US Investment in Large-Scale Land Acquisitions in Low- and Middle-Income Countries

Joshua Humphreys, Ann Solomon, and Emmanuel Tumusiime
OXFAM AMERICA’S RESEARCH BACKGROUNDERS

Series editor: Kimberly Pfeifer

Oxfam America’s Research Backgrounders are designed to inform and foster discussion about topics critical to poverty reduction. The series explores a range of issues on which Oxfam America works—all within the broader context of international development and humanitarian relief. The series was designed to share Oxfam America’s rich research with a wide audience in hopes of fostering thoughtful debate and discussion. All Backgrounders are available as downloadable PDFs on our web site, oxfamamerica.org/research, and may be distributed and cited with proper attribution (please see “Citations of this Paper” later in this section).

Topics of Oxfam America’s Research Backgrounders are selected to support Oxfam’s development objectives or key aspects of our policy work. Each Backgrounder represents an initial effort by Oxfam to inform the strategic development of our work, and each is either a literature synthesis or original research, conducted or commissioned by Oxfam America. All Backgrounders have undergone peer review.

Oxfam America’s Research Backgrounders are not intended as advocacy or campaign tools; nor do they constitute an expression of Oxfam America policy. The views expressed are those of the authors—not necessarily those of Oxfam. Nonetheless, we believe this research constitutes a useful body of work for all readers interested in poverty reduction.

For a full list of available Backgrounders, please see the “Research Backgrounder Series Listing” section of this report.

Author information and acknowledgments

Joshua Humphreys is a fellow and Ann Solomon is an associate at Tellus Institute, Boston, Mass.; Emmanuel Tumusiime is a researcher at Oxfam America, Washington, DC.

Ben Beachy, Christi Electris, Marjorie Kelly, and Jaime Silverstein at Tellus Institute provided valuable research assistance, analysis, and advice during the course of this study. Thank you to Stephanie Burgos and Suzanne Zweben at Oxfam America for providing useful comments and suggestions. This study also benefited from numerous interviews with experts in the field. The authors would like to give particular thanks to Caroline Bergdolt, Jeff Conrad, Lorenzo Cotula, Philippe de Lapèrouse, Catherine Gill, Harry Hummels, Bruce Kahn, Devlin Kuyek, James McCandless, Anuradha Mittal, and Sapna Shah.
Citations of this paper

Please use the following format when citing this paper:


For permission to publish a larger excerpt, please email your request to permissions@oxfamamerica.org.
ABSTRACT

In the past decade, investment in land used for agriculture and forestry in low- and middle-income countries has grown dramatically. This study provides an analysis of the extent of US investors' and investment fund managers' involvement in this phenomenon over the past 10 years. With this research, Oxfam America hopes to begin exploring the business models behind these investments and the potential food security implications in low- and middle-income countries where large-scale land acquisitions are occurring. The analysis is based on primary data collected from interviews with investors and fund managers involved in farmland and timberland investments and experts from civil society organizations, as well as a review of secondary and limited primary data on US investors and investment funds engaged in large-scale land acquisitions in low- and middle-income countries.

Despite the limited transparency of the land investment market, this research establishes that the scale and trends of US investors' involvement is discernable and substantial. The analysis reveals that US investors—mainly private equity and hedge funds—play a substantial role financing agribusiness companies that employ monoculture production in low-income countries at the expense of biodiversity and greater food security. Nearly half of the reported large-scale land deals involving US investors have taken place in sub-Saharan Africa, but the footprint of monoculture commercialization is greater in Latin America. Many obstacles to transparency obscure a complete understanding of farmland investment activity. To achieve a more complete understanding of these issues, it will be crucial to strengthen public disclosure requirements and reporting on investments in farmland and forestry. This paper discusses the sources of this opacity and the challenges to gaining access to information.
INTRODUCTION

This research background paper provides one of the first efforts to analyze the specific role of US investors in large-scale land acquisitions or concessions in low- and middle-income countries. The analysis is set against the backdrop of a well-documented global rush for land and increasing international concern about practices of “land grabbing” by foreign investors and local elites that often involve the lack of community consultation and consent, human-rights abuses, and a disregard for social, economic, and environmental impacts associated with these large-scale transactions, particularly in contexts where governance and transparency of land transactions are weak. Although not all large-scale land acquisitions can be classified as “land grabs,” mounting evidence suggests that local communities can pay a high price for foreign investors’ rush to acquire farmland in low- and middle-income countries.¹

Many existing studies of the global land rush have stressed the role played by a wide range of international financial actors. Private sector actors and investors, from agribusiness companies and biofuel developers to asset-owning institutions, such as pension funds and endowments, as well as private equity and hedge funds deploying capital on behalf of other investors, have been identified as playing particularly prominent roles in the phenomenon, often with support from development finance institutions.² Exposés of individual cases have identified numerous US-based investors involved in large-scale land deals, yet few studies have attempted comprehensively to analyze US investors’ involvement in the global land rush. More generally, much of the existing and emerging academic literature on land deals is confined to single cases or countries.³ Consequently, this paper aims to provide a more wide-angled lens through which to understand the specific role of US private investors in the global phenomenon of large-scale land investment in low- and middle-income countries, across multiple cases and geographies.

This paper is based on scoping research commissioned by Oxfam America to analyze the nature of US investors and investment funds engaged in land acquisitions in low- and middle-income countries. Specifically, the paper provides an analysis of the scale and trends of US private sector investments flowing into farmland and forestry in low- and middle-income countries. Oxfam America plans to utilize this paper as a basis for further research into the business models underlying these investments and the potential food security implications in the countries where investments are occurring. The analysis is based on secondary data assembled from existing databases of land acquisitions in low-income countries and case studies of land deals and investment funds, as well as primary data drawn from interviews with industry experts—including fund managers involved in overseas land investments and experts from civil society organizations. To illuminate the variety and complexities of the investments and leading investment trends, we present typologies of the different forms of intermediation that connect US investors to large-scale land deals in emerging markets.

In the next section, we discuss key historical and institutional contexts for understanding US investor and fund manager involvement in farmland and timberland investments overseas. In the following section, methods and data sources are presented. Here we also discuss challenges related to a lack of transparency and limitations to data access encountered in the course of the research that continue to obscure a fuller understanding of investment activities in farmland and forestry. Finally, we present an analysis of the data collected on intermediation types and trends, and we conclude with key observations and identify avenues for further research.
HISTORICAL PERSPECTIVES

Although US institutional investor involvement in farmland and timberland as asset classes traces its origins back to the early 1980s, only recently have US investors allocated assets to land investments in emerging markets. Despite their parallel genesis, investments in timberland and farmland have evolved according to their own internal dynamics. The farm crisis of the mid to late 1980s proved to be a major setback for the development of farmland as an asset class in the United States, but it also positioned several major insurers with agricultural lending arms to take over unprecedented volumes of foreclosed farms that had been used as collateral by overleveraged farmers. It is no coincidence, therefore, that some of the leading farmland investment managers, such as UBS AgriVest and the Hancock Agricultural Investment Group, can trace their origins back to agricultural investment divisions of insurers such as Connecticut Mutual, John Hancock, Equitable, and MetLife.

In contrast to farmland investment, timberland investment was poised for growth as a consequence of consolidation in the forest products industry. Leading wood-products companies such as Weyerhauser, Georgia Pacific, and Boise Cascade sought to generate cash by selling their extensive timberland holdings to small, private limited partnerships and an emerging group of commingled funds known as timberland investment management organizations (TIMOs), acquiring properties on behalf of institutional investors. Leading pension funds such as CalPERS and endowments such as Harvard, Yale, and Dartmouth embraced timberland as a way to diversify into a real asset class that seemed to provide relatively high returns at considerably low risk.

As the timberland asset class has grown over the past two decades, from $1 billion to an estimated $50 billion–$60 billion, overall returns for North American timberland have gradually eroded, from low double-digit annualized returns of

---

4 Although the term forestry is commonly used in developing markets, many US-based investors refer to forestland as “timberland,” and leading forestland asset managers have traditionally been known in the US as timberland investment management organizations (TIMOs). We use the terms interchangeably.
11–12 percent to high single-digit returns of around 8–9 percent.\(^5\) This erosion has led the most sophisticated US investors to turn to less crowded foreign markets in search of greater returns for their timberland portfolios, as well as to other less developed real assets, such as farmland, particularly in the wake of the financial crisis.

**DRIVERS AND TRENDS**

Several drivers are shaping US investors’ interest in allocating increasing assets to real assets overseas, and particularly to farmland. Since the financial crisis of 2007–2009, many investors have dramatically reduced their exposure to equities and reallocated their investments to “alternative”\(^6\) asset classes, that is, to nontraditional investments in hedge funds, private equity, venture capital, property, and other “real” or “hard” assets, including commodities—from oil and gas to agricultural products to gold and other metals and minerals. This shift accelerates a broader trend toward institutional-investment diversification into more illiquid asset classes over the past two decades, often led by long-term investors such as college endowments, philanthropic foundations, and pension funds—precisely the shift that led many of the most sophisticated institutional investors to embrace timberland as an asset class in the 1980s and 1990s.\(^7\)

Current market conditions have been particularly ripe for investors to diversify into alternative asset classes as they seek greater returns with low risk at a time when there has been extreme volatility in the markets for publicly traded securities and poor returns on money-market and cash investments in a low-interest-rate environment. Mounting concerns about inflation are pushing investors into tangible assets that can retain their value, and there is a widely held assumption that alternative asset classes are broadly uncorrelated to traditional asset classes, such as public equities, fixed income, and cash equivalents (though this lack of correlation may be much weaker than in the past). Farmland investment therefore finds its opportunity in investor demands for diversification.

Within real property investment, farmland has particular appeal because it is seen as more value-additive than timberland. Yet, like other rural land, the agricultural land market appears more inefficient (and therefore riper for skillful

---


\(^6\) Alternative investment is used here as an umbrella term for the asset classes that fall outside of more conventional investments such as public equities, bonds, and cash.

investment management) than more-developed real-property markets, such as commercial real estate or housing. Although generally more expensive than forestland, farmland can also be monetized in many ways: by renting the land to working farmers or transforming the land and generating income through the production of agricultural commodities that are themselves real assets and valuable investments in today’s markets. Within timberland investment, in addition to harvesting timber for wood and paper products, income-generating opportunities have arisen through conservation easements, biodiversity credits, and carbon-offset monetization, although carbon markets are not fully operational.

Among the drivers that inform managers’ farmland investment rationale, the most cited are population growth, rising personal incomes of households in emerging markets, and shifting dietary habits toward more meat and protein. With global population growth expected to reach nine billion by 2050, the demand for agricultural commodities is widely expected to increase to meet these demographic demands. The stock of arable land available to produce agricultural commodities is finite, and poor farming practices using ecologically harmful chemical inputs have eroded soils and limited agricultural yields. The most productive land cannot be easily increased, so there is a widespread belief among investors that land as an asset appreciates faster than the pace of inflation. Thus, demand for land is essentially the driver, while supply is more of a fundamental constraint.8

Given these macrolevel drivers, it should come as little surprise that the impetus to bring underutilized lands into agricultural production is a particularly strong element of the land rush in the Southern Hemisphere, making agricultural investment more financially compelling in emerging markets than in mature markets, where there is little undeveloped farmland left to exploit. As analysts at the agricultural consulting firm HighQuest Partners have put it: “There is more upside potential in the developing world, where per unit land acquisition costs are lower and there is often the potential to rapidly improve crop yields thereby boosting production and increasing the value of the land.”9 This is generally what has happened in the rapid agricultural development of Brazil, with the transformation of the “raw” savannah lands of the Cerrado into large-scale agro-industrial complexes for commodity crops such as soya and sugarcane, timber harvesting, and massive cattle ranches and dairy farms.10

---


9 Stookey and Lapérouse, Agricultural Land Investment, p. 4.

Our data and analysis show that US investors have played a key role in this development, with major fund managers and asset-owning institutions, such as Harvard University (e.g., through Insolo Agroindustrial), TIAA-CREF, and Soros Fund Management (Adecoagro), as well as more obscure hedge fund managers, such as Touradji Capital Management, often deploying their capital through opaque local affiliates, and with the active investment and industrial infrastructure of agribusiness giants such as Archer Daniels Midland Company (ADM) and Bunge. By clearing wooded grasslands and importing large-scale agribusiness practices, which inevitably involve chemical inputs and genetically modified seeds, land investors are providing crucial financing that leads to the destruction of native habitats and biodiversity loss. Such activity is one reason why the Brazilian Cerrado has been declared a “conservation hot spot” by organizations like Conservation International.

Some experts, including economists at the World Bank, have argued that the industrial intensification of the Cerrado provides a blueprint for the development of commercial agriculture across sub-Saharan Africa’s Guinea Savannah, which stretches from Senegal to Madagascar. Others have advocated support for small-scale farmers and local, grassroots innovations that are attuned to particularities of place as well as the demands of social and biological diversity. Current land investment practices appear compelled more by the former recommendations than by the latter.

11 Insolo, as well as other agribusinesses such as Empresas Verdes Argentina, is identified as a related taxable corporation in Harvard Management Company’s 2011 IRS 990 filing. For additional information on Insolo’s operations, see its corporate website, available at http://www.insolo.com.br/ (accessed November 2012).
SCALE AND SCOPE

Because of poor transparency it is difficult to gauge the size of the market for land investment; consequently, estimates of the global scope of land investments range widely. Estimates of the capital allocated to farmland globally have ranged from $10 billion to $25 billion, according to surveys of fund managers, considerably lower than the $50 billion–$60 billion estimates for timberland. Farmland thus remains in the eyes of many participants an emerging institutional asset class, with far less institutional ownership than found in timberland. Most timberland investments have remained in mature semi natural plantations, primarily in the US, but $10 billion to $20 billion of that has been estimated as invested in other geographies. Our own aggregated data collected for this study specifically on land investments in which US investors are involved has identified $40.4 billion in total assets under management across 154 funds that have been involved in the intermediation between US investors and land acquisition in low- and middle-income countries, though not all funds are focused solely on land investments in the way that timberland investment management organizations (TIMOs) are. Extrapolating from incomplete acquisition land price information in our data, we have also estimated approximately between $14 billion and $30 billion in overseas land purchases across seven million hectares and 133 deals. We consider the dataset to be a conservative understatement of US investor activity.

As for the scale of the land rush itself, estimates have also varied widely, making it difficult to assess the relative weight of US investors’ and investment funds’ activity within the space. For example, the International Food Policy Research Institute (IFPRI) estimated that 10 million to 15 million hectares had been purchased by foreign entities from 2006 to 2009. However, that same year (i.e. 2009), the International Institute for Environment and Development (IIED), International Fund for Agriculture and Development (IFAD), and UN Food and Agriculture Organization (FAO) published a report, based on field research, which concluded that the number of hectares bought by foreign entities from 2004 to 2009 topped 2.5 million in just five African countries, indicating a global estimate significantly higher than IFPRI’s number. Lending credence to this higher estimate, the Global Land Project estimated that from 2003 to 2010, the

---

21 Lorenzo Cotula et al., Land Grab or Development Opportunity?
total area of foreign land deals in Africa alone was 51 million to 63 million hectares.\textsuperscript{22}

In 2011, the World Bank published a frequently cited study estimating that 57 million hectares’ worth of land deals were announced between October 2008 and August 2009.\textsuperscript{23} This finding corresponds with other data showing that the pace of foreign land acquisitions peaked in 2009 and has since subsided to 2008 levels. For example, the Land Matrix, published by the International Land Coalition and IIED, finds that reported new foreign land deals surged from 6.1 million hectares in 2008 to 29.9 million hectares in 2009 before returning to 8.3 million hectares in 2010.\textsuperscript{24} The same report finds that reported foreign land deals between 2000 and 2010 totaled 203 million hectares. Yet a more conservative analysis of the Land Matrix data, released in April 2012, places the total reported foreign land deals at 83 million hectares.\textsuperscript{25} As such, the scope of active foreign land investments remains an inexact estimate.

Given the range presented, the seven million hectares linked to US investors and investment funds in our dataset could represent between 3 percent and 8 percent of the total land acquired by foreign investors, as documented in the Land Matrix. But given the low level of transparency (discussed in the next section), the US share could be much higher than estimated here. Interest in overseas land investment among US investors is nevertheless clear given the visible trends illuminated in our dataset and the macro level drivers as discussed earlier in this report.


DATA SOURCES AND METHODS

INTERVIEWS

The research team conducted 21 unstructured interviews with experts and financial professionals. Interviewees included principals and researchers at leading advocacy organizations and academic and nonprofit research centers such as the Global Impact Investing Network, GRAIN, and the Oakland Institute; current and former staff and investment managers at asset-management firms directly or indirectly involved in agricultural and forestry investment; and principals at businesses active in the agricultural and private investment sector as consultants or advisers. These interviews provided primary qualitative insight into the role of US investors in overseas land investment and their business models. The interviews also provided information about the operations of specific funds linked to large-scale land investments in low- and middle-income countries.

Many interviewees preferred not to have their comments attributed to them or their respective firms. To honor confidentiality in these cases, we have not identified interviewees by name; instead, their collective insights informed our research findings. It should be noted that several other potential interviewees, mostly from asset management firms and agribusiness companies, declined to speak with the researchers or failed to respond to interview and information requests.

DATABASE CONSTRUCTION

A central element of this research was the development of a detailed dataset of investors, funds, and land deals, which provides the foundation of our analysis. Following the guideline established by the International Land Coalition, the threshold size for a land deal to be included in our dataset is 200 hectares, with a focus on transactions during the 2000–2012 period (though information on transaction dates is scarce). Although the primary focus of the data collection effort was on land acquisitions in low- and middle-income countries, the dataset also includes investments from among the world’s largest economies, including China, Russia, and Brazil. Many investors and funds investing overseas are operating in multiple geographies, often testing land investment in more-developed economies before moving into lower-income, emerging-market countries. Thus, current investors’ and funds’ activity in higher-income countries

26 See Ward Anseeuw et al., Land Rights and the Rush for Land.
can be an important indication of potential future investment in low-income regions.

Most of the data on funds, investors, and land deals draws from existing databases and research published by the Center for International Forestry Research, the Global Impact Investing Network, GRAIN, HighQuest Partners, IIED, the International Land Coalition’s Land Matrix, Oakland Institute, Tellus Institute, the FAO, the UN Principles for Responsible Investment (UN PRI), the UN Environment Programme Finance Initiative, the US Overseas Private Investment Corporation, and the World Bank and its private-sector arm, the International Finance Corporation.

The research team attempted to confirm information from these third-party sources by cross-referencing the data with pertinent federal Internal Revenue Service (IRS) and Securities and Exchange Commission (SEC) filings, media reports, articles in the specialized financial press, corporate and governmental web sites, company profiles, and our own interviews. However, field research to verify our information was not part of this research. Therefore, some inaccuracy may remain in the underlying dataset, especially given the barriers to transparency detailed in later sections of this report and the limitations of secondary sources. Nevertheless, as a result of cross-referencing and verification, we believe that our dataset is a more comprehensive account of US involvement in large-scale land acquisitions in low-income countries than provided by previous reports. Ultimately, fieldwork will be needed to obtain complete information on land deals.

LIMITATIONS AND OBSTACLES TO TRANSPARENCY IN PRIVATE LAND INVESTMENTS

In general, US investment in large-scale land acquisition in low- and middle-income countries is made by asset-owning institutions and individuals who operate in the “shadow banking system”—through investment vehicles that are not required to report their underlying investments—or who invest in countries without robust public disclosure systems. For this reason, a study like ours faces the challenge of a lack of transparency and data accessibility. But understanding the challenges can also provide the basis for overcoming them. This section presents these challenges; recommendations to address them are presented in the concluding remarks of this report.

The vast majority of US land investment in low- and middle-income countries is taking place through “alternative” investment vehicles, namely private equity
funds, non-listed private property funds, and hedge funds. Alternative investment funds are usually open only to “accredited” institutional investors or high-net-worth individuals, so the distribution of fund-related materials to non-accredited investors or research organizations is restricted. For this reason, most of the information connecting investment funds to specific investors or land deals is limited to instances where a press release has been issued, media has covered the investment, or the country of investment has made the information public.

At the same time, alternative investments are so lightly regulated that the reporting required by regulators such as the SEC is extremely limited. The SEC requires fund managers to file the SEC Form ADV every year only if they exceed a threshold of $30 million in assets under management and have at least 10 percent of their client base drawn from US citizens. Managers who do not meet the threshold requirements for filing the SEC Form ADV—because their clients are exclusively “related officers,” pensions, or “qualified clients” such as companies—are exempt or partly exempt from even these basic reporting requirements. In these cases, virtually no information about the fund or its investors is publicly available. The only information available is what the fund chooses to disclose, or perhaps a story in the press if the fund engages in a transaction that is made public. In addition, and as our analysis illustrates, many alternative investment funds linked to US investors have organized themselves outside the US, most often in the Cayman Islands, to avoid even this relatively weak disclosure environment. (For an overview of fund domiciles, see Figure 1, in the “Analysis and Results” section of this report.)

It is even more difficult to trace and understand the land investments of small, lesser-known, privately held corporations and family offices. For example, PetroPalm LLC, a closely held, private biofuel development company included in the dataset, has been linked to land acquisitions in Ethiopia, but the company has virtually no online presence, nor does it have public filings that provide information about the company’s operations. This kind of opacity and the constraints of desk-based research restricted our efforts to follow every lead closely. Thus, the investments and investors identified in our research potentially represent a fraction of the asset owners invested in the identified funds. Within existing limits of transparency, this study focuses on the broader defining patterns of US investor involvement in overseas land investment, on one hand, and on specific actors and land deals that exemplify those broader trends and forms of intermediation, on the other.

---

27 As discussed in this report, alternative investment is used here as an umbrella term for investments in asset classes that fall beyond more conventional investments such as public equities, bonds, and cash.


ANALYSIS AND RESULTS

The data are organized according to two characteristics: types of investment actors and land deals. Investment actors as a group are disaggregated into two categories: asset owners, on the one hand, and managers and funds, on the other. Asset owners are further disaggregated into direct and indirect investors. This level of disaggregation allows us to illuminate the place of different actors within the chain of investment intermediation. In what follows, we present our findings in an interrelated fashion according to these characteristics: direct and indirect investors, funds and managers, and land deals—their scale, value, geography, and agronomic characteristics, where available.

DIRECT AND INDIRECT INVESTORS

According to our classification, direct investors are US asset-owning entities that purchase and control farmland or timberland either directly or through subsidiary companies that the direct investor wholly owns or has a majority stake in. Our dataset contains 39 direct investors linked to land deals outside the US. Most of these are agribusiness corporations (e.g., Bunge and ADM30) and energy companies such as Clenergen Corporation,31 but the list also includes a few individual investors, such as Dominion Farms, and institutional investors, such as Harvard Management Company, the nonprofit corporation responsible for managing the endowment and other assets of Harvard University.

US indirect investors in farmland are asset owners connected to land deals through intermediary funds or companies in which they are invested. The types of intermediated investments in which indirect investors engage vary widely. They range from stock held in a land-buying corporation to an equity investment in a private fund investing in agribusiness. However, as a group, indirect investors are distinct from direct investors in that they do not control the land-buying entity; rather, they have invested their capital in an independent entity engaged in land acquisitions. Indirect investors are particularly difficult to uncover. Despite the opacity, we have identified 35 indirect investors, a group made up of two government agencies, five foundations, six pension funds, nine corporations, and 13 endowments. Universities and pensions appear to have been drawn to agricultural and timber investing in search of portfolio

diversification and inflation hedging. Agribusiness corporations appear to be motivated by a different business rationale: indirect investment provides an avenue for companies to enter international markets by taking stakes in locally based agribusinesses.

MANAGERS AND FUNDS

Managers and funds are defined as asset management firms and their respective investment funds, which deploy investors’ capital into land investment and agribusiness ventures, whether directly or indirectly. We tracked 99 asset managers with 154 funds under management. Private equity funds and hedge funds are the most common types of funds, yet property funds that engage in direct land ownership are the largest type by total assets. Table 1 shows fund type distribution for the subset of funds where the type and assets are known.

Of the funds whose assets can be identified, most are domiciled in the US. However, a significant number are domiciled in the Cayman Islands, and a handful of funds are domiciled in other foreign tax havens, including Mauritius, the Channel Islands, and Luxembourg (Figure 1). Notably, many of the actual land investments are indirect. For instance, Harbor Funds is a mutual fund complex whose funds collectively own 2.12 percent of Sime Darby, a Malaysian agribusiness reported to have obtained 220,000 hectares in Liberia and 600,000 hectares in Cameroon for palm oil development.

Table 1. Fund type distribution for known assets by type (US$ millions)

<table>
<thead>
<tr>
<th>Fund types</th>
<th>Number of funds</th>
<th>Total assets by type</th>
<th>Average fund size</th>
</tr>
</thead>
<tbody>
<tr>
<td>private equity</td>
<td>47</td>
<td>$13,883.48</td>
<td>$295.39</td>
</tr>
<tr>
<td>Hedge fund</td>
<td>21</td>
<td>$5,482.25</td>
<td>$261.06</td>
</tr>
<tr>
<td>Property</td>
<td>17</td>
<td>$17,415.75</td>
<td>$1,024.46</td>
</tr>
<tr>
<td>Mutual fund</td>
<td>2</td>
<td>$3,667.69</td>
<td>$1,833.84</td>
</tr>
<tr>
<td>Total labeled funds</td>
<td>87</td>
<td>$40,449.17</td>
<td></td>
</tr>
</tbody>
</table>

LAND DEALS: SCALE, GEOGRAPHY, AND LAND USE

The third dimension of the dataset documents the details of specific land deals in which US investors or investment managers were identified as being involved. Despite earlier caveats regarding lack of transparency and lack of field-based verification, information on the size of land being transacted in deals in our dataset is fairly complete. Only four of the 133 tracked deals lack any hectare information. We aggregated 7,033,157 hectares across 122 completed transactions with an additional 1,158,000 hectares in planned/reported acquisitions in seven additional deals and expansions of completed deals. The median size of completed deals is 25,000 hectares, considerably lower than the average size of 57,180 hectares. Deals in Latin America and sub-Saharan Africa account for the majority of hectares in the dataset, representing 39 percent and 38 percent of total hectares, respectively (Figure 2). The median land deal in Latin America is twice as large as the median land deal in sub-Saharan Africa (34,650 hectares versus 17,000 hectares), highlighting the larger-scale commercialization of agricultural land occurring in South America.
In terms of the regional distribution of the number of deals, nearly half of the deals are reported in sub-Saharan Africa, followed by Latin America (Figure 3). At the country level, a small number of countries emerge as foci of land investment: Brazil, Ethiopia, Tanzania, and Argentina, respectively, are where the highest numbers of deals have taken place. Brazil also leads in terms of hectares, with 1.4 million hectares identified, almost twice as many hectares as the country with the next highest number of hectares: Argentina with 734,550 hectares in transactions.
Nearly two-thirds of the hectares in tracked land deals are devoted to the cultivation of grains—including crops such as soy, maize, cereals, and rice—reportedly for agribusiness purposes. Nineteen percent is devoted to forestry and 15 percent is devoted to biofuels (Figure 4). As for the geographical distribution of the reported land use, 69 percent of the reported biofuel deals are located in sub-Saharan Africa, and Latin America accounts for 28 percent of the reported biofuel land deals. Of the agribusiness deals in our dataset, 45 percent are reported in sub-Saharan Africa, 31 percent in Latin America, and 12 percent in Eastern Europe. All the land deals reported in Eastern Europe are in agribusiness activity. Our data further indicate that most forestry deals reported have occurred in Latin America, followed by sub-Saharan Africa and Asia.

Prices and values are rarely reported either in the news or in existing third-party databases. In our dataset, only 14 of the 133 deals include acquisition prices. Given these limited price data, estimating the acquisition value of land transactions can be an inexact exercise. Nevertheless, the median observed price for the reported 14 deals is $2,000 per hectare and the highest is $3,776 per hectare. Extrapolating the observed median price per hectare of $2,000 to the full seven million hectares identified in the dataset yields an estimated $14.1 billion in total acquisition value. By assuming that price per hectare is a broadly regional phenomenon and that our limited price data are representative of the region from which they are drawn, at least for sub-Saharan Africa and Latin America where data were robust, we arrive at a weighted estimate of $29.9 billion for the combined acquisition value for the full seven million hectares. We

35 Note that this price information includes more expensive land prices from more developed markets in Oceania.
therefore see estimated land acquisition values in the range of $14 billion to $30 billion—for the 133 deals involving US investors. Given the limited underlying data on which this extrapolation is based, caution needs to be exercised with the estimate.

Figure 4. Total hectares of land deals by sectoral land use

- Agribusiness: 63%
- Biofuels: 15%
- Forestry: 19%
- Personal: 3%
INTERMEDIATION ANALYSIS

The movement of capital takes varied paths as it flows from US investors, investment funds, and corporations into overseas land acquisitions. In the following section, we present five channels of intermediation between US-based investors and large-scale land acquisitions as a framework for interpreting these diverse capital flows. These five types encompass the most common flows of investment found in our research, though there are also several outlier deals that do not fit neatly into these broad types.

Although there are certainly patterns in the kinds of investors and funds engaged in each type of intermediation, the intermediation channels identified characterize the flow of capital. Agribusinesses are not confined to one channel of land investment; many are buying land directly, but some are also involved in different forms of indirect investment. Similarly, though venture capital, private equity, and hedge funds are meaningful categories in terms of how funds are organized, marketed, and registered with the SEC, the type of fund is not determinative of the way in which the fund is engaged in land investment intermediation. Some private equity funds purchase land directly, while others invest in corporations that acquire land as part of their business. Thus, intermediation types offer a distinct way of analyzing US involvement in land acquisitions in low- and middle-income countries by characterizing the way in which capital flows.

DIRECT INVESTMENTS

This channel includes deals in which a US-based asset-owning company directly purchases land abroad. The purchase may be made by a foreign subsidiary, but the US corporation fully or mostly owns the subsidiary. This category is made up mostly of large, publicly traded agribusinesses (e.g., Archer Daniels Midland, which has bought land for oil palm in Brazil), individual investors such as Dominion Farms, as well as smaller energy companies (e.g., Las Vegas–based Clenergen Corporation, which has purchased land for biofuels in Ghana), and one university endowment (Harvard Management Company), which wholly owns forestry and agribusiness companies in Latin America. The direct investments channel is the easiest to track and the most prevalent among the land deals in our dataset.

Of the 133 tracked deals, 49 fall into the category of direct investments and represent 27 percent of total hectares reported in our dataset.

INTERMEDIATION THROUGH A US FUND, NON-ASSET OWNING

This channel includes deals involving a non-asset-owning US-based fund that has directly acquired land abroad for its investors. Although the actual purchase may be conducted by a foreign subsidiary company, the purchasing entity is mostly or wholly controlled by the US-based fund. Funds engaging in such direct purchases tend to be property funds (e.g., the Heartland Forestland Fund, managed by Massachusetts-based Forestland Group, with land purchases in Costa Rica38), though some venture capital, private equity, and hedge funds have also been purchasing directly (e.g., Herakles Capital, a New York–based venture capital fund with land in Cameroon and Ghana39). Thirty of the tracked deals fall into this category, and together they account for 33 percent of land acquired in terms of hectares in our dataset.

EXTENDED INTERMEDIATION THROUGH A US FUND VIA A FOREIGN CORPORATION

Some acquisitions take place when a US-based, non-asset-owning fund invests a minority stake in a foreign corporation that then purchases land. The foreign land-purchasing corporations are usually large agribusiness firms (e.g., Argentina-based El Tejar40) or large multisector corporations (e.g., Malaysia-based Sime Darby). The investing US funds are primarily private equity funds (e.g., Capitol Group, invested in El Tejar41), though there are some instances of public equity investment via mutual funds (e.g., Harbor Funds, invested in Sime Darby42). Thirty of the deals in our dataset fall into this category of intermediation, representing 30 percent of the total hectares reported in our dataset.

INTERMEDIATION THROUGH A FOREIGN FUND

A small number of deals involve US-based asset-owning corporations or institutions investing a noncontrolling share in a foreign, land-purchasing fund. The foreign funds include forestry funds (e.g., Brookfield Brazil Agrilands, managed by Canada-based Brookland Asset Management) and funds mostly dedicated to agricultural property (e.g., Calyx Agro, a Latin America–based fund manager with land in Argentina, Brazil, Paraguay, and Uruguay). The US-based investors in these funds include publicly traded companies like AIG (a minority shareholder in Calyx Agro), university endowments, and even the US Overseas Private Investment Corporation (which has loaned and granted money to foreign funds, such as Citadel Capital, Egypt’s largest land-purchasing private equity fund). Twelve of the tracked deals fall into this category of intermediation.

INTERMEDIATION THROUGH A FOREIGN CORPORATION

The least common type of deals are those in which a US-based, asset-holding corporation or institution has invested a noncontrolling share in a foreign, asset-holding corporation or institution that is purchasing land directly. In most such cases, the US investor and the foreign land purchaser are both agribusiness corporations. Examples include Archer Daniels Midland, which is reported to own 16 percent of shares in the Singapore-based Wilmar International, an agribusiness company that owns oil plantations; and Dole, which holds 40 percent of the French Compagnie Fruitière, which is reported to own approximately 12,000 hectares of fruit plantations across Cameroon, Ivory Coast, Ghana, and Senegal. Eleven of the tracked deals fall in into this category.

The distribution of hectares acquired through the five main channels of intermediation described is presented in Figure 5.
Figure 5. Hectares by intermediation type
PERSPECTIVES OF US INVESTORS INVOLVED IN OVERSEAS LAND INVESTMENTS

In interviews, fund managers and investors repeatedly expressed an aversion to the risks involved in investing in “frontier” markets like sub-Saharan Africa. Managers and investors interviewed indicated awareness of the current controversies over land grabbing, and they are worried about being associated with them. Yet they maintain interest in farmland investment as an asset class because of its strong market fundamentals as described earlier in this report. One fund manager focused on Africa reported that the learning process was steep for US investors because the higher levels of due diligence expected by US managers interfered with getting deals in countries without the same levels of transparency and information access. The deals this fund manager described can hardly be characterized as land grabs. Some interviewees (investors) stressed that there has been far more talk than action when it comes to capital deployment on the part of US investors, who appear relatively hesitant to embrace overseas land investment in low-income counties owing to perceived concerns about imbalanced risk-return trade-offs.

Empirical evidence from our analysis suggests, however, that despite widespread risk aversion among US investors, there remains a pure financial proposition attracting capital that is willing to take greater risks if investors will be compensated for it. Profit remains the motivator behind the movement of capital into emerging-market land investments, though those standing to gain the most often invoke altruistic motives: feeding the nine billion, stemming global warming, modernizing inefficient agricultural practices, fostering entrepreneurship, fighting poverty and food insecurity, or promoting sustainability. With a relatively convenient and “cheap supply” of farmland in developing countries backed by farmland’s strong market fundamentals, arbitrage opportunities abound. As one fund manager highlighted, equivalent land selling for $4,000 per hectare in Brazil can be obtained for $900 per hectare in Swaziland, in southern Africa.

But some believe the dilemma for US investors is that they seek outsized returns to compensate them for the risks associated with an illiquid emerging-market investment in a region like sub-Saharan Africa. Only 14 funds in our dataset, out of 154, have data related to their target or actual returns. The funds are targeting returns ranging from 8 percent to 25 percent. Some investors acknowledge, however, that farmland and forestry investment is a long game,

where one cannot expect the kind of outsized absolute returns sought by aggressive private equity funds and hedge funds. Such high expectations have often turned out to be unrealistic and unsustainable, financially as well as socially and ecologically. For example, one agricultural land investor with a large US footprint reported that his team simply could not make overseas farmland investment work from a financial perspective, even in Brazil, where the team had conducted extensive research on the market. At the same time, the same manager acknowledged that with the growing interest in land as an asset class, raising capital has been much easier over the last four to five years than in the past, and highlighted that many more hedge fund and private equity actors—without a particular commitment to land and agriculture—had become active investors in land and agricultural commodities, in ways that signaled a potential asset bubble.
CONCLUSION

This study has analyzed the extent of US private investment in farmland in low- and middle-income countries, and explored the business models behind the investments and their potential food security implications in those countries. Despite the limited transparency of the land investment market, this report has identified leading trends among US investors involved in land investment in low- and middle-income countries. Based on our data specifically on land investments involving US investors, we observe approximately seven million hectares across 133 deals. Estimates on the overall magnitude of land acquisitions in low- and middle-income countries vary widely. Using the International Land Coalition’s estimate of 83 million hectares as a reference point of the total land acquired in low- and middle-income counties over the past decade, US actors appear to represent about 8.4 percent of global land deals, suggesting a sizable involvement of US investors and investment funds in large-scale land acquisition.

Land deals involving US investors are much larger in size (hectares) in Latin America than in sub-Saharan Africa, but more reported deals (nearly half) have taken place in sub-Saharan Africa. In terms of land use, many forestry and biofuels projects are under way, but agribusiness crops predominate, particularly those related to monoculture commodity cultivation of grains and oil seeds. One takeaway from this study is that large-scale land acquisitions by US investors and investment funds appear to promote monoculture commodity agribusiness at the expense of greater biodiversity and more sustainable agricultural practices. More research is needed to explore the potential effects of such monoculture cropping on food security in countries where the investments are taking place. Greater investment in agriculture is needed, but it is important that such investment contribute to food security and broadly shared wealth creation in the local economies, especially in rural areas where the investments are taking place.

Direct investment by US actors is the most common investment model and channel of capital intermediation, with agribusiness and biofuel companies in particular more involved in primary production, but we also found ample cases of US funds deploying capital directly into land purchases. Hedge funds and private equity firms generally deploy capital into agribusinesses that ultimately make large-scale land acquisitions and transform land use into commodity monoculture.

While we conducted this research, we encountered obstacles to getting information that could connect specific funds and investors to reported land deals. Because of these challenges, US investments and investors identified in our research may represent only a fraction of the asset owners invested in the
identified funds. Nevertheless, the 154 funds identified with collective assets of approximately $40 billion highlight the substantial capital committed to the space.

More generally, the vast majority of US private investments in land in low- and middle-income countries go through investment vehicles, namely private equity funds, non-listed private property funds, and hedge funds with weak public disclosure requirements. The lack of public reports at the transactional level in low- and middle-income countries and the limited public disclosure obligations of investment funds and individuals are a constraint to understanding farmland investments in low- and middle-income countries. To achieve a more complete understanding of these issues, it will be crucial to strengthen public disclosure requirements and reporting on investments in farmland.
REFERENCES


RESEARCH BACKGROUNDER
SERIES LISTING


“From the Ground Up: Strategies for Global Community-Based Disaster Risk Reduction,” by Kelly Hauser (2010).

“Impact of Climate Change on Response Providers and Socially Vulnerable Communities in the US,” by John Cooper and Jasmine Waddell (2010).


“Haiti Rice Value Chain Assessment: Rapid Diagnosis and Implications for Program Design,” by David C. Wilcock and Franco Jean-Pierre (2012).


Forty percent of the people on our planet—more than 2.5 billion—now live in poverty, struggling to survive on less than $2 a day. Oxfam America is an international relief and development organization working to change that. Together with individuals and local groups in more than 90 countries, Oxfam saves lives, helps people overcome poverty, and fights for social justice. To join our efforts or learn more, go to www.oxfamamerica.org.