

Canada and the global land rush

Analysis of Canadian involvement
in large-scale agricultural land
acquisition in the Southern
Hemisphere

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Introduction

Since 2008, there has been a rapid increase in the number of land transactions taking place in developing countries. Sovereign wealth funds and private companies are acquiring tens of thousands of hectares of agricultural land at a time. According to the Land Matrix¹ project, between 2000 and 2012, 83.2 million hectares of agricultural land in developing countries was sold or leased. While Africa is the primary location of land acquisitions, by both local elites and foreigners, land transactions are also on the rise in Asia and Latin America.

Investors interested in exploiting the commercial potential of land and natural resources are increasingly coming into direct competition with local populations, for whom such resources are a critical source of livelihoods. The global rush for land has prompted renewed attention at a global scale to questions of rights to land and natural resources and their place in efforts to overcome hunger and poverty.²

Depending on the vantage point taken, these transactions are either characterised as investments in agriculture or as “land grabbing”. With increasing frequency the term land grabbing is employed given the often negative effects on local communities, the lack of free, prior and informed consent, and the growing number of forced evictions.

While the acquisition of land in developing countries by foreigners and elites is not new, the food price crisis of 2007-2008 and the continuing price spikes have brought to public attention a wave of large-scale acquisitions of land in developing countries by foreign investors, including sovereign wealth funds. The food price spike is said to have been a “wake-up call” for many food importing countries to circumvent the open world market by securing dedicated sources of imports. Investments in farmland for offshore food production, often in food insecure countries, is one face of a much wider trend of increasing demand for land not only for food, but also for fuel (including land to produce bio fuels) and fibre along with oil exploration, mining, and ecosystem services such as carbon sequestration. Land needed to meet the food and nutritional needs of local people is being redirected to meet needs in capital rich countries. This is bringing international investors and their national partners into direct competition with local populations, for whom land resources are the basis of their livelihoods, health and nutritional well-being.

¹ The Land Matrix project is a public database of reported and verified land transactions. The project was started by five organizations: International Land Coalition, International Cooperation Centre of Agricultural Research for Development, Centre for Development and Environment of the University of Bern, German Institute for Global and Area Studies and Deutsche Gesellschaft für Internationale Zusammenarbeit.

² Taylor, M and Bending, T “Increasing commercial pressures on land: building a coordinated response”, International Land Coalition, July 2009.

The escalating global race for land has heightened national and international debates on the fundamental questions that underpin land rights; namely, who should have the rights to use which land, for which purpose, under what conditions and for how long.

China and Arabian Gulf countries are often singled out as the instigators of this land rush, but many other countries are also involved, including emerging countries and developed countries in the Northern Hemisphere.

We hear, however, very little about Canada. With the tenth largest economy in the world, Canada already makes massive investments in the natural resources of developing countries through its mining sector. Seventy-five percent of the world's mining companies are Canadian, and these Canadian companies have developed exploration and mining projects all over the world. Is land investment another area with heavy Canadian involvement? Is Canada a major player in the global phenomenon of land investment?

In the context of an explosive rise in large-scale agricultural land acquisitions in developing countries, the United Nations Committee on World Food Security (CFS) started a process to manage these investments. This process led to the publication of the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. Guideline negotiations took place between member states of the CFS during 2011 and spring 2012. Since these voluntary measures do not directly affect the Canadian mining sector, the attitude of Canadian negotiators raised questions among the civil society observers present. Was there something afoot? Did the Canadian position hide private or public interests in land investments? This research was conducted in response to this line of questioning. Since the existing data do not enable us to draw up an overall picture of Canadian investments, the Food Security Policy Group started a research project to assess the level of Canadian involvement in the phenomenon of large-scale agricultural land acquisitions in developing countries for non-extractive purposes.

This research concentrated on the acquisition of land for agricultural production or the logging industry. This research sought to inform the global debate on land acquisitions / land grabbing on the nature of Canadian participation, a missing dimension in the wide body of emerging research on the topic. It did not look into the acquisition of land by Canadian investors for mining projects, as this work has and continues to be done by others.

The investments of five major financial players in Canada were analyzed: private companies, universities, pension funds, banks and insurance companies. The lack of transparency and information available on the land transactions made this research difficult.

All the research was done in Canada. It was thus not possible to analyze the social, environmental and human rights impacts of these land transactions at the country level. Nor was it possible to determine if the Canadian investments studied should be described as land acquisitions or as land grabs as defined in the Tirana Declaration.³

³ “[A]cquisitions or concessions that are one or more of the following:

(i) in violation of human rights, particularly the equal rights of women; (ii) not based on free, prior and informed consent of the affected land-users; (iii) not based on a thorough assessment, or are in disregard of social, economic and environmental impacts, including the way they are gendered; (iv) not based on transparent contracts that specify clear and

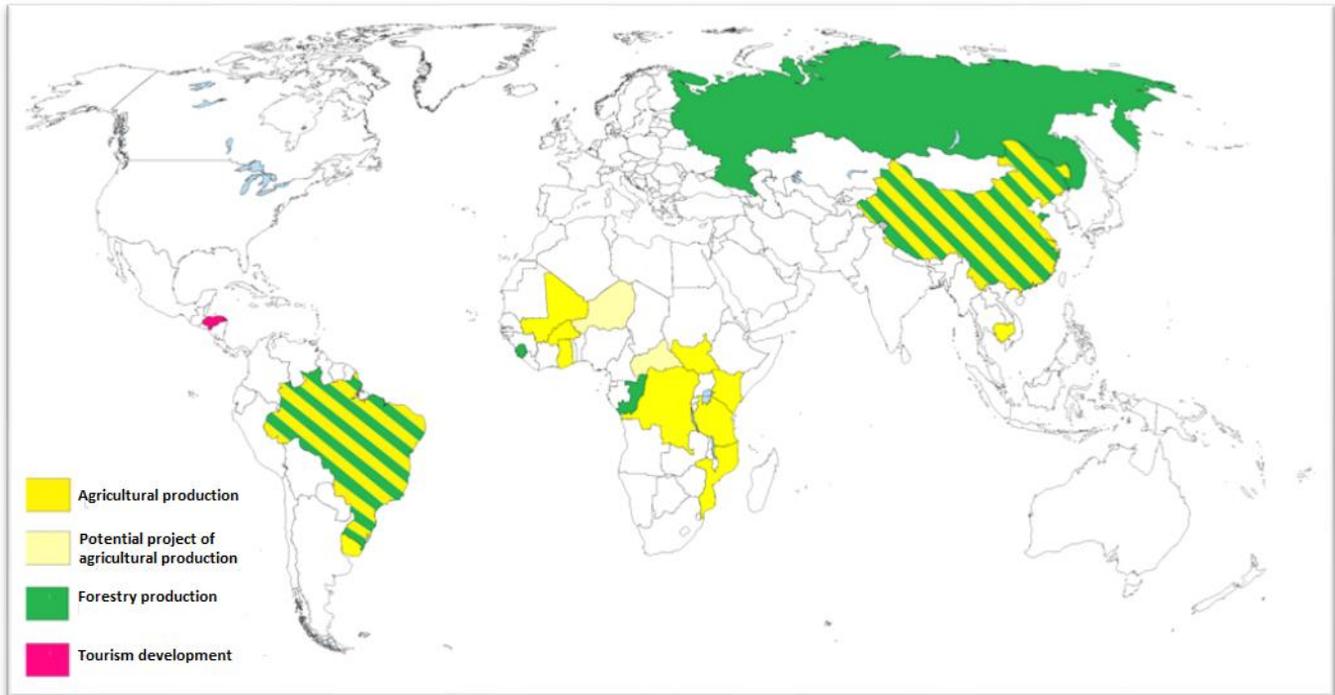
While the researchers recognise that there are fast growing efforts by foreigners to acquire land in Canada, this report is limited to the study of Canadian land investments in developing countries since 2000.

binding commitments about activities, employment and benefits sharing, and; (v) not based on effective democratic planning, independent oversight and meaningful participation.”

Canadian companies

At least fifteen Canadian companies have acquired agricultural or forest land in developing countries since 2000. Three of them are forestry companies and one company specializes in tourism development. Twelve other companies acquired land for agricultural production purposes.

| Company | Country of investment | Area acquired (ha) | Production | Transaction year | Contract type | Duration (if Lease) |
|------------------------------------|--------------------------------|--------------------|-------------------------|-----------------------|---------------------------------------|-----------------------------|
| AMG Bioenergy Resources | China | 875 | <i>Jatropha curcas</i> | 2011 | Purchase | - |
| Bedford Biofuels | Kenya | 160,000 | <i>Jatropha curcas</i> | 2009 | Sublease | 45 years |
| Brookfield Asset Management | Brazil | 249,000 | Food crops and forestry | 1980s-2005-2006-2007 | Purchase | - |
| Cathay Forest Products | China and Russia | 995,000 | Forestry | ...-2005-2006-2007... | Acquisition of cutting rights | - |
| CEDASS | South Sudan | 8094 | Food crops | 2006? | Lease | 10 years |
| Feronia | DR Congo | 127,000 | Palm oil and rice | 2009 | Purchase of shares in a local company | - |
| Kijani Energy | Mozambique | 75,000 | <i>Jatropha curcas</i> | ? | ? | ? |
| Kilombero Farms | Tanzania | 405 | Food crops | 2001 | Purchase | - |
| Kimminic | Ghana | 68,000 | <i>Jatropha curcas</i> | 2007 | Joint venture with communities | 50 years |
| Life Vision Properties | Honduras | 607 | Tourism | 2008? | Purchase | - |
| MagIndustries | Congo | 68,000 | Forestry | 2005 | Lease | 50 years (+ 21 year option) |
| Pan Asia Biofuels | Cambodia | 65,000 | <i>Jatropha curcas</i> | ? | Lease | 99 years |
| SeedRock Group | Mali, Burkina Faso and others? | 44,000 | Food crops | 2010? | Lease and outgrower scheme | 25-50 years (+ option) |
| Sierra Gold Corporation | Sierra Leone | 46,255 | Food crops and forestry | 2009? | Lease | 50 years |
| Sino-Forest | China | 894,200 | Forestry | 1994... | Lease of forest rights | 30-50 years |



Generally speaking, these fifteen companies are small, recently established businesses (detailed information about these companies and their investments is attached). Only three of the identified companies are large and well-established. Two of the large companies (Cathay and Sino-Forest) are forestry companies, while the other (Brookfield Asset Management) is an important asset manager that has invested more than \$150 billion in a variety of different sectors. Another company, Feronia, is the largest agricultural company in the Democratic Republic of the Congo.

Canadian companies that have acquired land in developing countries are not generally companies that are well-established or known, but a number of them are ambitious and plan to become important players. AMG Bioenergy, despite its current holding of 875 hectares, has declared its desire to become one of the largest biofuel producers in China within the next few years. Bedford Biofuels already possesses 160,000 hectares in Kenya and has undertaken steps to acquire an additional 200,000 hectares. SeedRock currently operates in Mali and Burkina Faso, and aims to acquire land in other parts of West Africa starting in 2012 and 2013.

For the moment, these companies have mainly acquired land in Africa. Of the fifteen companies, nine have invested in African land, four have invested in Asia and two in Latin America. This corresponds to a global trend which has mainly targeted the African continent.

The average surface area acquired by these companies is 182,000 hectares, and the median is 68,000 hectares or 680 km² (this is equal to about one and a half times the surface area of the Island of Montréal). Forestry surface areas are generally much greater than agricultural ones, which artificially inflates the average. If forest land is taken out, the surface area acquired, on

average, is about 41,000 hectares.⁴ The different transactions include small surface areas (between 400 and 800 hectares) and very large surface areas (between 45,000 and 127,000 hectares). Eight hundred hectares is small when compared with 127,000 hectares, but it is already a large surface area for a farm in Canada. On average, Canadian farms cover an area of 295 hectares.

The above-mentioned Canadian companies have, according to our estimates, mainly acquired their land between 2005 and 2011, apart from a small transaction (Kilombero Farms) in 2001. For their part, Brookfield Asset Management, Cathay and Sino-Forest started to acquire land in the 1990s, but they made significant acquisitions between 2005 and 2007. Most of the companies lease the land on which they operate. Seven of the transactions are leases whose average duration is 50 years. Two forestry companies have purchased or leased (with contract durations of 30 to 50 years) land use rights. The five other transactions are purchases.

Box 1: Collaborative development models

Recent land investments have taken various forms: purchases, short- and long-term leases, joint ventures, etc. In social terms, models of collaborative development, such as joint ventures or outgrower schemes, are the most interesting. These are models of production where local communities are more likely to benefit, since they are involved in the investment project and retain access to and use of their agricultural land.

In outgrower schemes, the entrepreneurs and local agricultural producers sign a production contract in which the producer commits to providing and selling a certain amount, and the entrepreneur commits to buying what is produced and to providing expertise, credit, inputs and new technologies to the producer. In a joint venture, local producers and entrepreneurs become partners in a new business.

Some Canadian companies appear to be doing the right thing since they have adopted these types of models. Their projects were not assessed in the field as part of this research, but it is still a point worth noting.

Kimminic, for example, has a joint venture with communities in Ghana. The producers remain owners of the land while Kimminic is owner of the *Jatropha* planted on the land. The producers participate in the operation and commit to allowing planting on their land for 50 years. SeedRock also operates partially under the collaborative model. A portion of its agricultural projects involve outgrower schemes with local agricultural producers in Mali and Burkina Faso.

⁴ This is the total average surface area acquired by each company, but a company generally acquires several lots, usually in the same country.

In regard to what is produced on this land, the popularity of *Jatropha curcas* cannot be denied. This shrub's (inedible) fruit produces oil, which, once refined, is used as an agrofuel. *Jatropha curcas* is one of the best sources of biodiesel. Five of the fifteen Canadian companies listed have decided to grow this crop (see box 2). Two of them sell their production to European airlines, thereby taking advantage of the fact that European airlines are seeking to increase their agrofuel consumption for image and cost reasons. Two other companies plan to sell their *Jatropha curcas* production to the Asian market, where demand for agrofuels is growing rapidly.

Among the companies that produce *Jatropha curcas*, Bedford Biofuels was criticized by environmental NGO Nature Kenya for the potentially negative environmental impact of the company's project. Nature Kenya has stated that *Jatropha* production is not appropriate in the coastal region where the company has acquired land, a region rich in biodiversity that is home to threatened animal species. The NGO has met with some success: the government has agreed to work out a development plan for the region, which will serve as a framework for commercial development. All commercial projects should have been suspended until finalization of the plan. Bedford Biofuels, however, has regularly announced developments regarding the plantation.

Four of the companies listed produce food crops: rice, palm oil, sunflower oil, etc. Most of the companies that produce food crops have declared that they would like to sell their production within the country of production. Five other companies produce forestry products. One of them, Sierra Gold, sells carbon credits,⁵ in addition to wood, from its kiri tree plantation. Some of the companies produce more than one product at a time, such as food crops and agrofuels.

Box 2: Agrofuel policies

In the last few years, many countries, including the European Union, the United States and Canada, have passed laws stipulating that fuel must contain minimum amounts of agrofuel when sold nationally. These laws aim to make fuel greener and reduce dependence on petroleum. However, several sources now say that agrofuels do not really reduce greenhouse gas emissions since their production releases an equivalent amount of emissions. Their potentially positive effects are also negated by the pressure they put on agricultural land as well as on the production and price of food. This legislation is one of the causes of the recent land rush. Various Canadian companies have confirmed that they export or wish to export *Jatropha curcas* oil to Europe, where demand has been very high since the passage of such legislation.

Apart from these fifteen companies, three other Canadian companies had acquired agricultural land in developing countries, but have since declared bankruptcy or have abandoned their operations. The first one, which was pretty well known, was Energem Resources, which declared bankruptcy in 2011. Energem Resources had acquired 190,000 hectares in Zambia, 60,000 hectares in Mozambique, 530,000 hectares in Madagascar and, apparently, land in Kenya to develop *Jatropha curcas* plantations. Carbon2Green, a Montréal-based company that had developed a project to produce *Jatropha curcas* in order to sell carbon credits and produce

⁵ A carbon credit is a way for companies to compensate for their greenhouse gas emissions by paying another entity that will reduce its emissions on its behalf. A carbon credit market has been set up in several countries. In Canada, the market is currently voluntary. Canadian companies do not face restrictions on the amount of greenhouse gas they can emit.

agrofuel, declared bankruptcy around 2011. In 2009 or 2010, it had acquired 14,000 hectares in the province of Bandundu, Democratic Republic of the Congo. AsiaPac Capital Services had signed an agreement to develop 300 hectares of land in the Philippines, an agreement helped along by one of its investors, in order to grow *Jatropha curcas*, but the project was recently abandoned.

These examples show that the success of land investments, particularly for agrofuel production purposes, is not an established fact. Their profitability is not guaranteed, and their environmental and social impacts are potentially very negative.

In summary, over the past decade, around fifteen Canadian companies have acquired land in developing countries for non-extractive purposes. Even if the phenomenon does not appear to be widespread, certain trends are clearly taking shape. Some of these transactions are enormous in terms of surface area, and it is this disproportion that is criticised by detractors of the current land rush. In addition, the vast majority of the transactions were made in Africa between 2005 and 2011. This is clearly a new phenomenon that follows global trends. However, there was no increase in transactions around 2008, unlike what was noted at the international level. There are also no clear trends in production or contract types, apart from the number of *Jatropha curcas* production projects.

While there are only a small number of Canadian transactions, the average surface of land acquired is by no means negligible and the effect on those whose land has been acquired is significant. One may ask, why are Canadian companies acquiring land in other countries when there is arable land in Canada?

Pension funds

Several reports have also shed light on the heavy participation of pension funds, Western ones in particular, in this new land rush. Pension funds are major financial players, representing some 23 trillion dollars. Jose Minaya, of TIAA-CREF Asset Management, estimated in 2010 that between 5 and 15 billion dollars in pension funds were invested in agricultural land.⁶

Canadian pension funds represented more than one trillion dollars in 2010.⁷ They have high investment capacity and are looking for long-term returns. Thus, they are the type of financial players likely to invest in agricultural land. Until recently, however, they did not appear to invest in agricultural land either in Canada or overseas, but this trend has changed over the last two years.

Pension funds sometimes manage their investments in-house by themselves, but often they hand over management to institutional fund managers who have various clients. For example, PSP Investments manages the investments of a variety of pension funds, including some funds of the Public Service of Canada, the Canadian Forces Pension Fund and the Royal Canadian Mounted Police Pension Fund. What this shows is that even greater amounts are being pooled together with institutional fund managers.

Internally managed pension funds do not appear to invest in agricultural land, but among the most important institutional managers in Canada, three invest in agricultural land overseas: Alberta Investment Management Corporation (\$71 billion in assets), British Columbia Investment Management (\$87 billion) and the Caisse de dépôt et de placement du Québec (\$159 billion).

In 2010, **Alberta Investment Management Corporation (AIMCo)** acquired 252,000 hectares of forest land in Australia by purchasing Great Southern Plantations for A\$415 million. For the moment this land is forest, but AIMCo plans to partially transform its asset into agricultural land. It also plans to diversify its investment destinations. In its 2010 annual report, AIMCo stated, "Going forward, AIMCo will shift its geographic focus from North America to emerging markets in Central and South America, Southeast Asia and Sub-Saharan Africa. [...] Our investment scope may also be expanded to include opportunities related to bio-fuel for power generation, wood pellets and forestry carbon credits. We will also explore the benefits of investing in agricultural lands." Forest land is an investment similar to agricultural land. These are land investments, tangible assets that require specific management and expertise and whose returns become interesting over the long term. Even if investment in forest land is not as new a phenomenon as investment in agricultural land, very few institutional investors do it. The only ones to do so are AIMCo, the British Columbia Investment Management Corp., the Ontario Teachers' Pension Plan and the Public Sector Pension Investment Board.⁸ Thus, it is unlikely that investments in agricultural land are equal to or greater than in forest land. Other than AIMCo, which plans to

⁶ GRAIN, *Pension funds: key players in the global farmland grab*, June 20, 2011.

⁷ Toronto, Pension Investment Association of Canada, *Composite Asset Mix Reports*, 2010. Online. <http://www.piacweb.org/publications/index.html>.

⁸ Edmonton, Alberta Investment Management Corporation, *Timberland Investment, An AIMCo Perspective*, September 2011.

reorient a part of its acquisition towards agriculture and look for opportunities of investment in agricultural land in the future, only two Canadian pension fund managers invest in agricultural land.

In May 2012, it was revealed that the **Caisse de dépôt et de placement du Québec (CDPQ)** and the **British Columbia Investment Management Corp. (bcIMC)** had invested in a new 2 billion dollar company named TIAA-CREF Global Agriculture LLC. This news marked the entry of Canadian pension funds into the market for agricultural land. It also confirmed the suspicions of civil society observers.

TIAA-CREF Global Agriculture LLC was set up by the American pension fund Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA-CREF), which manages the pension funds of 3 million university professors and employees of not-for-profit organizations in the United States. The company plans to invest in agricultural land in Brazil, the United States and Australia. The CDPQ has announced an investment of \$250 million in TIAA-CREF Global Agriculture LLC but the size of bcIMC's investment remains unknown. It is possible that other Canadian institutional investors have also invested in the new company since very little information has been made public.

The largest Canadian pension fund, the **Canada Pension Plan**, does not appear to have invested in agricultural land, but we know that it has invested in the agricultural sector and that it participated in the Global AgInvesting conference in New York in 2010, 2011 and 2012. This conference for world investors promotes investment in the agricultural sector. This is one of the biggest, if not the biggest, conferences of its kind. Organizers of the 2011 conference claimed that participating investors managed 20 million acres of agricultural land.

The Canada Pension Plan Investment Board (CPPIB) possesses an agricultural sector portfolio, but its contents have not been made public. Thus, the portfolio may include foreign agricultural land, or it may be limited to shares in fertilizer companies. However, even if the contents of this portfolio are not known, we do know that some thirty companies in which the CPPIB has invested are found on the list of land investors drawn up by the site farmlandgrab.org, managed by GRAIN. All the companies identified are companies or financial institutions whose main sector of activity is not agriculture. The list includes Morgan Stanley, Deutsche Bank, Samsung Group and Macquarie Group. All these companies invest in agricultural land, but it is impossible to know if the CPPIB's investment in the company is directed towards their agricultural activities. It is thus not possible to establish whether the CPPIB's investment in these companies is based upon a desire to invest in agricultural land. It is more likely that the CPPIB invests in these companies simply because they are profitable, blue-chip financial institutions. Thus, for the moment, it is impossible to know with certainty whether the CPPIB invests directly in agricultural land, but considering its size and known interest in the agricultural sector, it is something to keep an eye on.

Canadian pension funds seem to be following the same path as various other American and European pension funds that invest in agricultural land. Other examples will likely come up over the next few years. Agricultural land is still an attractive new sector, albeit a risky one.

Universities

In June 2011, an article in *The Guardian*⁹ attracted attention to the fact that American universities are investing in agricultural land. The names of major universities like Harvard and Vanderbilt were mentioned.

Both American and Canadian universities invest considerable amounts to finance their activities and the pensions of their employees. Harvard's endowment fund is worth C\$30 billion. The endowment funds belonging to the University of Toronto (C\$1.4 billion) and the University of British Columbia (C\$950 million) are comparable in size to that of UCLA (C\$1.06 billion). However, contrary to what we have found with several American universities, Canadian universities do not invest in agricultural land, or at least not yet. None of the seven largest Canadian universities in terms of student body (Université du Québec, Université de Montréal, McGill University, University of Toronto, York University, University of Ottawa and University of British Columbia) invest directly or indirectly, though pooled investment funds, in agricultural land. Four of the universities confirmed that they were paying attention to the sector and that they were potentially interested in investing in it. If they invested, they would probably do so through a pooled investment fund given the expertise required for this type of investment.

University investments are predominantly divided into two funds: their endowment fund and their pension fund for professors and other university employees. At private universities, the endowment fund is generally larger than the pension fund since the return on investments made using this fund are a major source of financing for university operations. Public universities are less reliant on this source of autonomous financing since they receive public financing. Their endowment funds are thus, generally speaking, smaller than their pension funds.

Somewhat unsurprisingly, the trend observed in American universities is not seen in Canada. Very few Canadian universities invest in tangible assets like real estate, the category under which agricultural land is found. In addition, pension funds are generally larger than endowment funds at Canadian universities, in comparison with American universities, but this is particularly true if we compare Canadian universities with *private* American universities. Investment strategies are more aggressive for endowment funds than for pension funds. Investment management of pension funds is generally more conservative since retired university employees need to receive their pension benefits over the long term. Therefore, they invest relatively little in alternative investment categories, which include agricultural land.

Canadian universities also have less money to manage than the major American universities named by the Oakland Institute, and a large part of this money is located in their pension fund rather than in the institution's endowment fund. On a list of the 30 largest public university

⁹ John Vidal and Claire Provost. "US universities in Africa 'land grab.'" *The Guardian* (London), June 8, 2011. Online. <http://www.guardian.co.uk/world/2011/jun/08/us-universities-africa-land-grab>.

endowment funds in North America, only 2 are Canadian: the funds belonging to the University of Toronto and the University of British Columbia.¹⁰

Investment in agricultural land is generally made by investors who have a lot of capital, and who are looking to diversify a part of their assets. It requires a sizable minimum investment as well as specialized expertise, which is generally found in a large team of employees rather than a small one. It is true that small university pension funds often do business with external consultants and thus could have access to specialized expertise, but these consultation firms generally have more conservative investment approaches. Therefore, according to these criteria, the University of British Columbia, the University of Toronto and McGill University would be the most likely investors in agricultural land.

If, in the coming years, investment in agricultural land is shown to be profitable, Canadian universities will likely start investing in it. The next decade will hold the key.

¹⁰ Toronto, University of Toronto, *Endowments*, 2011. Online.
<http://www.finance.utoronto.ca/Assets/Finance+Digital+Assets/reports/endow/2011.pdf>.

Banks and insurance companies

Different reports have shown how major European and American banks participate in large-scale agricultural land investments. A report by *Friends of the Earth Europe*¹¹ uncovered links between European financial institutions and land transactions.

It is, however, very difficult to obtain information about bank and insurance company investments. In Canada, these institutions have no obligation to disclose their investments, so there is no way of accessing them except through unofficial sources.

On the surface, the five largest Canadian banks (Bank of Montreal, Scotiabank, Royal Bank, Toronto-Dominion Bank and Canadian Imperial Bank of Commerce) and the two largest insurance companies (Manulife and Great West) do not appear to invest in agricultural land in developing countries, either directly or indirectly through the purchase of shares in companies that invest in such land. However, these banks and insurance companies are very secretive about their investments and what has been made public is far from exhaustive.

The only—incomplete—lists to which we have access include the companies in which the banks and insurance companies have bought shares. They do not include their real estate investments. We cannot know if the banks invest directly in agricultural land by making land acquisitions or by investing in mutual funds that specialize in this sector. We can only see whether there are companies that invest in land among the companies that the banks or insurance companies hold shares in. There are very few such companies and, as is the case for pension funds, banks and insurance companies probably invest in those few companies for reasons other than their land investments.

To our knowledge, Canadian banks do not obviously invest in Canadian companies that have acquired land in developing countries. This is not surprising since those companies are generally small and new and represent a relatively high level of financial risk. There are, however, three exceptions: Sino-Forest, Cathay and Brookfield Asset Management, a major firm with highly diversified investments. But in the case of Brookfield Asset Management, the investments made by the banks could just as easily go towards farming operations in Brazil as it could to the shopping malls that Brookfield has bought in the United States or Asia.

Canadian banks and insurance companies do not appear to be participating in land investments in developing countries, whether it is by direct acquisition, through pooled investment funds or through investments in Canadian or foreign companies that have acquired land. But in reality, we do not know anything. The investments verified as part of this research probably represent only a small part of all their investments.

¹¹ Brussels, Friends of the Earth Europe, *Farming money*, January 12, 2012. Online. http://www.foeeurope.org/sites/default/files/publications/Farming_money_FoEE_Jan2012.pdf.

Conclusion

Currently, fifteen Canadian companies possess, lease or exploit major parcels of agricultural land located overseas, and twelve of those companies are involved in agricultural production. Almost all the transactions have taken place since 2005, and the majority of the transactions are for land in Africa.

The land investments of other Canadian financial players are less obviously defined but are emerging. Canadian pension funds did not appear to invest in agricultural land, but this trend has started to change over the last two years. The identified cases are investments made by group pension fund managers, and they are not currently targeting developing countries. University funds are not currently invested in land, but it is a sector that is of interest to them. Banks and insurance companies do not appear to invest in land, but only a small part of their investments have been made public. Thus, it will be necessary to follow the evolution of the sector over the next few years. As for the financial sector, greater transparency will be essential to knowing with greater certainty the current level of Canadian involvement in large-scale agricultural land acquisitions in developing countries.

It is clear that the number of Canadian companies that are acquiring agricultural land in developing countries is not comparable to the number of Canadian companies that are acquiring land for exploration and mining purposes. However, it is undeniable that several Canadian companies have recently joined this new land rush. General increases in land value, increasing food prices and recent agrofuel policies are all part of the appeal to Canadian companies. If, in the coming years, it is shown that agricultural land is truly a profitable investment, Canadian financial players and a greater number of Canadian companies will probably diversify a part of their investments into this sector. The lack of transparency regarding the large-scale land transactions of the last few years will remain an obstacle to a detailed understanding of the phenomenon, but the snippets available clearly show a very worrying trend around the globe.

Even if the volume of Canadian investments is not that high, their social, environmental and human rights impacts are not known and ought to be assessed. It is important, for example, to know whether the affected populations were informed or consulted beforehand, whether their property rights have been respected and more generally, whether the projects increase food insecurity in affected communities and countries. Now that we have a better idea of the level of Canadian involvement, it is time to look at the effects that these investments have in the field.

APPENDIX A

INVESTMENT DETAILS OF CANADIAN COMPANIES

| | |
|---------------------|-------------------------------|
| Company name: | AMG Bioenergy Resources Group |
| Land area acquired: | 334 hectares |
| Location: | China (Guangdong province) |
| Production: | <i>Jatropha curcas</i> |
| Product | Biodiesel |
| Transaction year: | 2011 |
| Transaction type: | Purchase? |

In 2011, the company established a subsidiary in China, AMG Bioenergy Plantations, in order to purchase two plantations and the user rights of the Chinese company, China Zhejiang Biodiesel. The company said that there was a potential acquisition of 15,000 hectares. It was also stated on the company's web site that it had signed an agreement with Vietnamese authorities to develop a *Jatropha* plantation there, but we were not able to confirm if this agreement concluded in a property purchase in Vietnam.

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| | |
|---------------------|-----------------------------------|
| Company name: | Bedford Biofuels |
| Land area acquired: | 160,000 hectares |
| Location: | Kenya (Garsen, Tana Delta region) |
| Production: | <i>Jatropha curcas</i> |
| Product: | Biofuel for the European market |
| Transaction year: | 2009 |
| Transaction type: | Sublet (45-year contract) |

In Kenya, land belongs to the government, and it is leased to individuals. The land acquired by the company is organized into "ranches," a form of collective management. Therefore, Bedford Biofuels sublets the land to ranchers.

Besides *Jatropha curcas*, the company also produces food crops and forest products in limited quantities, and raises livestock. The 160,000 hectares are divided into six lots. As of now, only 10,000 hectares are planted for their pilot project. The company said that there was a possibility of acquiring 200,000 additional hectares.

The NGO Nature Kenya is examining Bedford Biofuels' operations. It is concerned not only by the project's environmental impact but also by the company's questionable licensing process. The company has projects in the Tana Delta region, which has a very rich biodiversity and is home to several endangered species. The organization requested that a comprehensive plan be established for government land use in the region with the goal of establishing a framework for all land use plans before any land development project. Last September, the Kenyan government accepted to develop a plan, but the process will last at least a year. The company's pilot project, however, was not suspended. Instead, the company announced the start of planting. Moreover, Kenya's *Star* newspaper reported in August 2011 that the license obtained by the company to develop its pilot project of 10,000 hectares had been illegally issued by an employee of the National Environment Management Authority (NEMA), who has since been

suspended. The NEMA does not have the power to revoke the license; it is a power held by the Ministry of Environment, which has not suspended the company's permit.

| | |
|---------------------|--|
| Company name: | Brookfield Asset Management |
| Land area acquired: | 170,000 hectares of agricultural land/99,000 hectares of forest land |
| Location: | Brazil (several provinces) |
| Production: | Sugar cane, soybean, cattle and other/pine and eucalyptus |
| Transaction years: | 1984-2000-2005-2006-2007 |
| Transaction type: | Purchase |

Brookfield Asset Management is a major asset manager. The company invests in real estate, infrastructure and renewable energy worldwide and has assets worth \$150 billion. Brookfield owns agricultural land only in Brazil since 1984, through its subsidiary, Fazendas Bartira. Of the 170,000 hectares of agricultural land that they manage, 97,000 were acquired between 2006 and 2011. The 170,000 hectares are divided into 11 ranches, located in the provinces of Mato Grosso, Mato Grosso do Sul, Sao Paulo and Minas Gerais. In January 2011, Brookfield announced that it had raised the necessary investments for the development of a new investment fund, the Brookfield Brazil AgriLand Fund, which would be used toward acquiring existing agricultural land or pasture land that could be converted into more productive agricultural land with soybean and sugar cane. The company also owns approximately 99,000 hectares of forest land in Brazil.

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| Company name: | Feronia |
| Land area acquired: | 127,000 hectares |
| Location: | Democratic Republic of the Congo (Orientale, Équateur and Bas-Congo provinces) |
| Production: | African oil palm and rice |
| Transaction years: | 2009 and 2010 |
| Transaction type: | Purchase of 76% stake in Plantations et Huileries du Congo and 80% of the shares of the Kansagulu farm |

Feronia Inc. is currently the largest agricultural company in the Democratic Republic of the Congo. Feronia seeks to introduce a model of large-scale, automated agricultural production as was developed in Brazil. Based on information provided by the company, the strategy is to put into production abandoned plantations.

The company's operations are divided into two branches: the plantations and arable land.

First, the company has three oil palm plantations with a total area of 107,000 hectares. These three plantations are located in Lokutu (Orientale province) and in Yaligimba and Boteka (Équateur province). Feronia acquired these plantations by buying 76% of Plantations et Huileries du Congo (PHC, registered in DR Congo) in September 2009, which was established by a Belgian company in 1911. These shares were purchased from the multinational Unilever, who had owned the majority of shares in the plantation since at least 1975. Unilever grew cocoa, coffee and oil palm. Unilever apparently sold its shares because the plantations had not been

profitable for several years, and there was a need for major investments in plantation infrastructure. It is possible that Unilever also sought to dispose of the plantations because the fertility of the soil was declining. Feronia says that 17,000 hectares are currently planted, and 60,000 hectares will be planted within ten years. The company stated in 2010 that it employed 3,639 people in its plantations. This indicates a significant decline in the number of jobs at the PHC plantations, since Unilever stated in 2005 that it employed more than 7,000 people. This is most likely due to the fact that production is now much more automated and that oil mills have been modernized. The company has two oil mills and sells all crude palm oil to two refineries in Kinshasa, which they then sell on the domestic market. Feronia's objective is to do away with all importations of palm oil to DR Congo and possibly export to markets with high demand, such as China and India. In addition, 24% of the remaining shares of PHC belong to the government of the Democratic Republic of Congo. Shares held by Feronia are held through its subsidiary Feronia PHC.

Second, the company has, through its subsidiary Feronia PEK, 10,000 hectares of arable land in Kasangulu (Bas-Congo province). The company currently farms grains, fruits and vegetables to sell on the local market, and production is highly automated. Agricultural land was acquired by the company in late 2010. Twenty percent of Feronia PEK is held by a local Congolese family whose name is unknown. In December 2011, the company completed the planting of 1,200 hectares of NERICA 4 and 7 rice varieties, apparently the largest single rice planting in DR Congo. The first rice harvest was scheduled for February 2012. Although these varieties are not the result of genetic modification (GM), but rather of a conventional hybridization, Feronia has publicly stated that it is working with research centres in Brazil as well as private agribusiness companies, including Monsanto, to develop seeds adapted to tropical climates. It also indicated that it is currently using genetically modified and conventional seeds in its agricultural projects in the DR Congo. Only 1,200 hectares are currently in production, but the company plans to rapidly plant the 10,000 hectares it already owns. The company says it wants to eventually acquire more agricultural land to have a total area of approximately 100,000 hectares. As in the production of palm oil, Feronia wants its food production to replace imports in the short and medium term. In the long term, the company plans to become a major supplier of agricultural products in the world market.

It is also interesting to note that Barnabé Kikaya Bin Karubi sits on the board of directors. He held various important positions in two Kabila administrations, and is now DR Congo's ambassador to Britain.

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| Company name: | Kijani Energy |
| Land area acquired: | 75,000 hectares |
| Location: | Mozambique (Manica and Gaza provinces) |
| Production: | <i>Jatropha curcas</i> |
| Transaction year: | ? |
| Transaction type: | ? |

Kijani Energy acquired 75,000 hectares in Mozambique. We were not able to reach the company for more details.

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| Company name: | Kimminic |
| Land area acquired: | 68,000 hectares |
| Location: | Ghana (Brong Ahafo region) |
| Production: | <i>Jatropha curcas</i> |
| Transaction year: | 2007 |
| Transaction type: | Joint venture with the local population (50 years) |

Kimminic is one of the largest producers of *Jatropha* in Ghana. The company established a joint venture agreement with three communities in the Brong Ahafo region. The company has planted shrubs, and the farmers remain owners of the land, but they must not interfere with the production of *Jatropha* for the duration of the 50-year contract. The agreement was signed around 2007. Local communities that are part of the agreement receive 25% of the company's profits, and part of the land acquired by the company is made available to farmers so that they can farm on a marginal scale.

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| Company name: | MagIndustries |
| Land area acquired: | 68,000 hectares |
| Location: | Congo |
| Production: | Eucalyptus |
| Transaction year: | 2005 |
| Transaction type: | Lease to Congolese government (50 years+21) |

MagIndustries is a company that operates potash and magnesium mines in Congo. It manages 68,000 hectares of forest land to grow eucalyptus plants and to sell the wood chips resulting from the plants. Those 68,000 hectares of plantings are found mainly on land acquired by the company with its mining license. This plantation belongs to Eucalyptus Fibre Congo, of which more than 50% of shares are held by MagIndustries. Plantations were developed by Shell Oil.

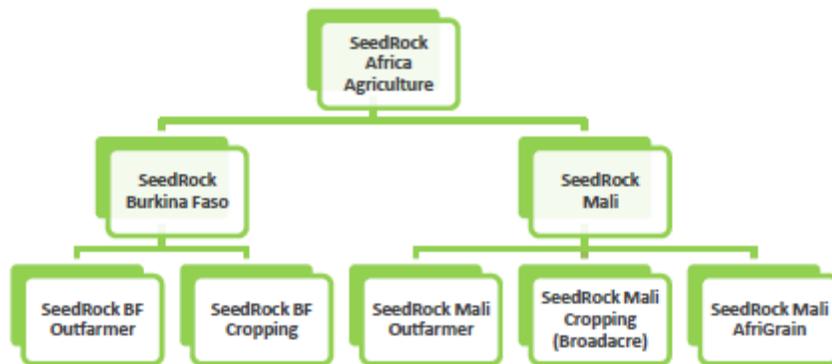
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| Company name: | Pan Asia Biofuels |
| Land area acquired: | 68,000 hectares |
| Location: | Cambodia |
| Production: | <i>Jatropha curcas</i> |
| Transaction type: | ? |
| Transaction type: | Lease |

Pan Asia Biofuels announced that it acquired 68,000 hectares of land in Cambodia, in lots smaller than 10,000 hectares, since the Cambodian law prohibits the sale of lots larger than 10,000 hectares. The company wanted to develop *Jatropha curcas* plantations. Checking with NGOs working in Cambodia on land grabbing in the country, places given by Pan Asia on its web site were consistent with land leased to Chinese companies. We contacted the company and it told us that the project was on hold, but it did not provide an explanation.

Company name: SeedRock Group
 Land area acquired: 68,000 hectares? More?
 Location: Mali (Bougouni and Kokéri regions) and Burkina Faso (and others?)
 Production: Sunflower, maize, rice, sorghum, soybeans, wheat
 Transaction year: 2010?
 Transaction type: Lease and outgrower scheme

SeedRock Group is a company headquartered in Vancouver which has agricultural operations in Africa, operated by its subsidiary SeedRock Africa Agriculture, registered in the British Virgin Islands and founded in 2009. SeedRock Africa Agriculture operates in two African countries, Mali and Burkina Faso, in three sectors. First, a portion of its operations are based on a “outgrower” model, where about 1,000 local farmers retain ownership of the land and sign a contract with the company to produce x amount of sunflower or maize. SeedRock provides them with inputs and agricultural expertise. The company also says that it wants to educate producers that it works with. Second, through its “Cropping” and “AfriGrain” activities, SeedRock leases land long term to produce sunflower, maize, soybeans, sorghum, wheat and rice. As for its "Cropping" activities, the Burkina Faso lands are deemed medium size by the company. In 2010, it had two plots of 1,400 and 600 hectares. In Mali, the activities are done on a large scale. The SeedRock Africa Agriculture’s structure is as follows:



In a presentation given in 2010, the company claimed to have amassed a little over 48,000 hectares, all activities combined. It also claimed to be in talks to expand the areas under its control in Mali and Burkina Faso, as well as in Ghana, Niger, Sudan and the Central African Republic. Notably, the company said it was on the verge of signing an agreement to lease 60,000 hectares of land in the Central African Republic, but its 2012 summary makes no mention of an expansion in this country. As of 2012, the company’s operations seem to be still limited to Mali and Burkina Faso, and the land available to the company is still about 48,000 hectares.

The duration of the contracts in the “Outfarmer” program is unknown, but as for the other programs, contracts are for a period of 25 to 50 years, often with an option to renew. In Mali, land that is under lease under the “AfriGrain” program in the Bougouni region is under contract for a period of 25 years, with a renewal option of 25 years. In the “Cropping” program, land is located in the Kokéri region in the Office du Niger in Mali; the contract is for a period of

50 years, and the company wants to establish a renewal option for an additional 50 years. In Burkina Faso, the lease is for a period of 25 years.

Moreover, it is interesting to note that the company's advisory board includes the former presidents of Burundi, Tanzania, Botswana, a former prime minister of Togo and a former president of the African Development Bank.

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| Company name: | Sierra Gold Corporation |
| Land area acquired: | 728 hectares of agricultural land/45,527 hectares of forest land for carbon credits |
| Location: | Sierra Leone (agriculture: Port Locko and Mara Mala; forest: Tonkolli district) |
| Production: | Rice, sorghum, cassava, peanuts, maize/Kiri trees |
| Transaction year: | 2009 |
| Transaction type: | Lease (50 years) |

Sierra Gold Corporation is a company registered in Nevada, but it is Canadian-owned and therefore managed in Canada. It is a small mining company that has operated gold mines in Sierra Leone since 2006. In 2009, the company decided to set up two additional projects: agriculture and carbon credits. So it leases 700 hectares of land to farm food crops for a period of 50 years. It also leases 45,500 hectares of land to plant Kiri trees to produce forest products and carbon credits for a period of 50 years.

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| Company name: | Sino-Forest |
| Land area acquired: | 894,000 hectares |
| Location: | China (several provinces) |
| Production: | Forestry (existing forests and plantations) |
| Transaction year: | 1994-1995-X |
| Transaction type: | Leasing user rights (30-50 years) |

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| Company name: | Sprott Resources, through its investment in the Union Agriculture Group (Uruguayan company) |
| Land area acquired: | 86,170 hectares |
| Location: | Uruguay |
| Production: | Beef, dairy cows, soybean, wheat, sheep, blueberries, honey |
| Transaction year: | 2008–... |
| Transaction type: | Purchase? |

Sprott Resources is a Canadian company that invests in farm land in Canada, through One Earth Farms. One Earth Farms is a partnership between Sprott Resources and First Nations in Manitoba, Saskatchewan and Alberta. Sprott owns about 60% of One Earth Farms. The company also invests in farm land in Uruguay. It owns approximately 9% of the shares of the Uruguayan company Union Agriculture Group, which was formed in 2008 and has 86,000 hectares of land in Uruguay. Sprott invested in this company in 2010. Sprott is not included in the report, because the company does not directly acquire farm land.

APPENDIX B

RESEARCH METHODOLOGY

Companies

The information provided on the fifteen Canadian companies was collected in several ways. First, each company's web site was consulted in detail. If a company is publicly traded, we also studied the documents it is required to make public, such as annual reports or management reports, with the Canadian Securities Administrators and on the SEDAR's official web site. When possible, telephone interviews were conducted with employees of the identified companies, and in some cases, they responded to detailed questionnaires that were sent after the telephone interviews. Information was also obtained through media, the Land Matrix project database, GRAIN's *farmlandgrab* web site and reports completed by other organizations.

Universities

The web sites and annual reports of the investment companies hired by the universities were consulted in detail, but most importantly, telephone interviews were conducted with investment managers of pension funds or university endowment funds.

Banks and insurance companies

The most difficult part was researching banks and insurance companies since they do not disclose their investments. Non-exhaustive lists of their investments were drawn up from the *Targeted* web site.

We also drew up a list of land investors from *farmlandgrab.org*. This list was created by extracting all the stakeholders identified on the site which are in any way involved in land investment.

The investment list for each bank and insurance company and the list of land investors on *farmlandgrab* were then cross-checked for any overlaps.

Pension funds

The information on the Canadian pension funds were obtained from their web sites and by analyzing their annual reports or investment reports. Telephone interviews were attempted, but were not possible.

A list of their investments, taken from their web site when possible or from the *Targeted* web site, was cross-checked with the list on *farmlandgrab.org*, as was done for the banks and insurance companies.