-scale land transfer countries on the continent. There are concerns over population displacement and sustainability in some of Mozambique’s large-scale transfers. Mozambique is a *Feed the Future Initiative* country and received over $35 million in food aid from the United States in 2010.

**Senegal:** Senegal has transferred almost 400,000 hectares of land to foreign entities. It is a *Feed the Future Initiative* country and a partner in OEF-TS.

**Tanzania:** Tanzania has transferred over 1 million hectares of land to foreign entities. Due to relatively good governance, Tanzania has some of the most progressive laws covering community consultation and compensation for land deals. However, the Oakland Institute reports that in practice the laws rarely work. Tanzania is a *Feed the Future Initiative* country. It is also within the Combined Joint Task Force Horn of Africa (CJTF-HOA) area of operations.

**Uganda:** Uganda has transferred over 850,000 hectares of land to foreign entities. As noted previously, forced displacements were reported due to some of the deals. Uganda is a *Feed the Future Initiative* country and received over $40 million in food aid in 2010. Though it’s not part of CJTF-HOA or OEF-TS, Uganda is also an important partner in the region. They are currently in command of the African Union Mission to Somalia (AMISOM) and are receiving U.S. military support in their hunt for Josephy Kony and the Lord’s Resistance Army (LRA).

**African Countries with Three Intersecting Issues**

**Nigeria:** Relative to its size and population, Nigeria is not much of a player in the “land grab” phenomenon, but still has transferred over 350,000 hectares of land to foreign entities. Moreover, due to poor governance, instability, and strategic importance (Nigeria is a large
provided of oil to the U.S.), it deserves attention. Nigeria is 14th on the Failed State Index and 13th from the bottom on the African Governance Index.

**Sudan:** Sudan has leased close to 3.5 million hectares of land, the most on the continent. For many years, Egypt and the Gulf States have been involved in large-scale farming and land investment in Sudan. Sudan received over $200 million in food aid from the United States in 2010 (numbers include South Sudan, which was not yet a recognized state). Sudan ranked third on the Failed State Index and sixth from the bottom on the African Governance Index.

**South Sudan:** South Sudan has transferred close to 1.5 million hectares to foreign entities. Many deals were in the works before the formal recognition of the country even though food security and sustainability problems already were endemic. South Sudan has not been measured in any indexes, since it has only been a recognized state since July 2011. Due to the large number of hectares already leased, the infancy of the nation, and the potential for sustainability issues, large-scale land acquisitions in South Sudan deserve examination.

**African Country with Five Intersecting Issues**

**Ethiopia:** Ethiopia has transferred over 1 million hectares to foreign entities. The press and NGOs have levied particular criticism on Ethiopia because of controversial land deals in the Gambella region in the West. The primary concerns are population displacement, sustainability, and the environmental impact of farming methods. Ethiopia is a *Feed the Future Initiative* country and received over $400 million in food aid in 2010. It ranked 20th on the Failed State Index and was 20th from the bottom on the African Governance Index. Ethiopia is a critical partner in the fight against terrorism in the Horn of Africa and is within the CJTF-HOA area of operations. Due to its strategic importance, social issues, poor governance, and the massive
amount of land transferred, Ethiopia must be given special attention when examining the large-scale land acquisition phenomenon. Several deals there are mature and provide ample opportunity for analysis. One such deal is the subject of the following case study.
In response to the spike in global food prices in 2007-2008, President Obama pledged $3.5 billion to help poor countries fight hunger by investing in agricultural development. The U.S. Government's Feed the Future initiative utilizes innovation, research, and development to improve agricultural productivity, link farmers to local and regional markets, enhance nutrition, and build safety nets. These investments will increase the supply of food where it is needed and help vulnerable people withstand price shocks better.

*Database compiled by GRAIN, www.grain.org. Focuses on those deals initiated after 2006, have not been cancelled, led by foreign investors, for the production of food crops, and involve large areas of land.
U.S. Food Aid 2010
and Large-Scale Land Acquisitions in Sub-Saharan Africa

U.S. Food Aid 2010
- Food Aid Greater Than $20 million*
- Total Hectares under Foreign Investment**

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Reflects those countries scheduled to receive greater than $20 million in U.S. food aid for fiscal year 2010. At the high end, Kenya was scheduled to receive $105 million, Sudan $221 million, and Ethiopia $446 million. Data does not include South Sudan, as it was not yet an internationally recognized state.

**Database compiled by GRAIN, www.grain.org. Focuses on those deals initiated after 2006, have not been cancelled, led by foreign investors, for the production of food crops, and involve large areas of land.
Failed State Index 2011

and Large-Scale Land Acquisitions in Sub-Saharan Africa

1:40,000,000

1. Among Top 20 on the Index
2. Total Hectares under Foreign Investment

*Foreign Policy magazine, www.foreignpolicy.com/failedstates
Annual ranking prepared by the Fund For Peace and published by Foreign Policy of the world's most vulnerable countries. The Fund For Peace rates 12 social, economic, political, and military indicators (demographic pressures, economic decline, deligitimization of the state, public services, human rights, security apparatus, factionalized elites, and external intervention). Countries highlighted here are among the top 20 failing states in the index. The 2011 Index did not include South Sudan.

**Database compiled by GRAIN, www.grain.org. Focuses on those deals initiated after 2006, have not been cancelled, led by foreign investors, for the production of food crops, and involve large areas of land.
The Ibrahim African Governance Index 2011 compiles 86 indicators grouped into 14 sub-categories and four overarching categories (safety and rule of law, participation and human rights, sustainable economic opportunity, and human development) to measure the effective delivery of public goods and services to African citizens. The countries highlighted here are the bottom 20 on the index, reflecting very poor governance. The 2011 Index did not include South Sudan.

**Database compiled by GRAIN, www.grain.org.** Focuses on those deals initiated after 2006, have not been cancelled, led by foreign investors, for the production of food crops, and involve large areas of land.
OEF-Trans Sahara Partners and CJTF-HOA Area of Operations

and Large-Scale Land Acquisitions in Sub-Saharan Africa

U.S. Africa Command OEF-TS provides military support to the Trans Sahara Counter Terrorism Partnership (TSCTP) program. TSCTP is the State-led interagency initiative to assist traditionally moderate Muslim governments and populations in the Trans-Sahara region to combat the spread of extremist ideology and terrorism in the region. Combined Joint Task Force Horn of Africa, www.hoa.africom.mil
**CJTF-HOA conducts operations in the combined joint operations area to enhance partner nation capacity, promote regional security and stability, dissuade conflict, and protect U.S. and coalition interests.

**Database compiled by GRAIN, www.grain.org. Focuses on those deals initiated after 2006, have not been cancelled, led by foreign investors, for the production of food crops, and involve large areas of land.
Large-Scale Land Acquisitions in Sub-Saharan Africa

Countries of Concern

*Countries of Concern:
- Concern
- Intermediate Concern
- Utmost Concern

Total Hectares of Foreign Investment**
- 0
- 1 - 300000
- 300001 - 500000
- 500001 - 900000
- 900001 - 1500000
- 1500001 - 3500000

**Database compiled by GRAIN, www.grain.org. Focuses on those deals initiated after 2006, have not been cancelled, led by foreign investors, for the production of food crops, and involve large areas of land.

Issues derived from Feed the Future Initiative countries, U.S. food aid greater than $20 million, Foreign Policy Failed State Index top 20, Ibrahim Index of African Governance bottom 20, and OEF-TS partner nation or CJTF-HOA area of operations. South Sudan added due to investment level and infancy of state.
Case Study: Saudi Star Farm, Gambella, Ethiopia

Background

For the reasons listed in the preceding paragraph, Ethiopia is extremely important in the study of large-scale land acquisitions and their effects; strategic importance, extreme food insecurity, poor governance, and a history of conflict over scarce resources in the Horn of Africa. Regarding Ethiopia’s record of large-scale land acquisitions in recent years, there are abundant claims in the media and from NGOs of customary land tenure violations, population displacement, human rights violations, environmental degradation, and unsustainable practices. Moreover, there are many mature deals that have broken ground in which to study.

Ethiopia is seen as very attractive for foreign agricultural investment, and in recent years, the Ethiopian government created an environment to make it even more so. Ethiopia has a suitable climate, an abundant supply of water (90% of the Nile River’s volume originates in Ethiopia from the Blue Nile or tributaries of the White Nile), a seemingly abundant amount of undeveloped land, access to key markets, low labor costs, low rents, tax incentives, and a streamlined land lease process. The government created a land bank with contiguous parcels of available land in quantities greater than 5,000 hectares. The result is a boom in foreign agriculture investment in the past four years.

A cursory examination of reported land deals in Ethiopia reveals that a majority are in the peripheries of the country; lowland areas with low population density and ethnic minorities. Political power resides in the highland regions of Ethiopia, much more densely populated and home to the Tigray, an ethnic minority now in power and responsible for the overthrow of the Derg Communist regime in the early 1990’s. Agriculture investment and a new program of
‘villagization’, population displacement to allow for better access to government services, may be an attempt by the Ethiopian government to assimilate these peripheries into Ethiopian society, according to Jason Mosley of Chatham House. The Ethiopian government attempted ‘villagization’ in the past and also settled highlanders in lowland areas. The new round of displacement seems to coincide with agriculture investment. Many NGOs claim this is the prime motivation behind population displacements, to make room for large-scale land acquisitions. Previous population displacements resulted in localized violence and the formation of opposition groups.

Gambella is a lowland region that the Ethiopian government is marketing for foreign agricultural investment. The region is sparsely populated by tribes that practice mostly shifting cultivation or are pastoralists. Customary land tenure is the norm. Two large-scale land acquisitions here garner particular attention; the Karuturi Global LTD deal of 100,000 hectares and the Saudi Star deal of 10,000 hectares. Due to the availability of data, Saudi Star is the focus of this case study.

Saudi Star is owned by the Saudi-Ethiopian billionaire, Mohammed Hussein Al-Amoudi. He signed the Gambella deal in 2010, but it was announced the year before. Ground broke as early as summer of 2009. The farm will grow rice for the Saudi Arabian export market. Concerns exist over the sustainability of growing such a water intensive crop. Human Rights Watch and the Oakland Institute report that Saudi Star is digging a canal from the nearby Alwero River Reservoir and have plans to dam the river further downstream to provide the water necessary to grow rice. These organizations also report forced displacement of villages to make way for Saudi Star farm and concern over the welfare of Gambella National Park, just downstream from the farm and site of the second largest land migration in Africa.
Methodology

The purpose of the case study is to analyze the effects of a large-scale land acquisition using commercially available satellite imagery and geospatial techniques. First, it was necessary to find a mature site that had historical imagery coverage prior to ground breaking, as well as recent coverage. The Saudi Star farm met this requirement. Next, using the satellite imagery, all past and present village locations were verified to determine possible displacement and the affected population. A map of the farm was created detailing cleared and cultivated ground as well as the irrigation system. Using the created data and satellite imagery analysis, it is possible to make basic assessments concerning the impact of Saudi Star farm as well as confirm or deny reports in the media and from NGOs.

Findings

Though the original contract is reported to be for 10,000 hectares, there is just over 17,000 hectares of used ground in vicinity of the Saudi Star farm; 340 hectares of cultivated rice, 9860 hectares of cleared ground, and a further 6860 hectares marked for future clearing (Map 8, Image 1). It is possible that a deal for additional land is not public, if not, the excess land used by Saudi Star is evidence of poor governmental oversight.

Analysis confirmed reports of a canal from the reservoir, completed and almost 20km in length (Image 2). There is also a large irrigation ditch dug straight from the Alwero River to the cultivated rice paddies (Image 3). There is no evidence yet of a dam further downstream and closer to the farm. Due to the farm’s extensive irrigation and likely heavy water usage to cultivate rice, several villages in the area will be negatively impacted. Villagers use the river for fishing, transportation, a water source, and prime agricultural land along the bank.54 Gambella
National Park will also be negatively impacted by the farm’s water usage. The Alwero is one of two rivers that feed the park’s rich wetland habitat.

No evidence was found to substantiate the claims that several small villages were displaced to make way for Saudi Star. No villages were visible on imagery on the site of Saudi Star farm prior to ground breaking. However, Pokedi, a village on the north bank of the Alwero River, opposite Saudi Star, grew in size between 2009 and 2012 (Image 4). Human Rights Watch and the Oakland Institute reported that villagers in the vicinity of Saudi Star farm were forcibly relocated to Pokedi. The increase in size may confirm this claim. It is possible that a small village just east of the farm and on the south bank of the Alwero, is now abandoned. The structures remained as of March, 2012, however. The villagers of Pokedi will not only suffer a diminished water supply, but also the loss of communal lands used to gather wood for fuel and forage during times of hardship.

Analysis of the Saudi Star farm seems to confirm most fears over its development. While population displacement is likely overstated by NGOs, several villages in the area will be negatively impacted by what seems an unsustainable venture. Karuturi Farm, presently reported to be about the same size as Saudi Star, but with a much larger contract, is just to the north, along the south bank of the Baro River. While recent imagery was unavailable to conduct a proper analysis of Karuturi, there are many more confirmed villages along the bank of the Baro River than there are on the Alwero. These two giants, if developed to the full extent of their contracts, will negatively impact the livelihoods of a great many villagers in Gambella, as well as encroach into Gambella National Park. As both sites are far from being fully developed, additional analysis is required to determine the true impact of large-scale land acquisitions in Gambella.
Competition over scarce resources and indignation over the loss of tribal lands will likely cause conflict in Gambella, as has been the case in the recent past.
**Saudi Star Rice Farm**

**Gambella, Ethiopia**

- **Gambella Wildlife Reserve**
- **Village**
- **District Capitol**
- **Road**
- **River**
- **Lake/Reservoir**
- **Distrito**
- **Map Extent (Inset)**

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- **Pokedi Village**: Increased in size, likely due to displacement from villages south of the Alwero River.
- **Site of second largest land migration in Africa downstream from Saudi Star Farm.**
- **Saudi Star Farm**: 340ha of cultivated rice paddies. Total 17,060ha marked or cleared. 100,000ha leased in original contract.
- **Villages potentially affected by Saudi Star water usage.**
- **Trial rice paddies adjacent to reservoir.**
- **Canal from Alwero River reservoir and irrigation from Alwero River to support water intensive rice cultivation.**

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Source: DigitalGlobe WorldView satellite imagery from 08 March 2012.
Saudi StarFarm, Rice Paddies and Support Facilities
Gambella, Ethiopia
GEO: 07-54-03N/034-18-46E

08 MAR 12
©2012 DigitalGlobe
Saudi StarFarm, Alwero River Dam and Reservoir
Gambella, Ethiopia
GEO: 07:51.42N, 034:30.59E
Conclusion

In February 2012, The Department of State’s Bureau of Intelligence and Research (INR) hosted an interagency seminar entitled, “Land Grabs in Sub-Saharan Africa: Old Fashioned Exploitation or New Opportunities for Development?” This primer is a step in the right direction. The United States government must increase its understanding of large-scale land acquisitions and their impacts in order to better engage African nations where our strategic interests are concerned. Regarding large-scale land acquisitions, those interests are sustainable development, democratic values and human rights, and conflict prevention. The Department of State and United States Agency for International Development (USAID) should lead this effort, with the intelligence community in a supporting role. The geospatial analysis conducted for this report is one way to broaden our understanding of comprehensive trends in large-scale land acquisitions. The Land Matrix, due to be released to the public in April 2012 by the International Land Coalition, will enable more accurate analysis of trends. The Humanitarian Information Unit, a division of INR, with interagency staff from the Department of State, USAID, Department of Defense, and National Geospatial Intelligence Agency (NGA), is ideally suited to conduct such analysis. Deeper analysis, such as that undertaken for this report of the Saudi Star acquisition, should be conducted over especially conflict prone areas and where U.S. strategic interests are the greatest.

The world’s population will continue to rapidly increase, more people will move into the middle class, and climate change will strain the environment. Global agriculture will be hard pressed to meet demand. As a result, the upward trend of large-scale land acquisitions in the developing world will continue into the foreseeable future. For the United States, this trend is at the intersection of economics, security, and politics. In sub-Saharan Africa, the evidence
suggests that large-scale land acquisitions, if continued on their present track, will negatively impact U.S. national security and strategic interests. As such, applicable U.S. government agencies must broaden their understanding of large-scale land acquisitions in order to properly inform policy makers and determine a way forward.
Endnotes

1 Thomas Friedman, *Hot, Flat, and Crowded: Why We Need a Green Revolution and How it Can Renew America.* (New York: Picador, 2009), 64-74.


24 Fred Pearce, ”Agribusiness Boom Threatens Key African Migration” *Yale Environment 360.* [http://e360.yale.edu/feature/agribusiness_boom_threatens_key_african_wildlife_migration/2377/](http://e360.yale.edu/feature/agribusiness_boom_threatens_key_african_wildlife_migration/2377/)


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