Foreign and Local Elite-Led Land Acquisitions in Madagascar

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1. Introduction

1.1. Conceptual Problematic

Madagascar stands out as the country that almost leased out 1.3 million hectares (ha) of farmland in 2009 to a South Korean corporation. The media frenzy surrounding the 'land grab' captured the international community given the size, length, and objective of the land deal. International media revealed that the corporation had leased the land for 99 years and planned to grow maize to export back to Korea. The project never materialized after it was cancelled due to political and social unrest. The Daewoo deal was just one of many investments in the agricultural sector within the past few years in the resource-rich country of Madagascar.

Starting in the mid-2000s, there was a sudden spike in interest in land from foreign investors particularly in the agricultural sector. Between the mid to late 2000s, 3 million ha were under negotiation by 52 foreign companies seeking to invest in agriculture (Andrianirina Ratsialonana et *al*., 2011; Üllenburg, 2010). However, about one-third of these investments were eventually cancelled, such as the Daewoo deal, after social unrest broke out in the capital city and political conflict ensued. These tensions led to the fall of the former president, Marc Ravalomanana. The opponents of Ravalomanana used the Daewoo deal as a political manoeuver to evoke negative publicity by showing how their president was mismanaging their natural resources (Pellerin, 2009; Allerdian, 2010). This led to widespread fear amongst the people of Madagascar many of whom began to worry about their own access to the land. The world financial crisis and world food price volatility of the mid to late 2000s as well as the political crisis (2009 to the present) has since discouraged many foreign investors from investing in the country (World Bank, 2010). This is evident in the marked decline in the size, number, and progress of foreign investments in Madagascar as now approximately 400,000 ha are targeted by 18 foreign companies (Burnod et *al.*, 2011).

Despite this drop in foreign interest, and the infamous legacy of the Daewoo deal, there continues to be interest in Madagascar's land by foreign actors seeking land for agricultural production. Investors are interested in Madagascar's land because it is cheaper than most land-rich countries, and investors expect to acquire land and other natural resources more easily in developing countries. Policy-makers, elected representatives, and national elites have welcomed investors based on their perception that foreign investments in land can generate revenues, boost economic growth, reduce poverty and food insecurity through employment opportunities, improved infrastructure, and technology transfer. Despite the fact that there is “little empirical evidence” on such large-scale land deals (Cortula et *al*., 2009), many are convinced that foreign investments in land are an opportunity for the country, as opposed to being a political, social, cultural, and environmental threat.

International institutions, scholars, and activists warn and argue that large-scale investments are a threat to rural livelihoods. The list of risks that local people may face is extensive. It includes, inter alia, food and nutritional insecurity through loss of livelihood via displacement, dispossession and expropriation; environmental degradation (i.e. soil erosion, deforestation, and pollution) through expansion of cultivated areas and use of chemical fertilizers; and reduced access to, usage of, and control over natural resources that sustain livelihoods (Borras and Franco, 2010; Cotula et *al*., 2009; De Schutter, 2009; Deininger et *al*., 2010; FAO, 2010; Deininger et *al*., 2011; Wollenburg et *al*., 2011). Local governments and foreign investors are also at risk, but generally they have less at stake (or have a fallback plan if projects fail) compared to marginalized groups in rural areas.

For governments, they can expect that investments will increase revenues. Some risks or threats include investors’ poor compliance to original agreement, political and social tension and conflict within the government and between local populations. For foreign investors, the main expected benefit is to generate profits and to gain control over natural resources. The investor is also vulnerable of losing their project or not generating expected profits if political instability erupts or local resistance the project develops.

Minimizing risks and threats and maximizing benefits for all actors is possible according to the World Bank, United Nations Food and Agricultural Organization, and International Federation for Agricultural Development, United Nations Conference on Trade and Development. In their 2010 report entitled *Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources* investments can produce a “win-win” scenario between host country and investor if all actors involved follow the seven principles outlined. The principles call upon actors to respect land rights, ensure food security, maintain good governance, engage concerned groups into consultation and participation, uphold laws, maintain social and environmental sustainability. Implementing these principles is referred to ask taking a “best practices” approach to investments. Given that these principles are not legally binding, it is unlikely that all actors adhere to and implement the principles set in this code of conduct based on findings that it is difficult to merely follow the national laws, which are binding. In practice, there has been a lack of information indicating that actors abide by the principles and few studies indicating that recent large-scale land investments produce win-win scenarios. In a recent study by the High Level Panel of Experts on Food Security and Nutrition (2011), it confirms that there is no evidence of ‘pro-poor, win-win’ scenarios in recent land deals.

The paper begins by questioning if foreign investments in land have produced a ‘win-win’ scenario. The study, however, is not limited to the gains and losses incurred solely by investor and “host” country; instead, it deepens the analysis to examine the impacts on local populations, governments, intermediary, and investor, and discusses of the diversity of roles within these groups. We are interested in how actors have gained and lost from investments in terms of access to and control over natural resources and economic gains, and whether the national regulations have been adhered to and enforced by actors. We assume that gains and losses incurred by actors are as a result of national regulations and whether or not they are adequately adhered to and enforced.

The paper begins by questioning if foreign investments in land have produced a ‘win-win’ scenario. The study, however, is not limited to the gains incurred solely by investor and government; instead, it broadens the scope of analysis to local communities and intermediary, and takes note of the diversity of roles within these groups. We are interested in how actors have gained and lost from investments and whether the national regulations have been adhered to and enforced by actors. We assume that gains and losses incurred by actors are as a result of national regulations and whether or not they are adequately adhered to and enforced. The paper is centered on revealing to what extent regulations protect local actors’ interests and needs in terms of access to and control over natural resources and economic gains. Our findings our based on a case study in which two Indian investors, who work with a Malagasy company that functions as an intermediary, have established two commercial agricultural projects. We find – in our case study - that the main “winner” in large-scale foreign acquisition of land in Madagascar is the intermediary represented by the local elite as it has the greatest access political, economic and social power which is evident in the roles it takes on during the processes of acquiring land, and during the production of food on the project sites. This finding leads us to argue that gains were not evenly distributed amongst other actors due to the lack of adherence and enforcement of national regulations pertaining to land and investment. Thus, our study finds that a win-win scenario was not realized.

1.2. Significance and Importance

The topic is significant based on the fact that investments may increase in the future and given that impacts it will have on poverty which continues to plague the island. The World Bank (2011) projects that these deals are not likely to “slowdown”, especially in sub-Saharan Africa. Since Madagascar’s land has been targeted by investors and welcomed by governments in the past, in the present, and (mostly likely) in the future, we find it necessary to conduct a critical examination into the investments’ results and impacts. Often investments are promoted and facilitated as a means of revitalizing the economy and agricultural sector which in turn increases the country’s capacity to reduce poverty. This study questions these claims within our case study.

More specifically, we are interested in understanding how or if investments have impacted rural populations in Madagascar, which are for the most part living in poverty. The rural poor can include, “the peasantry with its various strata, landless rural labourers, migrant workers, forest dwellers, subsistence fishers, indigenous peoples, and pastoralists” (Borras, 2010). This group usually does not have much voice when it comes to investments and have limited access to information about projects (Evers et *al*., 2011). This is problematic given that the projects established in Madagascar are established in rural areas where 80 percent live in poverty (US$1 per day or less) who depend on land (and other natural resources) for their survival and require large tracts of arable land, which are often occupied and in part cultivated (Cortula et *al*., 2009; Gorgen et *al*., 2009; Von Braun and Meinzen-Dick, 2009; World Bank, 2010). In Madagascar, 81 percent of the rural poor are “small-scale farmers” (INSTAT, 2011), working (on average) only 1 ha of land, and cultivate mainly rice (MAEP, 2005). The current realities facing the rural poor and the objectives of investors give rise to how foreign investments in land will impact this already land insecure group.

Most smallholder farmers are land insecure, meaning that their land rights – which may be locally secured on the basis of local and customary rules or social recognition – are not upheld or recognized by the State. Since the 2005 land reform, those who own land through the legitimization of customary or social norms have now been legally recognized. This law, however, has not been systemically enforced by the State. The land reform, in principle, expects that by increasing individual's access to mechanisms allowing them to legalize their right to the land, their land security will also increase.

In addition to the impacts of smallholder farmers, there is also currently a lack of information on how all actors are affected when foreign investors set up projects in Madagascar. What has been found is that local populations are often the least involved in the negotiation processes (Evers et *al*., 2011). More often than not, investment projects are discretely negotiated (Burnod et *al*., 2011), which make it easier to exclude those who will mostly be affected by the project – the rural poor. This study seeks to broaden the discussion by examining how all actors gain and loose from investments through examining actors' roles in projects at the micro level. Thus, the paper goes beyond identifying the actors and their roles at the preliminary stages of the project, by also discussing the impacts – an area that has yet to be adequately explored.

1.3. Structure of Paper

While the impacts on the rural poor is the primary interest, the paper also seeks to understand how other actors benefited or lost in large-scale land acquisitions as a means of showing the asymmetrical playing field in which these investments are based. Identifying the actors and their roles, and measuring how they gained and lost will be revealed during the two stages of the investments: (1) land acquisition to establish the project and (2) food production on the project sites. The following six sections attempt to differentiate the impacts incurred by each actor for the purposing of revealing the differences and similarities between each during the two stages.

The paper begins by providing a brief overview of the legislation and regulations pertaining to land acquisitions and foreign investments in Madagascar. Section 2 discusses the methodology and case studies used. Section 3 and 4 make up the bulk of the paper which (a) identify the actors' roles in the land acquisitions and food production, and (b) show how the actors gained and lost in terms of their access to and control over natural resources (i.e. land, water, and food), and in terms of their economic and financial status. The discussion in section 5 reveals the gap between principle and practice in terms of how land is acquired and the actors involved, and the uneven distribution of gains.

1.4. Land and Foreign Investment Regulations

Within the past decade, there have been several changes to the legislation relating to land and foreign investment. This section attempts to illustrate how recent land reform and investment law appear to be conflicting in principle.

1.4.1. Land reform

The land reform which began in 2004 has implemented new laws to modernize land services and decentralize the management of natural resources for the purpose of strengthening land security for local land users (Teyssier et *al*., 2009). Two major shifts have occurred with the reform. First, before the land reform officially got underway in 2005, land that was untitled but occupied was deemed to be State-owned. This kind of land could be claimed by its owners or users through customary laws. With the current and ongoing land reform, untitled and occupied State-owned has taken the status of "untitled private property" which means it is no longer considered State property (Teyssier et al., 2009 Andrianirina Ratsialonana et *al*., 2011). As a consequence of this reform, the state can only lease or sell state-owned land, meaning (i) land titled in the name of the state or, (ii) untitled and unoccupied land. The state, through the land services, can neither lease nor sell land that includes or encroaches upon titled private property or upon occupied land (labeled untitled private property) (Andrianirina Ratsialonana et *al*., 2011, Burnod et al., 2011).

The second major change brought about through the land reform was the establishment of local land offices for the purpose of increasing local populations' access to obtaining private property rights through the legal framework. Before the land reform, the only way that someone could legally secure their land was through applying for a title deed issued by the country's State land registry services. Now with the new laws, local people can obtain a land certificate, which confer similar property rights as a title deed, from a local land registry office (called *guichet foncier* in French) (Teyssier et al., 2009). The local authorities, comprised of elected representatives and the claimant's neighbours in the village, legalized individuals or groups' claim to land based on pre-existing customary rights through the delivery of certificate The certificate system is more accessible to the average Malagasy as it is almost US$ 500 cheaper and takes only 6 months, not 6 years which is the time it takes to process the deed. Not only it is more accessible for the population, but it bestows more power to local governments, rather than central government, to issue land certificates (ECR 2008; Teyssier et *al*., 2009, National Land Observatory, 2011). In essence, the decentralization of land management in principle bestows greater power at the local level, particularly the government who takes on a new role as the gate-keeper of land rights.

As it stands now, there are now two systems for land management: one at the state-level where one can obtain a title deed from the national government and one at the local level which issues a land certificate granted by the local government (Teyssier, 2010). Even though formalizing land rights has been made easier for some local populations, most communities determine one's access to land based on customary rights (Evers et. *al*., 2011).

1.4.2. Investment Laws

For the past few years, the state has developed policies and legislation to promote foreign investment and make it easier for foreign investors set up projects in Madagascar. During the time when the former president Ravalomanana was in office, his government called for the creation of Agricultural Investment Zones (ZIAs) in Madagascar for the purpose of making it easier for agribusinesses to access land. In the Madagascar Action Plan (2007-2012), the creation of agribusinesses was one way to improve agricultural productivity which has been stagnant for the past 30 years. The regional government played a key role in identifying lands to that would be ZIAs. The creation of ZIAs was meant to favour private investors, national and international. With the recent political changes, the ZIA lands have not officially been recognized by the new government. This has created problems for investors who have established projects on ZIA land. This problem was observed in our fieldwork.

Foreign investors targeting land to establish an agricultural project have to adhere to the laws set in the Constitution and Investment Code. The Constitution, which was recently re-written and accepted by referendum, is ambivalent on how foreigners can acquire land. Currently, it does not clearly state that foreigners cannot buy land (Burnod et *al*., 2011). The new Constitution refers to the Investment Law (2008), mentioning the possibility to deliver "authorizations of land acquisition" to foreigners, but this was never done in practice as it has not been adopted by the decree stipulating how this can be done.

To acquire land, foreign investors have to adhere to the principles of the *Circulaire* N°2010-321, a new regulation enacted by the current government led by President Andry Raojelina. For investors planning to use more than 250 hectares a commission of representatives from each of the concerned ministries has to evaluate and approve the investor's plan. For those planning to use more than 2,500 ha, the plan has to undergo an evaluation process by the Council of Ministers. The objective is to allow governments to assist investors in completing the processes for acquiring land and setting up their projects. By doing this the government also aims to obtain and centralize information on the on-going agribusiness projects (ibid).

Investors are also required to have an environmental license if their projects are larger than 1,000 ha. This is required under the environmental law (decree MECIE, 2004) enforced by the National Agency for Environment. In order to obtain the license, investors must conduct an environmental impact assessment which then needs to be approved by the Agency.

Such procedures are, in principle, meant to help to protect and respect owners of titled private property and un-titled private property, as well as, to safeguard special status zones (national parks, land reserves). Under the new land laws, only State-owned land, which is genuinely unoccupied or "vacant without master" can be leased to investors and developers. State land services are responsible for implementing and enforcing the new regulations which stipulate that investors must follow procedures to ensure that proposed investment projects use is in fact vacant and available. Thus this legislation is meant to directly give governments more control over land allocation by having greater access to information, and to ensure that investors adhere to the regulations when acquiring land and establishing their projects.

1.4.3. Incoherent and Conflicting Policies

Recent government legislation to help local populations formal their rights and to promote foreign investment is in principle conflicting (Teyssier et al, 2010). With the land reform, locals are able to formalize their legal ownership which is supposed to, in theory, shield them from losing their land. However, at the same time, the government promotes foreign investments which put more pressures on rural populations who have no or limited access (physically, economically, and socially) or limited knowledge to formalizing their land rights. For such communities where investors target land, populations are at risk of losing their land and livelihoods, especially if they cannot legally prove their ownership. Nonetheless, even with a certificate or title deed, it does not necessary protect local populations from displacement, but at least with some form of legal documentation they may be able to receive some compensation for losses incurred. Between the legislation that seeks to protect the land user and the policies that seek to facilitate land investment, the governments' agenda to promote land investment may threaten to override the new land laws and, in essence, local populations' access to and control over natural resources now and in the future.

In practice, it has been found that investors and State representatives often ignored or bypassed official legal channels which threaten local land rights. Customary land rights in particular are partly not respected due to the imperfect implementation of the law (Andrianirina Ratsialonana et *al*., 2011; Evers et al., 2011). This lack of recognition of the local land laws, and adherence to, and implementation of the new land laws at the various levels of government and within communities has caused problems between local populations, government, and investors. The confusion and conflict within and between local, national, and central governments about which regulations are to be followed and enforced can make it easier for powerful actors to take advantage of a weak governance system by developing their projects without respecting the regulations.

2. Description of the Methodology and the Case Study

2.1. Overview

The study employs a case study approach to reveal the nuances within large-scale land acquisitions in Madagascar. The fieldwork was designed to examine the patterns and dynamics unleashed through land acquisitions at the micro level to better under the actors involved and how they have been affected. Fieldwork was carried out from May to July 2011 in village M and village P where there are two commercial agricultural project sites, referred to as M and P[1], respectively, and also in Antananarivo, the capital city of Madagascar. Twenty-eight one-on-one semi-structured interviews and seven group interviews were conducted during the three months. Interviews were conducted with the local population (including smallholder farmers and entrepreneurial farmers that were both worked and did not work for the projects); local and regional government authorities; local members of the military; employees of the projects (including labourers, contract workers, project managers, and administrators), agricultural technicians working as consultants for the projects; and, directors and managers of both corporations and the Malagasy intermediary firm.

We have chosen to focus on two commercial food production sites (herein referred to as projects) in northern Madagascar because they make up the country's largest food production sites that have been established by foreign investors within the past few years[2]. Two Indian corporations, Munja and Penja, finance the projects in two different sites, site M and site P, respectively, and are managed with the help of a Malagasy intermediary firm (Maco)[3]. The projects mainly produce maize and arhar[4]. The land leased cover a surface totaling 6,450 ha. The project P is operating on three different kinds of land: (a) vacant without master, (b) titled private property, and (c) untitled private property, together totaling 6,000 hectares. The project M covers 450 ha of land and has been established on military land (Table 1). These projects were chosen for the case study because both have begun cultivation and have harvested crops, which make it possible to analyze the impacts. Cultivation began in 2009 on site M (277.5 ha) and 2010 in site P (262 ha). So far, there has been one harvest on site P and two harvests on site M. Unlike site P, site M is a part of a two-year pilot project. In a few months, the two-year period will come to a close. It is not clear, what the plan is for the future.

Table 1: Breakdown of the Agricultural Projects

First Production year	Project/ Site	Investor	Land Ownership	Land Leased (ha)	Area cultivated in 2010 (ha)	Area cultivated per crop in 2010 (ha)	
						Maize	Arhar
2010	P	Penja	Mix*	6,000	262	262	0
2009	M	Munja	Military	450	277.5	19.5	158

Source: Fieldwork in the northern region of Madagascar (2011)
Notes: *The land includes: (a) unoccupied, (b) titled and (c) untitled private property.

2.2. Actors Involved in the Agricultural Projects

2.2.1. Investor Munja

Munja is a subsidiary of a large Indian corporation that has carried out activities mainly in the energy sector in India for the past few decades. The corporation began investing in Madagascar's energy sector in 2008 and the agricultural sector in 2009. Prior to 2009, the corporation and its subsidiary had no previous experience in conducting agricultural activities in Madagascar. Before setting up the projects in site M, Munja's first agricultural investment took place in a different region to cultivate various grains and vegetables on a much larger scale. This first project failed in large part to the political crisis in early 2009 which was triggered by large-scale foreign investments. Munja abandoned that project and nine months later set up two projects adopting another strategy to access land. This led them to acquiring military land which was advantageous for them as the land was titled, meaning that they needed to only negotiate with the owner. This is case of the project on site M, one of the cases examined in our study.

Munja's main objective on site M is to produce food in order to create a showcase of agricultural development to present to other prospective investors. Munja is more interested in land and project management and land speculation rather than producing food. Munja's primary role is financing the land lease from the military and deciding what food is produced and how.

2.2.2. Investor Penja

It was found that Penja is a subsidiary of an Indian insurance company. The insurance company has existed in Madagascar for the past few years. Like Munja, Penja has no previous experience in conducting agricultural activities in Madagascar. Penja started to invest in food production in Madagascar in 2010 on site P. Its main objective is to produce maize for export.

2.2.3. Maco: The Malagasy Intermediary and Broker

Maco, a Malagasy company, was created in 2009. Before 2009, it was an import-export company for 10 years. While the company's title indicates that it is an agricultural engineering company, it functions as a developer and manager of projects in many regions of Madagascar and in various sectors, i.e. agricultural, energy, and tourism. In the studied region, Maco has acquired for lease or is in the process of acquiring just over 12,000 ha of land, half of which is on military land.

Outside the region, Maco is in the process of negotiating over 40,000 ha of land for other projects. It is able to negotiate vast tracts of land because the managing director is an influential, well-known businessman in the country and abroad and has many powerful connections. Another reason is that some of their senior-level employees and consultants are also current and retired government employees at the local and regional level who are familiar with government procedures and laws pertaining to land and investment. Through Maco's political and social connections it can have privileged access to state institutions.

Maco identifies itself as a facilitator of investment, meaning that it sells investment opportunities in Madagascar to foreign investors. In agriculture, Maco deals with all the procedures that foreign investors need in order to carry out their projects from the finding and leasing of land to project management and building infrastructure. In both sites M and P, investors finance the projects.

2.3. Project Area and Sites

Site M is on military land located in village M. The area is easily accessible – the roads leading to the village are paved and it takes less than 1 hour to get there from the main city. The project site is divided into two parts: the main part is located on a former training and shooting field totaling 434 ha, and another part is in and around a military camp totaling 16 ha. For the project, the military also allocated one building inside the camp to be used as a warehouse for storing crops. The land was originally inherited by the Malagasy *gendarmerie* (rural military) from the French military. The military camp mainly serves to train civilians who would eventually become part of the reserves.

Most of the agricultural land in village M has been titled to the military as well as a French corporation which began its activities during the colonization period. In addition to the land occupied by the military, over 2,555 ha of land are titled to the French corporation, which makes up more than half of total available land in village M. Both Munja and Maco were once interested in leasing this land but the French corporation could not accept their bidding price. For villagers in the area, most are using land but have no rights to it. Some are now trying to negotiate with the French corporation to own the land.

Site P is located on a vast plain close to the Indian Ocean. Access to the areas is poor as it takes over 1 hour to get to the village on dirt roads from the highway. The warehouse, used as the main office for the project is about a 30 minutes walk from village P where most employees and daily workers live. Three communes[5] are found within the area acquired by Penja which covers 6,000 ha. In 2007, Site P was classified as ZIA by the regional government. Munja was the investor who negotiated the land lease from the central government through Maco. In 2010, Munja subleased the land to Penja. When Penja began cutting trees and removing stones to prepare the land for cultivation, Penja realized that some parts of the land had owners. Those owners had even land title. During the survey, a Maco senior-level employee revealed that out of the 6,000 ha leased by Penja, 4,000 ha were unoccupied, and 2,000 ha were titled property, and untitled private property. However, a local government official claimed that only 2,000 ha were unoccupied and that the remaining land is all private property. This shows the discrepancy and inconsistent information about land status between the actors, which has caused conflict between investors, government, and local populations. Until now, Penja has only cultivated 262 ha (representing 4% of the total land acquired) which does not infringe on those private lands. In subsequent harvests, it plans to expand cultivation which may lead to more conflicts in the future. Nonetheless, there has already been resistance from local populations who used to use part of the 262 ha for animal grazing and growing trees, mainly jujube trees.

2.4. Villages and Farmers

The two villages are similar in that they are made up of mostly smallholder rice farmers, but they are different in terms of size and population and their source of income (Table 2). In both villages, most farmers were either tenant or sharecroppers managing less than one ha of land. For the most part, people earn money by selling tomatoes (in site P), and maize, cassava, and chickens (in site M). They produce rice for self-consumption.

In terms of producing food, most farmers in both sites produce rice at low levels of productivity. In both sites, the average yield was two tons per ha. To assess the impacts of the projects, we selected two farmers in different positions. Impacts under scrutiny were changes relative to access to, and control over natural resources, to access employment opportunities, to income variation.

The two individuals are tenant farmers and were both employed by the agro-projects. In village M, Mr. Ramarison is a smallholder farmer. He uses in total 80 ar of land to cultivate, on 20 ar plots, respectively rice, cassava, maize and groundnuts. Crops are mostly produced for household consumption and for animal feed as the family also raises chickens (40 heads) and two cows. To obtain cash, Mr. Ramarison and his 4-person family sells chickens. Mr. Ramarison sells one chicken about one or two times per month, so his annual cash income is on average US$71 per year on average, or $0.20 per day. Before the project arrived, Mr. Ramarison had no off-farm activities. Since 2010, he is employed as a guard in site M. For the project in site M, Mr. Ramarison was worked as a guard.

In village P, Mr. Josia is an entrepreneurial farmer and vice-mayor of the commune. Relative to the others farmers, he is a better-off farmer and is one out of a few farmers that uses modern agricultural techniques and inputs. His household is also composed of four persons. He cultivates a total area of 2 ha. He gets enough rice to feed his family with his 1 ha of land that he rents from his father. He also produces tomatoes, the main cash crop. The total annual cash income from selling rice and tomato can reach MGA2,000,000 (US$1,000) for Mr. Josia, or $2.70 per day on average. For the project in Site P, Mr. Josia was hired as a daily worker.

Table 2: Size, Household, and Agricultural Crops Grown in Village M and P

Village (*fokontany**)	Size (Ha)	Number of Households	Most Produced Crop	Cash Crops
M	4,600	350	Rice	Maize, Cassava
P	10,000	500	Rice	Tomatoes

Sources: *Plan de Développement du Fokontany* (Local Government's Development Plan 2010-2011)
Note: *Fokontany* is the smallest administrative division in Madagascar.

3. Land Acquisition and Food Production

3.1. Land Acquisition

On both sites, Maco, the Malagasy intermediary, was the main actor in terms of finding and acquiring the land. For both projects, the local populations (including the smallholder farmers and gendarmerie trainees) were not consulted and did not participate in the negotiating processes. For negotiating the land, the high-ranking officials of the gendarmerie and the regional government in site M and site P, respectively, were the main decision makers and entities involved in negotiation. The local gendarmerie, local government, and local people were informed after their superiors finalized the deals.

3.1.1. Site M

When Munja decided to invest in agriculture in Madagascar, it made a contract with Maco to establish the project. Munja funded Maco to realize land access procedures and to select an area suitable for maize and arhar production.

Maco is composed of all the experts required to select suitable areas and legalize land access. Maco leaders recruited government authorities and agricultural experts on a temporal basis to obtain information about agricultural activities and the land situation in the region. Maco employed regional representatives from the Ministry of Agriculture and, with this information, maco made field visits to various communes to assess whether or not the area was suitable for maize and arhar production (i.e. soil quality and water availability and how it could be accessed physically). To assess the legal situation of the land, Maco employed a former topography agent. Using information provided by this employee and others, the company learned that the land was owned by the military. The leader easily approached the Secretary of State of the gendarmerie and directly negotiated the land deal for 7 years, extendable to 15 years. The regional and the local government, the gendarmerie camp officers and the villagers did not participate in the negotiation. They were informed about the lease of land to an Indian investor after the deal was signed.

3.1.2. Site P

Using site M to show prospective investors the potential for agribusiness, Munja began the next step of looking for investors to set up agro-projects in the region. It attracted Penja, another Indian corporation, to produce maize for export. But Munja identified the land thanks to Maco. Once again, and thanks to their “experts” working for the Ministry of Agriculture, Maco selected the area. As for the military land, it selected a zone with a legal status appropriate to ease the land acquisition – in this case a ZIA. As in site M, Maco strategically employed consultants to lead the next step, such as the Vice Mayor of the commune hosting the targeted land to convince the local authorities to agree to an (informal) rent (or land tax) of MGA 400 per ha per year (US$0.20). He employed the local topography agent to get a map of the chosen location. Later, Maco got authorization form the region which allowed Munja to acquire the land and then sublease it to Penja. During this process, the local population was not involved in the negotiations. The commune informed the locals about the land deal after it was made. The land rent, income tax and other taxes and commissions paid to the central and regional government were not disclosed.

Conflicts have now erupted between local populations, local authorities (i.e. the mayor of the commune), Maco, and Penja because the 6,000 ha that has been leased is not completely state-owned land. There is an estimated 2,000 ha of titled and untitled private property. Approximately 100 households (roughly 500 people) occupy this land. This demonstrates that the legal procedure to access land is not respected as the legitimate path for setting up investments. Maco plans to negotiate with these households some kind of deal to compensate those households that have to relocate so that the 6,000 ha targeted by Penja is located in one block of land.

3.2. Food Production

3.2.1. Site M

Maco has also played a key role in the production of food on project site M. It was in-charge of executing Munja's instructions about what crops to grow (including the variety, i.e. local or Indian), as well as hiring and managing the personnel to provide technical advice on crop production as well as recruiting those to physically carry out all the agricultural activities such as preparing the land, digging wells, weeding, harvest.

The results of the two harvests were extremely low. In the two harvest that they had in the past two years, both have performed poorly as productivity has been 0.5 tons per ha, which is lower than the local average for maize production which is 3.2 tons per ha, or 1 to 1.5 ha per ha nationally. When using proper techniques, the maize should have reached between 4.5 and 7 tons based on information about the seed used, which was IRAT 200[6].

These poor results resulted from poor management. In practice Maco's role as the project manager was not clearly defined. Munja's employees, coming directly from India, were also put in-charge of similar activities. Confusion over roles and responsibilities were strong and reinforced by language barriers, which was used as an argument to explain the poor result. Maco complained that Munja was later in providing the funds needed to carry out the activities.

Low result also resulted from poor techniques. Tractors were used to flatten and plough the land. However, they were but not to sow. Sowing was not carried out on line but randomly, and the Malagasy and Indian seed varieties of maize and arhar were mixed. Therefore, some plants grew in crowded areas making it difficult to weed and harvest, and making it difficult to know the results of production by each kind of seed. Fertilizers and insecticides were applied too late or with insufficient quantity.

Other than the technical consultants hired by Maco, smallholder farmers and *gendarmerie* trainees in village M were hired mostly as a daily labourer. About 30 daily labourers were hired; most of them trainees from the local *gendarmerie* camp. The workday lasted 8 hours and people were paid MGA3,000 (US$1.50) per day. This rate is lower than the legal minimum wage[7]. The *gendarmerie* trainees were hired through an informal deal between Maco and the supervisor of the local *gendarmerie* camp.

The other jobs that were available were contract workers including farm managers, supervisors of daily workers, warehouse keepers, guards, and tractor drivers. In total, 6 jobs were offered. The contract workers were paid MGA100,000 to 150,000 (US$51-77) per month, which is slightly higher than the legal minimum wage in Madagascar. The contracts were for three months, renewal of contracts was possible but this was up to the Munja to decide.

3.2.2. Site P

In December 2010, Penja started out by putting Maco in charge of managing the project, but did not delegate the decision making. Similar to site M, Maco did not have autonomy in decision making, especially in terms of the project's expenditures. As of April 2011, Penja ceased the deal with Maco and gave it an advisory role so that it could directly manage the project. This meant that all the personnel hired by Maco became employees of Penja, including the farm manager, supervisors of daily workers, warehouse keepers and guards.

Contrary to site M, most activities were done manually, which means that more employment opportunities were offered to locals. Out of all the activities carried out, only once was a tractor used, which was for ploughing the land. About 700 daily labourers were hired for clearing activities (cutting trees and removing stones), sowing and weeding. Ten contract farmers, including farm manager, supervisors of daily workers, warehouse keepers and guards were also hired.

When the fieldwork was carried out, Penja had not finished harvesting because it was carried out at a slow pace. Harvesting was done manually and labourers had to walk about one kilometer (one-way) to carry crops from the farm to the warehouse. The timing of the project's harvest also coincided with the local's rice harvest, so few people were interested to work for the project as they were already occupied with harvesting their own crops. According to project managers on site P, there were never enough workers, meaning that they were always looking for more workers to complete the activities faster and even had to get workers outside of the village area. Daily workers were asked to work 10 hours for MGA5,000 (US$2.50). Even though, the rate was the equivalent of the average local wage rate, it is well below the legal minimum wage rate.

As was found in site M, the yield per ha was only 0.5 tons, and three-quarters of the cultivated area did not produce any crop due to poor agricultural techniques. For 2011-2012 harvest year, Penja plans on improving roads and building a dam so that they can increase their production.

Table 3: Employment and Income Earned by Daily Labourers on Site P

Activity	Total Number of Labourers Hired	Total Volume of Activity (person day)	Average Working Day per Labourer	Average Income per Labourer (MGA)	Average Income per Labourer (US$)
Cutting Tress and Removing Stones	400	5,735	14	71,688	36
Planting	150	2,611	17	87,033	44
Weeding	150	7,075	47	235,833	118
Harvesting (ongoing)	45	899	20	99,889	50
TOTAL	745	16,320	98	494,443	247

Source: Fieldwork in northern Madagascar (2011).

4. Effects of the Projects on Actors

4.1. Investors

Investors, as a whole, have gained in terms of acquiring medium to large tracts of land for agricultural production, and will soon gain control of local water sources needed for food production on the sites. While the terms of contract are not available, it appears that their investments are risky because they are not fully aware of the local land situation and have not involved other actors, namely local people, during the land acquisition phase, which may lead to local resistance against the project. Investors' greatest loss incurred was financially. At this point, it appears that both investors will not break-even.

4.1.1. Financial Losses

From the two harvests, the output produced on site M and P was both low in quality and quantity. Most of the maize produced was sold locally to a poultry farmer as animal feed and some were wasted as they were infested with insects. On both sites the yields were below the national, regional, and local averages of maize production and below the potential yields expected when using the variety of maize, IRAT 200.

Table 4 shows that project M incurred a loss of MGA 11,354,000 during the second production year. The data presented only concerns the direct variable costs incurred, and does not take into account some variable costs like the commission on harvest to be paid to the commune, the investment costs (i.e. the importation of eight tractors and purchase of other agricultural machineries for well digging and land clearing) and the overhead costs (i.e. Maco's fees and commission, and land rental fees).

In Site P, we were unable to calculate the income and expenditure because harvesting is still ongoing. However, based only on the daily labour costs already incurred (Table 3) and the expected output from the first harvest, there is already a financial loss. This based on calculations in which we subtract the labour costs from the expected income. Based on the expected output (130 tons) and the price per kilogram (MGA 300) income is MGA 39,000,000. The labour costs for planting, weeding, harvesting is MGA 52,925,000. Without including other costs associated with the project, Penja can expect to incur a loss of at least MGA 13,925,000 (about US$7,000).

Table 4: Income and Expenditure Account for Project M in July 2011

		MGA
Income		12,000,000
Output sold on the local market: 40T of maize		
Market price: MGA 300 per kg		
Expenditure		23,354,000
Contract labour: (4x100,000 + 2x150,000) x 6 months	4,200,000	
Daily labour (436 person-day x MGA 3,000)	1,308,000	
Fuel	17,000,000	
Seeds (47 ha x 45 kg x MGA 400/kg)	846,000	
Loss		-11,354,000

Source: Munja

4.1.2. Access to and Control over Natural Resource

With the land deals, investors have control over the land as well as local water resources; however, their control over these resources is in some cases risky. In site M, Munja has begun digging several wells which may or may not threaten the local population's access to water. In site P, Penja plans to build a dam which will reduce local's access to water as the water is re-routed from the well directly to the project site, bypassing some local villages. For Penja, their control over the natural resources seems to be risky as they were not directly involved in negotiation the land. The local resistance to the project and their lack of information about the land statuses within the 6,000 ha may threaten their activities in the future as cultivation expands and infrastructure is built.

4.2. Government and Military: Local Loses and Gains

The government has gained and lost depending on the level and section of government. In both sites, the mayors and vice-mayors of the communes have gained financially as they have received taxes paid by the investors and employment opportunities. For project M located on military land, the high-ranking gendarmerie officers have also gained as the investor gave them the land rental fee. Members of the regional government could also gain financially as they received a commission for helping to find the land. The ones who lost financially were the central government as they were excluded from negotiations, during which point they could have collected the land rental fee. The lower-ranking government officials of both the regional and local government did not gain financially either as it was their superiors who were involved in both the land acquisition and food production.

4.2.1. Project M

In site M, Maco leased the land from high-ranking members of the *gendarmerie* based in the capital city. The local *gendarmerie* that once used the land as a shooting range was not directly involved in the negotiation process. It was not until after the decision was made between investor and military authorities in Antananarivo that the local gendarmerie was informed. As a result, conflicts have ensued within the local and national gendarmerie, and between the gendarmerie and Maco and Munja. For example, due to the late payment of the *gendarmerie*'s wages and the unfilled request made by the gendarmerie's head for more commission, the *gendarmeri*e members themselves stole the project's crop on 3 ha of land

The local government was also not involved in the negotiation and yet they have received threats from local people who think that the local authorities have sold the land to Munja. The local government tried to get some assistance from the regional government in resolving conflicts but no support has been offered.

Although, the mayor of commune received a tax by Maco (which comes from Munja) called "ristourne" which is a kind of tax paid when transporting raw materials to another area for commercial purposes.

4.2.2. Project P

In site P, the local government could gain financially by receiving a tax paid by Penja and employment opportunities offered through the project. Contrary to site M, the mayors and vice-mayors of the three communes located within the land acquired were involved in the negotiation. Despite the fact that the local authorities knew that some of the land that Munja wanted to acquire was private property, they agreed to the project because of the tax benefits they would receive. The tax the three communes could expect to receive is MGA 2,400,000 (US$1,200) in total. This represents an increase of 120% the government budget, based on the average local government budget which is about US$5,000 to $7,000. Even if the local authorities did admit that there was private property, they did not do anything to defend the local communities' interest but let Maco continue its undertaking.

It appears that the local authorities enticed by money and overruled by the regional government's authority, was not in a position to negotiate an alternative. And, some did not want to jeopardize the project given the financial perks that they could receive. This is evident by the fact that local authorities were working for Maco and Penja during the negotiation period and during the food production phase. For example, the Vice-Mayor of one commune was hired as a daily labourer (Mr. Josia), and one of the mayors was a consultant working for Maco. The local government, specifically the high-ranking authorities, have profited from the project in terms of the tax received and employment opportunities.

4.3. Farmers

The local population, namely the rural poor, has gained the least in both sites. While some could increase their incomes significantly by working for the project, the employment opportunities will decrease significantly and will be limited in subsequent production years as mechanization is fully integrated. At this point, locals' access to land has been threatened, namely pastoralists who previously used the land for grazing. In the future, access to land will be reduced as investors use more of the land acquired to cultivate, which will become an issue especially in village P where livelihoods occupy the land within the land acquired by the investor. Access to food in village P has been reduced as 1,000s of jujube trees were cut down. Access to water in both villages has not directly threatened locals' access to water, but as dams and wells are created this will likely impact local accessibility.

4.3.1. Job Opportunities and Income in Site M and P

In both sites, there were employment opportunities offered to local populations; however, most of the jobs did not come with a formal contract. For the farmers, the employment opportunities were beneficial as the agro-project production started in December, which meant that during the time when the agro-project needed labourers, the local farmers were not busy with their own household farming activities. Therefore, the employment produced by the project did not conflict with the farmers' activities so the income made from working for the project allowed them to get money during the time when their income tends to be lower compared to the harvest season.

In site M, the project had a significant impact on the income of farmers as proven by Mr. Ramarison's case. He worked as a guard for six months and could make MGA 600,000 (US$300) during these six months representing three times his initial annual income. However, the farmers who benefited from the project were few. Out of the approximate 700-person labor force in village M, less than five percent were hired.

In site P, more employment opportunities for locals were available. For the locals that were hired, most were hired as daily labourers. From a total of 500 households in village P, 750 individuals were hired as daily labourers – meaning that more than half of the labour force in village P could get a job. Compared to the income levels before working for the project, the cash earned from being a daily labourer allowed farmers to earn cash at a time when the amount of work available was low. Without the project, there are few opportunities for farmers to earn money in between harvests.

Even the better-off farmers in village P could get profit working for the project. For Mr. Josia, the additional income, made through working for the agro-project, represents 20 percent of his total income. With the increase in income, he could use the cash to re-invest in his own farming activities. He could expand his tomato farming activities by paying land rental fees and for chemical inputs.

In site M, low income levels did not increase as much as they did in site P where there were more daily workers hired. However, employment opportunities in site P will be expected to significantly decrease because Penja will use machinery to cut down on labour costs. It was revealed that the poorest farmers were not necessarily hired as daily labourers. This means that the jobs did not necessarily go to farmers with the lowest income who perhaps needed the cash more than the better-off farmers. Also, it was observed that some of the jobs were given to those who had a social connection with either the managers or administrative staff.

4.3.2. Access to and Control over Natural Resources in Village M and P

In site M, inhabitants did not own the land as it is all owned by the *gendarmerie*; however, they were told they could no longer use the land. Some local pastoralists used the land for grazing, and were told by either Maco or Munja to use other land. There appears to be land available for grazing, but most of it the land either belongs to military or the French corporation. Access to and control over land has thus affected pastoralists, for the most part. Some farmers used some of the land to use rice also, but not many.

The major issue of concern amongst local populations is their access to and control over water. Munja has dug 20 wells so far but they only use 2 now. If the other 18 wells are used, it may impact locals' access to water in the future.

In Village P, until now, local populations have lost their access to jujube trees. Approximately 1,000 trees were cut down when land was cleared for cultivation. Pastoralists have also lost in their access to land for grazing. In terms of access to land, only 13 percent of the land acquired has been cultivated, meaning that resistance to the project has been minimal. For the future, however, it is likely that problems will arise when cultivation is expanded to include households occupying one-third of the land of the total land acquired. It was stated by Maco that they will negotiate with these households. Given that the land has already been acquired by the investors, the local people will have very little bargaining power, especially those who do not have a title deed or certificate. Even if they wanted to get a land certificate now, it would be difficult as the local communes do not have *guichet foncier*. Another issue in the future is the dam which Penja has planned to create, which may affect local's access to water.

5. Discussion

The first (of four) main findings presented in the paper are that the laws and regulations were not followed by instrumental actors responsible for making and executing decisions. It was found in section 1 that Madagascar has policies which are problematic in that their objectives are conflicting and confusing. This confusion was apparent in the field where powerful actors (i.e. investor, intermediary, local and regional government leaders) used their positions of power to exert their own agenda without upholding laws and regulations. For example, the investor did not respect the national law on minimum wage as the daily labourers that they hired did not receive remuneration equal to or above the minimum level. Also, a field visit by a recognition commission organized by the state land service was not carried out to verify the presence of existing claims to land on the targeted area to ensure that land allocated for development purposes is genuinely "vacant and ownerless". The intermediary also did not engage concerned groups into consultation and participation. And, there was a lack of transparency.

The second main finding that was discovered was the reason why the laws and regulations were not respected. Previous studies have found that this happens because public land services are not prepared to deal with large investments, or because these services have not mastered and/or have different interpretations of the laws (Andrianirina-Ratsialonana et. *al.*, 2011). We find that the main reasons to explain why laws and regulations were not followed in our case is because of (a) the strategic position and power held by the local elites, namely the intermediary, (b) the competition between governments to make decisions which leads to a competition over whose jurisdiction the projects' activities falls under.

The third finding that was revealed was the impacts of the investments (which in this case did not abide by the laws and regulations) on investors, governments and local populations. Based on each actor's access to and control over natural resources and economic gains, most lost more than they gained on the whole. The one who lost the most were the rural poor because the projects threaten their own land security situation, which is a major factor that perpetuates their impoverished livelihoods. Despite the employment opportunities offered, they did not target the poor. Compared to other actors, the rural poor have more at stake compared to the other actors whose livelihoods are not directly impacted as a result of the projects.

The fourth finding was that identification of the intermediary, Maco, and their role in the foreign investment saga. Unlike the other actors, Maco did not necessary gain or lose based on the criteria used, but was the most interesting amongst all the actors as it was the main power broker of the land deals. It thus is an anomaly of our study as it falls into the grey area when it comes to analyzing impacts. This is one of the first studies in Madagascar which has identified the existence of the intermediary and the roles it plays in recent large-scale land acquisitions. While Maco and its employees have gained financially through being employed by the investors to manage the land acquisition process and food production on the sites, it has not gained or lost as a *direct* result of the projects because it is not in a risky position as it does not finance the project, meaning that it will not lose money on the investments if performance is poor.

Learning more about the role of the intermediary would be an area for further research as they are most instrumental actor and thus the one that should be adhering to the laws and regulations. Maco has represented itself as the main "go-to" company for foreign investors who want to invest in Madagascar. They claim to be the one that knows-all when it comes to the procedures for acquiring land and managing agro-projects. Having a company to assist investors throughout these processes can be seen as an attractive partnership. Thus, to address the lack of adherence of the laws and regulations, it is important that policy-makers are aware of the intermediary and their functions.

Our preliminary conclusion is that the laws and regulations pertaining to foreign investments are not respected by the local elite, which as a consequence adversely impacts most actors involved, particularly the rural poor. The implications are that even with well-developed laws and regulations (though conflicting in our case) the power local elite are able to exert their own agenda in areas occupied by marginalized groups, i.e. the rural poor, irrespective of the short- and long-term impacts on populations which neighbour projects sites.

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Notes

[1] To reveal processes, respect informants, and to limit the possibility of aggravating current conflicts relating to land, we use codes and pseudonyms to describe and differentiate between localities and actors.

[2] The ministry of land estimated that currently 1,100 ha of land are being developed for food crops and 5,300 ha being targeted by foreign investors for food production (Andrianirina Ratsialonana et *al*., 2011). At this point it is unclear how many projects have been established on these surfaces. The two agro-projects we examine have not been calculated into this total and surpass the size of the reported projects.

[3] Investor Munja’s project is called project M, the project site is referred to as site M and the village where the project is located is village M. Investor Penja’s project is called project P, the project site is site P and the village where the project is located is village P. Investor Munja’s project is called project M, the project site is site M and the village where the project is located is village M.

[4] Arhar dãl is the Indian name for pigeon pea. This lentil is mostly produced and consumed in the Indian subcontinent.

[5] Commune is the second smallest administrative division in Madagascar.
[6] IRAT stands for the International Research on Tropical Agriculture, a French-based agricultural research centre.
[7] As for 2011, the legal minimum wage is MGA 91,520 per month (equivalent to US$43.83). This means MGA 3,048 MGA per day or US$1.46 (CNaPS).