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Madagascar:

Land and Property Rights Review

June 2006

PREFACE

Recognizing the importance of a transparent and well-functioning property rights regime to meet the growing demand for formalization, reduce disputes and court cases, improve the investment climate, and promote good governance, the Government of Madagascar has set in motion an ambitious process of land tenure reform. Consequently, the Poverty Reduction Strategy Credit has incorporated the formulation of a new Land Policy and the piloting of decentralized land administration as explicit development targets. To support this reform process in a timely fashion, the World Bank undertook to produce this policy note—A Review of Land and Property Rights. The note attempts to pull together what we know about property rights in land in Madagascar and make some "just in time" policy suggestions.

The Review was conducted as a co-production between the Government of Madagascar and the following Bank technical "families": Private Sector Development; Environment, Social and Rural Development; Poverty Reduction and Economic Management; and the Development Research Group. Moving ahead, it is important that this spirit of "co-production" is maintained so that the Government's strategic vision is supported in a consistent manner, which adds up to more than the sum of its individual parts. In this respect, the Review will hopefully serve as a useful coordination instrument.

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Several existing and planned Bank lending operations have an immediate interest in the formulation of a National Land Policy and this study:

(i) The Watershed Management Project has co-financed some of the background work undertaken for this policy note and would be in a position to finance a certain number of pilots for better land administration in the project area;

(ii) The Governance and Institutional Development Project (Programme de Gouvernance et de Développement Institutionnel—PGDI) is providing direct technical support to the policy reform process;

(iii) the Rural Development Support Project (Projet Support de Développement Rural—

PSDR) will co-finance further analytical, but action-oriented, work on the Madagascar experience with land rights formalization and background work on land taxation; and

(iv) the Integrated Growth Poles Project, which would be interested in financing a pilot in Nosy Be, a tourist area, where land tenure issues figure prominently in the challenges faced.

The Review's policy suggestions are based on an assessment of the most salient land and property rights issues in Madagascar within the context of relevant international experience. The report serves as input into the preparation of Madagascar's National Land Tenure Program (Programme National Foncier). A number of background studies were carried out, including a literature review and an analysis of existing and new empirical data to make a first attempt at estimating the economic and financial benefits of formal property rights registration.

The audience targeted consists of policy makers and analysts in Government, civil society, the private sector, and the development partners. Interest of the development partners in land administration issues (e.g. EU, FAO, France, and IFAD) is significant and growing. During the preparation of this report, intense collaboration took place with the US MDG Challenge program, which is supporting the land tenure reform program in a major way.

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1. EXECUTIVE SUMMARY

The Government of Madagascar is committed to address the dysfunctional nature of the existing land administration system and the high demand for some form of formalization of property rights in urban and certain rural areas. This political commitment to reform is clearly illustrated by a number of recent Government actions, including the adoption of a tight timetable for legal and policy reform, which included the passing of a new land tenure policy and land in 2005 in, by international standards, record time.

The Government's vision, as publicly announced and agreed in Cabinet, is to put in place a land tenure regime which is transparent, inclusive, equitable and efficient. The implementation of this strategic vision will be based on the twin principles of modernization of the existing land titling system and the decentralization of land administration to the lowest level of local government possible ("commune"). Implementation of the decentralized land administration system starts with a phase of piloting and learning by doing.

The overall assessment of this report is that the government's program is moving in the right direction. Therefore, this report is intended to contribute to this process by assessing the on-going reform process in the light of international experience and making suggestions for the completion of the reform process and its cost-effective implementation in a transparent and sustainable manner. We pay particular attention to institutional, fiscal, social and environmental sustainability.

This Review attempts to be a timely input into the legal and policy reform agenda and the implementation process on which the Government has embarked. The report has been elaborated in close partnership with the National Land Tenure Reform Program (Programme National Foncier). It has been benefited from the input of a number of independent consultants, whose names and papers are listed in Annex 3. The report investigates some of the major land-related issues under the following headings: (i) overview of land tenure and land markets; (ii) the current property rights regimes (statutory and customary); (iii) the economic benefits of the current land titling system; (iv) open access and natural resources; (v) private sector issues; (vi) reforms underway and outstanding; and (vii) the piloting and implementation strategy. The main recommendations of the report are summarized in matrix form in Annex 1.

LAND TENURE AND LAND MARKETS

Land in Madagascar is distributed relatively equally distributed among income classes. While landownership is primarily in the hands of men, the gender distribution of land ownership is better than in most other countries. Unlike in other countries, there are no obvious land conflicts and restitution issues looming. Farms are small and most are inherited, but land markets have spontaneously developed in areas where land has become relatively valuable. In urban areas, an antiquated, cumbersome and outdated land administration system is a source of confusion and corruption, and hinders private investment from local and foreign investors alike.

Land tenure is often mentioned as a key constraint for rural and urban development, but the

empirical basis for this assertion is weak or missing. Neither farmers nor investors put tenure insecurity high on their list of problems. Careful research in high intensity rural areas has failed to show that the existing land titling system leads to higher productivity. The situation in urban and peri-urban areas might be different, but there are no studies to confirm this. In the absence of widespread tenure insecurity, international experience in rural areas suggests the benefits from formalized property rights mostly come from better access to credit. However, Madagascar's rural banking system is currently quite underdeveloped and not in a position to provide broad access to credit now or in the foreseeable future. And a rural banking system is unlikely to emerge merely because of a better documentation of existing property rights.

While land tenure security and access are not the most important development issues for farmers, they are very important or moderately important issues for between 30 and 40 percent of them. They also affect a significant minority of investors. There is widespread recognition of the dysfunctional nature of the existing land administration system and its potential as a source of corruption. Because of the legal complexities and the lack of low-cost conflict and dispute resolution mechanisms, existing land disputes are clogging up the legal courts in both rural and urban areas. In addition, increasing population pressure and the attendant rising scarcity of arable land are leading to a "natural" evolution from a traditional common property regime under which an individual's use rights are recognized, but sale to outsiders is restricted, towards a more individualized regime, under which property rights become fully tradable. An informal system has emerged to formalize these land transactions, the so-called "petits papiers". Finally there are significant open access issues to natural resources associated with the lack of clarity of ownership over these resources and widespread state intervention. As a result, there *is* a groundswell of demand "from below" for improvement in land administration, some form of formalization property rights, and improvements in dispute resolution mechanisms.

Current property rights regimes

The existing land titling system. The existing system was introduced by the French colonial administration to serve its interests and those of the small Malagasy elite. To date, the system covers less than 15 percent of the total land area. It is the Torrens system, from Australia, in which the State guarantees that the person whose name is on the title deed in the registry is indeed the uncontested, and, in a court of law, uncontestable, owner of the land. This system served the colonial authorities and its settlers well, because it effectively annulled any existing rights of the indigenous population on the land targeted.

The post-independence administration did not have the capacity and resources to sustain the system, let alone extend it to the population as a whole. It is extremely costly to access, it moves at a snail's pace (with waiting periods sometimes spanning decades), its records are hopelessly out-of-date, and because of its complexity it is not understood by, or accessible to, the majority of the population. Even on the already titled plots, the subsequent inheritances and transactions have often gone unregistered. Hence, the situation on the ground today bears little resemblance to what is documented in the title deed registry. Especially in areas where land has obtained a high value (viz. urban, peri-urban, irrigated, and high-migration areas) and the traditional common property regimes have broken down, this provides ample room for confusion, disputes and opportunistic behavior, expressing itself in a rising number of court cases (land-related cases are easily the majority of all court cases) and corruption. Investment, including foreign

investment, is thus constrained.

Given the problems with the Torrens system many observers ask why it cannot simply be abolished, and the titles replaced by the Certificat Foncier which are being introduced now as part of the new decentralized land administration program. The main reason is that property rights have been granted and guaranteed under the system which cannot be simply abolished. Unlike Torrens Titles, the CFs do not provide a state guarantee of land ownership and the holders of title would undoubtedly demand compensation for the replacement of their existing right with a right that is seen as a lesser right. Designing and implementing a compensation system would both be complex and costly, and failure to do so would result in endless conflict and litigation. In addition, significant demand still exists, and will most likely continue to exist for Torrens titles on behalf of individual and investors in valuable properties in urban/peri-urban areas, and in special situation such as the tourism sector.

Dating back to 1926, there have been a large number of reform attempts to improve the property rights system, dating back to 1926. We will describe these reform efforts and the incredibly complex mosaic of legal land classes they have created (see Figure 1 in Chapter 4). The complexity of this system itself is a source of tenure insecurity, conflicts, high transactions costs and disincentives for investment. Fortunately, the process to reform of this complex mosaic has started in earnest.

The "petits papiers". At the same time, unlike many other developing countries, the traditional, "informal" regime, until the past year, had no official status, and the relatively popular sharecropping arrangement is even explicitly illegal. Not surprisingly, an extra-legal property rights regime has evolved, issued by local government institutions – the so called "petits papiers". The emergence of the institution of "petits papiers" is a strong indicator of the existing demand for formalization, induced by the process of population growth and increasing land scarcity mentioned already. Unfortunately, however, the existing formal land titling system has provided opportunities for well-connected and powerful people in rural and urban areas to acquire title on land already occupied by traditional or informal right holders, and partially explains the strong desire of populations for formalized land tenure documents. This threat and the attendant increase in land-related disputes is especially prominent in those areas where the traditional governance institutions have ceased to function.

The economic benefits of the current land titling system

The results of a survey carried out for this report suggest that for rural areas the benefits of the current titling system are modest at best. (Unfortunately there is no similar research available for urban areas, where the benefits of titling could be higher). Given that the area chosen is characterized by high-intensity agricultural production, the estimated benefits can be considered as an upper bound for titling benefits for rural Madagascar.

The empirical analysis tried to answer a number of pertinent questions. First, does titling influence investment behavior? Looking at three types of recurrent investment (irrigation/drainage canals, protective bunds, land leveling), measured in different ways, we find practically no evidence of a positive impact of land titles, up-to-date or otherwise. However, when we differentiated between titles that were up-to-date and titles which were not, we found

that up-to-date titles did have a positive effect on one single type of investment (viz. protective bunds), whereas out-of-date titles did not.

What can we say about the effect of titling on land values? Land values would, in addition to picking up the value of fixed investments in the land, also incorporate the direct impact of the risk of expropriation, and whether or not titled land would be easier to transact. We found that titled plots were on average 5.6 percent more valuable than untitled plots.

In other words, the market premium for titled plots is at most 6 percent, which is quite modest. To put this into context, Deininger (2003) reports comparable land differentials in Asia and Latin America ranging from 40% to 80%. Based on data from one of the most productive area in Madagascar, we conclude that the corresponding number for rural Madagascar lies well below this range. This seems to be the result of the fairly high existing level of tenure security, perhaps enhanced by "petits papiers", and the lack of a significant formal credit system.

The private economic benefits from extending the *current land titling system* in Madagascar would be minor, especially relative to its current costs. The median rice plot in the Lac Alaotra region is worth about US$ 1000 per hectare, and titling it would raise its value by no more than US$ 60 per hectare. Teyssier (2004) reports that the total cost of obtaining a title in Madagascar today averages about US$ 350 per parcel, which means that it only makes economic sense to title plots in excess of around 6 hectares. Unfortunately, less than 3% of the plots in the Lac Alaotra area have an area of 6 hectares or more. Put another way, the marginal cost of a title would have to fall by a factor of six in order for it to be economical to title the median-sized plot in our sample (1 hectare). For Madagascar as a whole, this problem is greatly compounded by the even more highly fragmented nature of landholdings; median plot size nationally is only 0.20 hectares.

Given the analysis above, what level of costs could be justified under a new land administration system? Let us assume that a community-based land registration system would provide as much tenure security as the current formal titling system, with all the current drawbacks as described (e.g. out-of-date titles, high cost, and long delays in obtaining title). Let us also assume that a community-based land registration system would *not* have the additional benefit of facilitating land transactions. *Given these conservative assumptions, we suggest that the average costs of registering a parcel under any new system must be commensurate to the economic benefits of titling which we estimated for Lac Alaotra, namely on the order of US$60 per hectare.*

Finally, the fact that only a small fraction of land in the Lac Alaotra region is titled does not appear to constrain the land market or access to credit (the so-called efficiency effects). In an environment where the risk of expropriation is low and where collateralized lending is in its infancy, such results are not entirely unexpected. Nevertheless, farmers still reveal their preference by applying for formal titles, despite the high cost. This suggests that land expropriation and perhaps false land sales, though low risks, are massively costly in the event that they occur. *Better, and more highly publicized, enforcement to minimize land-grabs could lower the risk and costs of expropriation and false land sales, combined with more effective and transparent adjudication of land disputes*.

Natural resource issues

Open access problems threaten Madagascar's environment. However, where a customary land tenure regime is still functioning well, governing both the individual fields and the "commons", viz. grazing areas and the forests, there is a sense of security to land and no major environmental problems exist. For example, no large scale land clearing has taken place in customary areas in the last 30 years (Leisz, 1994).

However, there is generally a lack of security for communities where State tenure systems predominate. The first threat to environmental sustainability in areas under customary tenure come from the state-sanctioned issuing of cutting permits to outsiders, by-passing the customary land tenure system. Certain local state agents sometimes act as "owners", giving loggers access without consent of communities. A second major threat to sustainable resource management is the convention in rural areas governed by formal property rights (viz. State land, and land not falling under traditional property rights regimes) that a claim to ownership and eventual legal title to land must be accompanied by physical acts of development such as cultivation (*mise en valeur*). This rule encourages farmers to slash and burn entire plots in order to stake a claim, rather than conserving, for example, forest vegetation.

Insecurity, therefore, is prevalent where state tenure is imposed, *de facto* creating open access, and where legislation creates special incentives to clear forests. Hence, the problem is the "Tragedy of the State", rather than the "Tragedy of the Commons".

Private sector issues

Land issues are *not* the single most important issue to improve the investment climate for private investors. Of the top 20 areas that may pose constraints to investment, land related issues were ranked 16th. But land issues *do* merit significant attention, especially as part of a broader agenda to improve the investment climate. Chapter 8 of this report, therefore, describes in great detail the land acquisition options for domestic and foreign investors, the administrative procedures and steps to obtain ownership or leases, environmental and other regulations which must be followed, sector-specific requirements for acquiring land for mining, tourism and agriculture, the taxes which are associated with land acquisition and ownership. As well as possible exemptions such as tax free investment zones.

Land with up-to-date title is extremely scarce and concentrated in urban areas. The granting of title on untitled land is subject to conditions for added value to the land which are complex and open to bureaucratic interpretation and subject to lengthy periods (up to 40 years) of risk of repossession. Land administration is in a mess, giving rise to high costs, delays and risks of litigation.

In the absence of purchasing of land, investors can acquire long-term leases of up to 99 years from private individuals or the state. They are tradable subject to the lessor's permission and a right of preemption by the state, and they can serve as collateral. Where the state grants such leases, they are also subject to investment requirements, which have to be spelled out in an investment plan. The criteria for evaluating these investment plans and for verifying whether they have been complied with are not specified in the law. Many investors therefore do not

consider these leases "clean" leases, because they leave the door open for disputes and risk of termination of the lease. The state's right of pre-emption at the point of sale constrains the ability of the seller to sell his property rights.

Foreign investors, in addition to the problems confronted by domestic investors, can purchase land only under the highly restrictive conditions of the law of August 27, 2003. This law imposes low ceilings on the area a foreigner can own, high and unclear investment requirements, and approval by the highest authorities. As a consequence, this law has been used only twice, and most foreign investors instead resort to long-term leases. A review of these restrictions is needed.

The National Land Tenure Reform program goes a long way to address some of the main concerns of investors. In particular it includes a program to improve and simplify the existing land titling system, to clear the backlog in land titling, and to conserve and digitally record the existing property rights documents. In addition, investors will also be able to use the new Certificats Fonciers discussed below to acquire and record their land rights. However, these reforms will have to be complemented by additional measures discussed below to resolve the many problems encountered by domestic and foreign investors.

Reforms under way

The discussion so far explains why the land tenure reform is high on the agenda of the government and development partners. The Ministry of Agriculture, Livestock and Fisheries in 2004 developed a Land Tenure Policy (Lettre de Politique Foncière, or LPF), whose draft was discussed at a National Workshop on February 8, 2005, under the patronage of the Prime Minister. The new Land Tenure Policy was adopted by Cabinet on May 3, 2005. The legal framework for this decentralization has been created on October 17, 2005 by the "Loi No. 2005-019 "fixant les principes regissant les statuts des terres". Implementing legislation and regulations are currently being drafted and expected to be put in place in the first half of 2006.

As already enacted, the reform program represents a significant advance in term of the creation of security of tenure for the citizens of Madagascar. It seeks to address the needs of both urban and rural areas of the country. It reflects clearly the needs to modernize the existing Torrens system of registration. A modernized Torrens system is most appropriate for urban and other areas of high-value land where land markets are fully developed, and the volume of transactions against which fees can be charged is significant enough to make the system affordable and sustainable. However, a lower cost system is needed for other areas. The policy therefore provides, in the spirit of the existing practice of "petits papiers", a new and less onerous system, more appropriate for the smallholders of very modest means for whom the current system is too slow and too costly.

The new law simplifies the complex mosaic of land rights left by history by recognizing only three broad classes. These are: (i) land of the state; (ii) land of private persons or entities; and (iii) land under special legal provisions, such investment zones and protected areas.

The other main innovation of the new law is that it creates a more accessible formal property right in land, the so-called "*certificate foncier*" (CF). The CF can be created for untitled land of

private persons, communities, or entities. This property right can now be established and recognized by the local government using procedures also defined in the new law. These procedures must be public and contestable, implemented by a properly composed commission, and recorded in minutes. No CF can be issued for which the minutes record an unresolved dispute. The CF is signed by the head of the local government. The CF entitles the owner to all transactions already allowed with titled land, including sale, inheritance, long-term leases, and mortgages. This means that the CF will be a major new opportunity for investors to acquire land via purchase or long-term lease. They will of course be most important to rural and peri-urban Madagascar, but may also be appropriate for areas of informal land occupation by the poor in urban areas, and for enhanced land access by investors who have difficulty in acquiring, or do not need or wish to acquire formal land titles.

After the adoption of the new Land Policy and the necessary legal reforms (the so-called Preparation Phase) in mid 2005, Government has now embarked on a second phase—the Pilot Phase. This phase will take approximately two years during which a process of "learning by doing" through the strategic implementation of pilots will be implemented. The final and third phase is the "extension phase".

The "Programme National Foncier" (PNF)—the government's land tenure reform strategy and program—is based on sound principles, rooted in international best practice, and moving ahead at rapid speed. The major thrusts of the reform program can be summarized in the following matrix.

	Major programs	
Implementation activities and systems	*Modernization of land titling*	*Decentralization of land administration*
Legal and regulatory reform		
Training and communication		
M&E - monitoring - impact evaluation		
Information technology and management		

Legal and Regulatory Reforms: The legal and regulatory so far enacted have been impressive, but remain incomplete. While the new law recognizes the rights of customary right holders, making them effective requires the acquisition of certificates fonciers, whose implementation will be phased over time, leaving many customary right holders in limbo. Second, the environmental legislation and procedures regarding the recognition or acquisition of property rights of communities over natural resources is not yet harmonized with the new land legislation. And third, legal and administrative provisions and systems for the access to land by investors have not yet been reformed and are scattered among different laws and administrative entities and procedures. *Review and reform of all these provisions is required culminating in a single set of laws and regulations, and streamlined implementation mechanisms.*

The *modernization of land titling* will be carried out by a systematic application of all four program elements, in particular legal and regulatory reform, training and communication and the application of information technology and management. It also involves the conservation of the existing land records and its digital capture, and the clearing of the existing backlog in updating and issuing of titles. In chapter 8, this report reviews international best practices for improving formal land titling systems, makes suggestions for improvements, and on how to ensure consistency between the modernization program and the decentralization program. But the report does not deal with the highly technical matters of implementation of the planned modernization.

The *decentralization of land administration* involves the development of the capacity for land administration at the commune level (the lowest level of local government), where it can be easily accessed by the entire population, and where the information to ascertain existing land occupation and land rights can be managed by close involvement of the populations themselves.

Decentralization will involve the implementation of the legal and regulatory reforms already enacted or in the process of elaboration, which created the new CFs, and designate the local governments as the locus of future land administration. Guichets Fonciers will be established at for individual communes or groups of communes which will support the issuance of the new CFs, and tasked with keeping the land records up to date thereafter. The new land administration will be based on the principle of cost recovery from the users, and therefore has to be adapted to their willingness to pay. These and other principles of the decentralized land administration system are discussed in the final two chapters of this report. In the last chapter different options for land administration which are appropriate and cost-effective for different types of rural, semi-urban and urban areas will be discussed in detail, as well as the plans to pilot and implement them. Since this report has shown that land tenure security, conflict, and open access issues are not equally pressing for all areas and groups, and since users will have to pay for the land administration services, *one of the main recommendation of this report is to focus the expansion of the Guichets Fonciers on areas with clearly identified tenure or conflict problems, and/or with effective popular demand.*

Continuing the reforms

This section includes the main recommendation of the report. (The next section focuses on one element of the implementation strategy, namely the decentralization of land administration). The legal and regulatory reform is not yet complete. It is for this reason that the ministry has made legal reform a continued major implementation activity. This review has identified a number of specific issues for further work under this activity. They are summarized in matrix form in Annex 1.

Legal recognition of customary land rights is implied by the new law. The procedures by which the commune will recognize land occupied and held under customary rights contain the required safeguards to protect those rights. However, these rights are still not guaranteed a priori by the law. Therefore there may remain risks that well-connected and powerful individuals would be able to manipulate the procedures to their advantage and dispossess customary right holders. International experience suggests that these risks are significant. The report therefore recommends that these rights be recognized a priori via a further amendment to the land legislation.

Clearing up the titling backlog. Many people who have requested title on previously untitled land, but for whom the process has not yet been completed, will have the option of dropping their request for title, and instead opt for a CF. Since the costs of CFs will be much lower than the cost of completing the titling process, it is likely that many will opt to do so. This will help clear part of the enormous backlog of applications for new titles. On the other hand, the new procedures will do nothing to clear the backlog for updating the information on existing, but out-of-date, titles, and for situations where records have been lost or destroyed. Is there a way to simplify the process of up-dating titles and decentralize it to the communes? For example, could the same commissions and contradictory procedures being used for issuing CFs be adapted and used to update titles, or where records are incomplete or lost, to issue certificats fonciers? The legal and land administrative issues surrounding these questions should be resolved speedily.

Natural resource issues. In the past, the government, supported by development partners, has initiated a number of initiatives, such as the GELOSE program, aimed at community-participation in natural resource management, culminating in the allocation of property rights in natural resources to the communities. However, these initiatives have generally stopped at the level of temporary management contracts to communities. One of the major reasons for this is that the processes to provide the so-called "relative tenure security" to communities continued to require the completion of most of the steps needed for formal land titling, resulting in the same costs and delays experienced there. The recommendation of this report is to build on the GELOSE Program experience and to include the recognition and establishment of property rights for communities to natural resources within the same decentralized land administration system, using the "certificates fonciers". This may require further legal and regulatory reform, as well as piloting implementation in areas which suffer from open access to natural resources.

Gender equality: Land ownership in Madagascar is skewed toward men. Fortunately the situation is less extreme than that in many other countries. However, the new legal framework on land rights does not address the gender issue explicitly, even though the way it is interpreted and implemented could have profound effects on the access of women to land, and the equality of ownership rights between the genders. The report therefore recommends that a careful review of the gender issues be undertaken rapidly, including the variations in ownership patterns and inheritance rules across regions and sectors, and the potential impact on gender equality of the existing and emerging land legislation, regulations and implementation mechanisms. The review should results in concrete proposals on how to improve gender equality in property right over land. In addition the land administration pilots need to be designed to enhance gender equality and monitor their impact on gender equality.

Conflict resolution. Due to increasing land scarcity, a lack of high economic growth outside of agriculture, and the weaknesses and complexities of the formal titling systems and the courts, Madagascar is characterized by a slowly, but steadily accumulating burden of low-level land disputes in rural and urban areas. This is confirmed by survey data and the high prominence of land-related disputes in the courts. International experience is clear on the risk that such low level conflicts, if not resolved, could escalate into more serious forms of conflict. Decentralization of land administration and the process by which the CFs will be issued have the potential of resolving a large number of existing or potential conflicts, especially in cases where the new procedures will be applied systematically across an entire commune. However, they are unlikely to address inter-commune conflicts, conflicts between herders and farmers, conflicts on

already titled land and conflicts between central state agencies and the population at large. Moving forward, the government should develop a more comprehensive approach to improve dispute resolution, and include these mechanisms in all future implementation pilots.

International best practice suggests that such an approach would have the following elements:

- strengthen traditional and modern low-cost dispute resolution mechanisms, such as mediation and arbitration;
- establish a process for giving legal recognition to the informal settlement of disputes;
- provide incentives that reward the settlement of conflicts; and
- disseminate information about rights and options for conflict resolution.

Such a strategy could become a third major program of the new land policy, along with the modernization and decentralization of land administration. If the three major programs are properly integrated, this need not add significantly to the overall cost of the Land Tenure Reform Program.

Investor issues. The main impetus for the government's reform program has come from the problems experienced by the majority of the population. Some investor concerns were taken into account, such as the need to reform and upgrade the existing property registration system and the clearing of the backlog of land titling. The new law also introduces a third alternative for access to land (in addition to purchase and long term leases) namely the "land certificate". This certificate will make it possible for investors to acquire and invest in land which has previously been untitled. Nevertheless, the comprehensive and detailed review of investor issues in chapter 8 shows that many investor issues remain. It is therefore recommended that continuing legal reform be undertaken with a specific focus on investors' needs, both domestic and foreign.

First, as was done in the case of the companies law and the laws related to secured transactions (sûretés), the laws of Madagascar related to land access by investors should be critically reviewed, be modernized and brought under one legal code and set of regulations. This review should take into account new technologies, and other areas key to investment such as taxation, environmental and land use regulations.

Second, as part of this review and the subsequent reform process, investment requirements associated with the granting of leaseholds should be reduced and the criteria for evaluating compliance with them should be clarified and codified, so as to make the grounds for cancellation of leases more predictable. For foreign ownership, the investment requirements should also be reduced, the surface restrictions increased significantly, and the processes for acquiring ownership simplified.

Third, high transactions costs reduce the efficiency of land sales and rental markets and tend to drive land market transactions "under ground". Reducing these transaction costs should be a major objective of the review.

Forth, the gender dimension of registration and other formal land administration procedures

needs to reviewed urgently both in the law and the implementation of the program as part of the broader review process.

Information dissemination: Inadequate information on rights and obligations of landowners, the new land laws, programs, and alternative dispute resolution mechanisms are partly to blame for difficulties in using the existing and future legal and administrative systems, for fostering a sense of insecurity and disputes, and slowing down the application and implementation of the new legal provisions. The information gaps exist not only at the level of the population at large, but also among investor, the legal profession, and government officials. It is therefore recommended to rapidly develop and conduct separate but coordinated information campaigns for rural populations, urban and peri-urban areas, investors, the legal profession, and government officials

Improving human capacity to implement the reform process: Capacity is weak at all levels which are involved in the future decentralized land administration process and in the upgrading of the existing system: the community, the commune, the regions, at the level of technicians and university graduates. The department of lands has already initiated discussions with Universities and technical institutions to start to remedy the situation, but no funded action plan is yet ready. The existing and future pilots will provide opportunities for learning-by-doing among community members and communal and regional government staff. The learning-by-doing will have to be complemented by formal short course training programs which eventually can be scaled up. It is therefore recommended to develop an overall training strategy and start designing and implementing the different training programs for land administration (University, Technical, and Region, Commune and Community levels)

Implementation strategy for the decentralization of land administration

This section focuses on the proposed pilot program and the subsequent scaling up of the decentralized land administration system. In light of the finding that land tenure security ranks low among farmer and investor problems, but is very important or moderately important for 20 to 40 percent among them, it is proposed to target the implementation of the new administration on priority communities and communes, where land related issues, natural resource management issues, and actual or potential disputes are the most pressing, and/or where *effective demand and willingness to pay* for improvements is the highest.

Decentralization of land administration should be coordinated closely with fiscal reforms to allow communes to generate and retain land tax revenues. A sound strategy would involve: (i) building toward a broad-based, modest annual charge upon landholding that will sustain commune administration, including land administration; (ii) avoiding any but the most modest threshold costs to landholders entering the formal system and becoming taxpayers, and (iii) avoiding fees upon transactions that discourage development of markets and drive those engaging in transactions outside the formal system to avoid them.

A close reading of the National Land Policy and the "Loi Cadre", as well as of preliminary implementation plans, suggests that the decentralization of land administration rests on the following principles:

Uniformity in functions. All land users, irrespective of where they live are entitled to

receive the same land administration services from their local government.

Diversity in implementation mechanisms. The demand for the different land administration services will vary widely, according to population density, proximity to urban centers, and importance of natural resources. A typology of areas, their problems and proposed solutions is provided in chapter 10, table 13. Differences in demand will translate into differences in willingness and ability to pay by the population and their communes for services. Therefore, the systems by which land administration services are supplied, must adapt to the different levels of demand.

The proposed implementation plan therefore proposes three different types of Guichet Foncier, with different implementation mechanism and unit costs. These are:

- *Communal Guichet Foncier "standard"*, serving one to three communes, with high level of demand, with dedicated professional staff, and fully computerized data management and delivery systems for the CFs.

- *Paper-based communal Guichet Foncier*, served by a Land Administration, Resource and Information Center (LARIC), which serves about 10 to 15 communes. Suitable for rural areas with significant demand, but limited willingness to pay.

- *Improved system of natural resource management and conflict resolution*. This system would apply to remote zones, where the demand for individual title is low, and the main issues are preventing open access to natural resources and avoiding conflicts. Such a system would also have to have the ability to issue CFs to individuals and communities. This model still needs to be developed.

Sustainability. Unlike the existing titling system, the new decentralized system must be planned from the beginning to ensure social, institutional, and fiscal sustainability.

- Elements of social sustainability that are already included in the policy and implementation plans include the decentralized and participatory approach to land administration and dispute resolution, transparent adjudication of land rights, information campaigns and subsequent public access to information in proximity. An outstanding issue of social sustainability is ensuring equal rights for women to land, and equal access to all land administration services.

- Elements of institutional sustainability include the clear assignment of the land administration function to the commune, and the radical simplification of the CF system relative to the titling system. The formalization and legal recognition given to traditional tenure and to oral evidence and documentation of transactions ("petits papiers") is another important pillar of institutional sustainability. In addition, the implementation phase foresees intensive use of the legitimacy, the knowledge and mediation skills of traditional and other local leaders at the fokotane and commune level.

- Elements of fiscal sustainability are the intention to make land administration at all levels completely self-financing via charging for all services, and integrating the land administration into local government finance, and focusing the expansion of the Guichets Fonciers on areas with identified conflict or natural resource management problems, and/or high expressed demand from the communities and respective communes. The use of traditional leaders and other volunteers in the roll out of the system will contribute to this. In the longer run, the system is expected to serve local government revenue raising purposes, although detailed plans do not exist. Government subsidies will initially be provided for systems development and set-up costs during the piloting phase. Initial cost projections for a scaled-up system suggest that fiscal sustainability should be obtainable, if the above cost-saving strategies are pursued.

Learning by doing via a pilot phase. Government has decided to initiate the National Land Tenure Reform Program with a two-year pilot program. This will enable the testing of the above models in different environments and their further refinement. In particular, the questions of social, institutional and fiscal sustainability signaled above can be resolved during the pilot phase. The pilot phase will also result in field-tested operational manuals, information and training programs, and logistics for scaling-up.

The pilot phase will build on four existing rural communal Guichets Fonciers, which have been under way for a number of years, and are ready to issue the first CFs as soon as the implementing legislation is finalized. Best practices in the areas of these pilots are already fairly well developed, and they can be completed rapidly. Further attention to social and institutional sustainability as well as to cost reduction in these pilots is warranted.

The existing four GFs are all located in rural areas characterized by intensive agriculture. Therefore, special attention will have to be given to the development of urban and peri-urban GFs, and of GFs and LARICs for areas with relatively low population densities and significant natural resources. Again these pilots will have to give careful attention to all sustainability issues.

Eight development partners, the most important of which is the Millennium Challenge Account of the USA, have indicated their willingness to finance about 30 GFs and/or LARICs over the next two years. The pilot phase will also continue to capitalize on the skills and implementation capacities available in existing development projects and among interested NGOs. For example, the pilots in natural resource-rich areas can benefit from the experience and capacities built under the GELOSE programs financed as part of the multi-donor environment programs.

Updating titles via the GFs and CFs: The issue of how the decentralized system will be used to upgrade existing Torrens titles, and or replace them via CFs, has not yet been resolved legally or administratively. As a consequence properties with titles, no matter how outdated they are, will not benefit from the new system. The Department of Land urgently needs to propose legislation and implementation mechanisms to remedy this situation.

One single implementation program. The discussion above shows that the PNF will confront significant coordination problems during the pilot phase. The Ministry has therefore proposed that there be a single implementation program, led by the Coordination Unit of the Ministry. The

one program principle means that there will be a *single operational manual, a single budget, a single set of financial management rules, including and a single M&E system.* It is hard to imagine that the pilot program could be implemented and become successful without strict adherence to this principle. Therefore, development partners have indicated support for the single program. Because no basket-funding has been arranged, development partners will still use their own disbursement procedures. It is clear, however, that the scaling-up phase will need to go further and be financed from a single source, either via basket-funding or through the national budget.

In order to develop a full set of field-tested tools for the pilot phase, i.e. the operational manuals, training program, information and M&E system, the PNF intends to start setting up a LARIC and the corresponding GFs in a single district first. The full set of tools can then serve as the starting point for a second nearby district and all the other pilots. However, significant adaptation to urban and peri-urban conditions and to areas with significant natural resources will be needed. It is imperative, that the principle of a single set of services and a single operational manual be maintained during the pilot phase. This is best done via a series of workshops among the teams involved in the different pilots, such as a bi-annual joint review of the various program tools. In the end, the pilot phase should lead to one kit of differentiated tools adapted to the major land tenure contexts found in Madagascar.

Recall that the *impact evaluation* of the existing titling system in the Lac Alaotra region suggests that the productivity benefits from land titling in rural areas of Madagascar are limited. Of course, an improved land administration system, along with improvements in infrastructure and rural finance could have significantly larger benefits. Benefits could also be larger in peri-urban and urban areas. But no studies exist to prove these hypotheses. In order to evaluate them, a rigorous system of impact evaluation needs to be rolled out along with the pilots. This includes timely base-line and several follow-up surveys to capture both short-term and longer term benefits. The major challenge for impact evaluation is the selection of control groups of communes and districts. The fact that during the pilot phase, the program will not be scaled up to the level of entire regions, greatly facilitates the selection of control groups. Nevertheless, the major danger is the premature inclusion of control communes and districts into the program. It is therefore imperative that the Coordination Unit of the PNF maintain tight control over the roll out of the pilots, and design it in close coordination with those responsible for impact evaluation. It is recommended that a small working group be immediately constituted to plan for the impact evaluation and the selection of control groups.

The initial results of the impact evaluation need to become available before the end of the pilot phase, i.e. in two years, in order to inform the scaling-up decisions. Such decisions include whether or not to scale up, where to scale up, and at what pace. Obviously, in such a short time, the full impact of improved land administration cannot be evaluated. However, impacts on the resolution of disputes, perceived benefits and willingness to pay, and initial changes in investment behavior.

World Bank assistance. During the piloting phase, which will start in earnest in 2006 and will last for 2 or 3 years, the report recommends that the Bank mobilizes resources in its existing projects, or projects under preparation. Specifically, the government could fund pilots and related activities under the following Bank-assisted projects:

- The Environmental Program III, with an emphasis on decentralized land administration pilots which would eliminate open access to natural resources and establish clear ownership over trees, grazing areas and bio-diversity resources for individuals, communities and in some cases, the private sector.

- The Growth Pole project could finance a pilot in areas of its intervention, where land tenure issues figure prominently in the challenges faced.

Given the Bank's experience with impact evaluation of land administration world-wide and in Madagascar, the report also recommends that the Bank should support the piloting phase by assisting in the design of the impact evaluation and by financing it. In addition, the Bank's projects should be open to financing other system development components of the pilot phase.

In the medium term, the report recommends that the Bank assists the government in preparing the ground for the financing of its land tenure reform program through budget support under the PRSC. The existing and planned Bank support as defined above (design of the program, piloting, and impact evaluation) would be key building blocks in preparing the sector for budget support. In addition, to become eligible for budget support, the Ministry would also have to improve its internal organization and accountability systems.

Conclusion

In conclusion, Madagascar's land tenure reform program is off to a good start. Developing it further to cover areas so far not included in the policy reform, and implementing it will present challenges to the Government and its development partners. While land tenure reform and improved land administration are no magic bullets for accelerating growth, reducing poverty and improving environmental management in Madagascar, the timing of the reform effort is perfect to ensure that land tenure issues and conflicts do not become a major impediment to achieving these objectives. Improved land administration is therefore a significant complement to on-going reform and investment efforts.

2. INTRODUCTION

There are four broad reasons why land matters for development. First, land has often been a source of conflict—successfully preventing such conflicts is one of the most worthwhile investments in development that many countries can make. Second, land matters for economic growth—the security and tradability of property rights in land profoundly influences investment behavior and access to credit. Third, land is important for poverty reduction—security of tenure and access to land for the urban and rural poor, and marginalized groups is often a key asset which sustains their livelihoods. Fourth, land is one of the most important natural resources in sub-Saharan Africa—promoting sound stewardship by the elimination of open access and providing basic services to those living on the land (e.g. water, sanitation, garbage disposal) has substantial environmental benefits.

However, efforts to improve security of tenure and provide an adequate property rights regime in any country must begin with the reality on the ground. In Africa, this reality usually includes land held under titles granted by the state under statutory law (both colonial laws as well as enactments since independence) and land (often significant areas of the country) whose use is governed by customary norms. In many countries, there will have been attempts to replace custom with statutory law as the basis for land access and use, but the attempt will often have been limited to more developed areas of the country, including urban areas. And even if a nation-wide replacement has been attempted, the replacement will likely have only been implemented imperfectly, and only in some parts of the country.

International research on customary land tenure in the past two decades has resulted in a rethinking of the nature of the customary systems and a significant reassessment of their functionality. Much of the early literature characterized them as unclear, because they were unwritten and subject to local variations; as "communal", suggesting that they did not provide clear individual property rights; and as static, unable to adjust quickly to new needs. Many states in Africa sought to replace customary tenure with statutory tenure, under which the state rather than local communities provided land rights, often with the objective of providing a unified and uniform national system of land tenure. In the end, many countries were simply unable to afford the land administration framework required to create and manage such a new system, and these failures gave impetus to a reconsideration of the role of customary land tenure.

Madagascar has embarked on an ambitious program of land tenure reform. It has adopted a set of clear principles to guide its implementation. In this chapter, we have selected some issues from international experience relevant to the Madagascar situation. We will argue that implementation of the reform agenda should proceed with caution, focus on areas with land clearly identified land tenure problems, actual or potential conflict, and/or expressed community demand. It should be supported by an intensive monitoring and evaluation effort.

TITLING IS NOT ALWAYS NECESSARY

During the 1970s and 1980s, many governments and development partners often tried to address land tenure issues by the introduction of land "titling" programs. Titling is a specific, and quite demanding, way of formalizing property rights. Titling creates precise documentary evidence—title deeds—of property rights that are guaranteed by the state and therefore extremely difficult to contest in courts. Title deeds are underpinned by detailed surveys of property boundaries, so-called cadastral surveys.

The earlier consensus was that titling would strengthen tenure security, and thus lead to increased investment. In addition, titling would transform land into collateral, and thus lead to an increase in credit, which again would lead to more investment. A virtuous cycle of improved, modern economic institutions and increased investments would thus be created.

However, the experience with such titling programs in Sub-Saharan Africa would turn out to be quite negative. Title deed registration was introduced in a number of countries early in the colonial period, including Sudan and Uganda. Failures to register transactions and inheritances over generations have rendered the land records obsolete. A comprehensive review is provided by Dickerman (1987).

World Bank-supported studies in a number of African countries suggest that sweeping formalization is premature where other institutions of the market economy and the dynamics associated with a market economy have not been developed (Bruce and Migot-Adholla 1997). What are some of the reasons?

In many cases, the fact that someone obtained a formal property right—a title deed or a lease, issued by the State—did not increase his tenure security at all. Firstly, because he was not tenure insecure to begin with: the community recognized his property rights quite well. Second, the introduction of title deeds issued by the state created ample room for opportunistic behavior by political and economic elites. These used their influence with the land administration agencies to acquire title deeds in a non-transparent manner, confiscating existing informal property rights of local communities or unregistered state lands. An Africa-wide survey done by Bruce, Migot-Adholla and Atherton in 1993 therefore concluded that many of these titling initiatives had created more confusion than security. Moreover, improving the security of property rights through formalization is a formidable task, involving major political, legal and social reform. In many African countries, the authors found, the existing customary property rights were very secure and not in need of wholesale replacement by formalized rights at all.

In addition, even if one were to introduce secure and enforceable formal property rights, when do these start to function as collateral for lending? Simply introducing title deeds may not lead to collateralized lending. First, if land is not the scarce factor, it will have little value as collateral. In terms of sheer area, most land in Sub-Saharan Africa arguably falls in this category. Second, communities may resist the sale of land outside the community, because land is a vital social safety net for the poor and the elderly, in particular when virtually no other safety nets exist. Since the key idea behind using land as collateral for lending is the right to foreclosure, under which the creditor can seize the land and sell it, a community which disallows such sales outside the community makes external credit based on collateral impossible. For instance, this was the

experience with titling programs in rural areas of Kenya. Third, even if land can be used as collateral, there needs to be a credit system in place. In many areas in Africa, in particular its rural areas, such credit systems are not in place, and they are unlikely to suddenly emerge merely because of the introduction of title deeds.

Medium and long-term credit for farmers and rural entrepreneurs can also be supplied through other means than collateralized lending. International experience demonstrates that, while successful agricultural credit schemes are relatively rare, the success stories that do exist did not necessarily need a title deeds register and collateralized lending. The emergence of cooperative banking in 19th century Western Europe can serve as an example. When farmers found that banks would not lend to them on an individual basis, farmers' groups—some of which were already organized into trading cooperatives—proposed to be jointly liable for any and all loans of its membership. In addition, financial institutions can operate efficiently by carefully evaluating the intrinsic merits of a project proposal or an applicant's repayment record. Successful examples of this principle can be found in the management of US credit cards, or within the micro-finance sector.

In many rural areas of Sub-Saharan Africa the potential for mortgage-based lending is limited. Such potential, however, does exist in the urban areas and in areas characterized by intensive agriculture, in particular irrigated areas. In those areas, common property regimes may no longer be functional, land will have considerable value, and a banking system is often already in place. Under such conditions, the chances that a formalization of tradable property rights will lead to increased security and access to credit are significantly higher.

However, the tradability of property rights in land is a necessary, but not a sufficient condition for the increase in credit. For instance, a banking system will need to be in place, and one that is ready to deal with low-income clients. And a system for business dispute resolution also will need to exist, to avoid a situation in which every dispute has to go to court to be resolved. Finally, the legal system needs to be accessible and affordable so that it can resolve those cases which need a court decision.

In other words, creating more formalized property rights is not a "magic bullet", which triggers investment by itself. A number of other economic institutions need to be in place and functional for the property rights institutions to translate into increased investment and credit.

IF NOT TITLING, THEN WHAT?

Titling programs obviously have their place on high-value land, in particular in urban, peri-urban and high-intensity farm areas. However, there are many rural areas where wall-to-wall titling would make no sense, because most landholders would not have the opportunity to practice the new behavior that a title would permit, such as mortgaging the land. But a few may, and traditionally their interests have been accommodated through "sporadic" titling, in which an individual applies for and covers most of the costs of survey and registration of his holding. This will work for the investor who wants to irrigate a holding or build a mill or a hotel or even a fine house.

But what to do for the bulk of the rural people? Their customary interests in land may be

protected reasonably well under many, but not all, customary tenure systems. The findings of studies funded by the World Bank in the 1990s[1] were that customary land tenure more often than not provide property rights under rules which are quite clearly understood and respected in local communities and so provide security of tenure. Instead, major threats to security of tenure often come from *outside* those communities, from the state or outsiders seeking land with the backing of the state. While certain resources (pastures, forests, wetlands) used in common are properly considered communally owned, most farm and residential land is held perpetually, and subject to inheritance, by families, either by virtue of a lineage claim or through membership in the land administering community. The latter will often be true even where a community of descent or residence is said to "own" all the land within the territory of the community. Finally, customary land tenure is not static, but can be shown in many cases to have evolved to meet new needs, allowing new types of transactions and growing autonomy for individual landholders.

This led to an increasing acceptance by land policy experts that the development of customary land tenure systems may represent a viable option for rural landholders in some circumstances. Hence, the World Bank's 2004 Policy Research Report on land policy and administration concludes that:

> "Given that customary tenure systems have evolved over a long period of time, they are often well adapted to specific conditions and needs. Even in situations where such arrangements reach their limits, building on what already exists is in many cases easier and more appropriate than trying to re-invent the wheel, which can end up creating parallel institutions with all their disadvantages."[2]

This said, there remain some serious problems with land custom. The institutions of land administration under custom are in some societies relatively democratic, but in others they are highly authoritarian and non-transparent. Under a Bank-funded land administration project in Ghana, the government is seeking to develop land registries under traditional authorities, to provide records of decisions that will ensure consistency, and to promote the development of more transparent styles of land administration, with greater accountability. In addition, some customary land tenure systems may reflect patterns of local colonization and ethnic dominance, or treat members of some ethnic groups or castes unfairly. Reforms are needed in such cases. A final problem is that in the many patrilineal societies in Africa, custom largely excludes women from holding land in their own right. This is an issue with deep cultural resonance, hard to address through legal reforms alone, but it clearly represents an area in which custom must evolve or face reforms by the state.

In countries that have gone through long conflicts resulting in displacement of millions of people from their customary lands for many years (e.g. Mozambique, Rwanda, Angola, southern Sudan and northern Uganda), customary interests in land may not be adequately protected due to a breakdown in the traditional rules and leadership structures. In such situations, alternative arrangements would need to be explored to provide reasonable protection of customary interests during the post-conflict era.

Similarly, communities which have seen their social fabric disrupted may not longer be able to

[1] Bruce and Migot-Adholla, 1993.
[2] Klaus Deininger, 2003.

protect the customary interests in land for all or some members of the communities. For example, the HIV/AIDS pandemic has in some African countries destroyed traditional systems that used to protect the customary land rights of widows and orphans. Widows who lost their husbands through HIV/AIDS, and whose access rights to land used to be protected through wife inheritance by their in-laws, get deprived of their land as their in-laws can no longer inherit them for fear of contracting HIV/AIDS. Often, after the death of their husbands, the widowed women are chased away by their in-laws with the aim of taking their family land. Customary tenure systems are not adequate to protect the land rights of these widows. And the existing formal systems do not provide protection either. It is for this reason that Uganda, in 2004, amended its 1998 Land Act to require consent by spouses and children before family land can be transferred.

Even where custom does provide reasonable protection from neighbors and local authorities, it cannot provide it against incursions from outsiders, who may be claiming land awarded by government officials under national law. Land titling, misused, is often a tool for land grabbing, by which official and commercial elites from national level appropriate land from rural communities. The root of the insecurity of rural landholders lies in the fact that much of the land they hold is considered state-owned land, and national government may not recognize rights under customary tenure. Rural people cannot be left in legal limbo, exposed to such incursions, and national governments need to find more ways other than titling, most cost-effective ways, to secure their tenure.

Several countries in Sub-Saharan Africa have in the last decade sought to deal with this issue. In Uganda, government has addressed this by legislating broad recognition of customary land rights, providing them with the same status as private property rights as that enjoyed by freehold ownership and the same protection under national law. In Mozambique and Tanzania, national land laws have recognized the existing landholding under customary systems, not by reference to custom but to the good faith occupation they have enjoyed under it. In these two cases, land continues to be owned by the state, but customary holdings are given full legal protection as usufruct rights. In a number of other countries, such as Ghana and Nigeria, customary rights enjoy strong recognition under common law judicial decisions, and in Ghana, customary rights can be registered under statute.

But even in countries where customary land tenure is recognized by the state, there are increasing cases of landholders seeking additional protection of their land rights, strangely enough, against the state. As many governments in Africa are notorious for not paying full and fair compensation when they compulsorily acquire land in the public interest, the customary landholders seek documentary evidence, such as a title deed, to increase their negotiating power against the state in the event they are evicted by the state.

A second and supplementary approach is to provide a certification of land rights less elaborate and expensive than land registration, foregoing for instance the cadastral survey required for title registration. This is already being tried out in Tanzania and Uganda. Decentralization will be a key element in such cost-effective approaches, and yet it should be approached with caution. In the Uganda 1998 Land Act, an ambitious district level staff was specified that could not in the end be funded, requiring the amendment of the law and resulting in some years' delay in implementation.

A third and supplementary approach is the provision of a title to the community or village, leaving individual rights within the community or village to be taken care of by the community or village itself. This approach is cost-effective as it requires surveying the boundaries of community land only, and not the land boundaries of individual landholdings. The Uganda 1998 Land Act and the Tanzania 1999 Village Land Act provide for the issuing of village titles along these lines.

What this implies is a two-track approach to land tenure reform. In some areas, where the demand for change has outpaced the evolution of customary tenure systems, there is a need to essentially replace those systems. Systematic titling is an effective way to approach this problem. Systematic titling adjudicates, surveys and registers land in mass area by area, and thus enjoys economies of scale. And transparency can be achieved through community participation. But equal attention must be given to other areas, through recognition and protection under national law of customary land rights and land holdings, and the provision to rural people of more user-friendly and affordable options for recordation and certification of those land rights. That attention will need to include not only support, but reform initiatives, especially if customary rules infringe constitutional or other fundamental rights but more generally as well, to increase transparency and accountability in decision-making under these systems and to assist their evolution to accommodate the increasingly market-driven economies in which they exist.

This implies maintaining a number of approaches to securing land rights in place at the same time within a nation, perhaps for a generation or more. At independence, "unification of land tenure" was often a stated aspiration of new governments. It is still a worthwhile long-term objective, but in the short and intermediate run, the emphasis must to be on responding adequately to the different needs of different landholders for security of tenure.

THE CHALLENGES FOR LAND TENURE REFORM

In Madagascar as elsewhere, customary and statutory land rights co-exist. The customary rules predominate in remote areas or where there is little presence of the state and land is often still relatively abundant. The statutory rules dominate in areas where there the state has an historic interest (e.g. for parks, protected or classified areas, or rice irrigation schemes) or in densely populated urban and peri-urban areas where land titling has been carried out. Legally, all non-titled lands belong to the State but in practice, considerable areas of farmland, forests and pasture have been allocated and are held under traditional tenure systems.

Madagascar's customary regime has unfortunately often been seen as "backward" and less desirable. This may explain why it still finds itself in legal limbo. How Madagascar will deal with customary land tenure remains one of the key challenges facing land tenure reform. It has so far not adequately been dealt with, even in the most recent legislation. The new national land law and policy calls for the creation of land certificates provided by the commune, combining simpler certification of land rights with a decentralized administration of the new system.

The second challenge relates to salvaging the Torren's title deed system. Is it worth it? The statutory system in Madagascar is based on title deeds: the so-called Torrens system, imposed by the French colonial authorities. It covers only a tiny part of the country and is for all intents and purposes almost dysfunctional, because the post-independence administration did not have the

capacity and resources to sustain it, let alone extend it to the population as a whole. However, it does represent the desired form of ownership in most high value areas, as attested by the long queues of applicants in the Offices des Domaines in the major cities. Just for this reason alone, it would be difficult, if not impossible, to simply abandon the system and go for a wholesale replacement.

The colonial legacy in land administration, then, is a system which is extremely costly to access, moves at a snail's pace (with waiting periods sometimes spanning decades), with records that are hopelessly out-of-date, and because of its complexity, is not understood by the majority of the population. So the principle of "building on what exists" also implies assessing whether the existing titling system can be salvaged and reformed. Is the Torrens system salvageable?

The Bank works with Torrens-style land registration systems in many countries, and does consider that they are superior for higher-value land. Bank projects in many countries support systematic titling under such systems. The experience in Cambodia, Laos, the Philippines and elsewhere indicates that such systems can indeed be simplified and made affordable (see the fourth section of chapter 8). Two decades of experience in Thailand suggests that such a system can also be made self-supporting. New technologies help make this possible.

In the next chapters, we will assess what the potential costs and benefits of an improved Torren's system could be, and make a number of suggestions for its reform.

The remainder of this report has the following outline:

(i) Land tenure overview;

(ii) History

(iii) Current land tenure issues

(iv) Titling

(v) Preventing open access to natural resources;

(vi) Policy and legal reforms; and

(vii) Policy recommendations and possible Bank assistance.

3. AN OVERVIEW OF LAND TENURE AND LAND MARKETS

This chapter lays out what is known about the economics of agricultural land in Madagascar; particularly, the distribution of its ownership, the features of the markets in which it is transacted, the manner in which its ownership is (or is not) documented, and the nature and extent of land ownership insecurity. We will argue that land is relatively evenly distributed, which is important for equity, but also for efficiency. There is ample international evidence of the potential for accelerating broad-based agricultural growth based on small family farms. Land markets exist, but most transactions are taking place supported by other documentation than title deed transfers.

DATA USED

The analysis in this report is based on the existing literature and the results of two recent surveys, one of which was undertaken specifically for the purpose of this report. The EPM (*Enquête Permanente de Ménage*) of 2001 is a nationally representative income and expenditure survey which includes a detailed agricultural module.

The second, the EDPLA (*Enquête Droits de Propriété Lac Alaotra*), completed in 2005, covers 38 communes surrounding Lac Alaotra, the most important rice-growing region of Madagascar. Over 1,700 households were sampled. While it does not provide a national overview, this survey is much more detailed than EPM-2001 on, among other things, the issues of land documentation, tenure insecurity, and conflict in the Lac Alaotra region, which contains some of the country's most productive irrigated rice land.

SUITABLE ARABLE AND IRRIGATED LAND IS SCARCE

In 2004, the total population of Madagascar was estimated at about 17.5 million. Given a total land area of about 581,000 km^2, this translates into a relatively low population density of 31 persons per km^2. This would not put Madagascar in a category of countries which is deemed "land scarce". However, if we combine a number of agricultural constraints (viz. agro-climatic, topographic, chemical, etc.) into an overall index of "suitable arable land", Madagascar turns out to have very little arable land per person (Table 1). Note, however, that this definition of "arable" is quite restrictive, in particular by using a measurement of the slope of a terrain which may be problematic for mechanical cultivation methods, but less so for manual methods.

The table shows that the share of suitable arable land is quite small. Irrigated land is also extremely scarce. Hence, the pressure on land with high agricultural productivity is high.

Table 1: Land availability

Land	*sq km*	*population density (p/sqkm2)*
Total	581,540	31
Suitable arable land	25,588	684
Irrigated	10,900	1,605

Source: Centre for World Food Studies, Free University, Amsterdam.

FARMS ARE SMALL, BUT EVENLY DISTRIBUTED

The vast majority of Madagascar's rural population ekes out its existence on very small farms. The median area owned per household is about one hectare, based on EPM-2001, and very rarely exceeds 20 ha.[3] Given limited leasing markets, typical operated area is not much different than this.

The median size of an agricultural plot in Madagascar is 0.20 ha, viewed by some observers as too small and a serious impediment to agricultural mechanization. Large-scale mechanized agriculture is rare. Fraslin (2002) estimates that there between 100 and 200 such farms occupying less than 2 percent of the country's cultivated land. Partly, this reflects the history of land ownership in Madagascar (no widespread imposition of settler farming or feudal land relations). Partly, this also reflects the difficult terrain of most of the country. In this setting, rice plots must often be small to render them sufficiently level for adequate flooding. Plot size, of all land types, is substantially higher in the Lac Alaotra area, probably reflecting both topographical and historical factors.

With a Gini-coefficient of 0.57, the distribution of land in Madagascar is relatively equitable, comparable to Uganda (0.55) and far more equitable than many Latin American and South Asian countries, such as Brazil (0.84) and Pakistan (0.78). The absence of a strong feudal or settler history militates against looming land conflicts rooted in landlessness and inequality.

While there is a smattering of evidence that land inequality rose during the 1980's (Dorosh, et al., 1998), the data sources are not strictly comparable across years and must be viewed with caution. Moreover, increased land inequality, to the extent that it did occur, could well have been driven by the high rate of internal migration and consequent new entry into farming, rather than through land reallocations arising from distress sales by the poor.[4]

POVERTY AND LAND OWNERSHIP ARE LINKED

There is a fairly strong link between rural poverty and land ownership (Table 2, see also Dorosh, et al. 1998). Nationally, median owned area rises, though not consistently, from 0.67 ha per household in the poorest quintile to 1.00 ha in the richest quintile. The poor also tend to have a smaller share of lowland, which is more valuable than upland. This difference tends to

[3] Other surveys, such as the agricultural census of 1984 and more recent data that are not-nationally representative – i.e., ROR (Reseau d'Observatoires Ruraux), IFPRI/FOFIFA survey (International Food Policy Research Insitute), and the BASIS CRSP survey – probably provide more accurate information on land area than the EPM-2001. These data show slightly larger, but still very small, farms.

[4] Data from Lac Alaotra shows that recent migrants (i.e., those born elsewhere) own 30 percent less land than original residents or children of migrants.

accentuate effective land inequality. In the data from the Lac Alaotra, these patterns are more pronounced.[5]

Table 2: Agricultural land ownership by expenditure quintile (land owners only)

Variables		Consumption/wealth quintile					
		All	1	2	3	4	5
EPM 2001 (INSTAT-DSM)							
Owned land per household (are)	Mean	277	123	162	206	399	616
	Median	100	67	80	100	135	100
Owned land per capita (are)	Mean	74	20	30	49	92	233
	Median	20	11	16	23	31	33
Plot size (are)	Median	20	15	15	25	25	30
Share (in percent) of							
rice-land in total owned area	Mean	46	43	46	46	51	47
upland in total owned area	Mean	50	55	51	50	47	48
Lac Alaotra (World Bank, EDPLA 2005)							
Owned land per household (are)	Mean	446	84	184	306	440	1214
	Median	280	75	170	300	425	800
Owned land per capita (are)	Mean	131	29	64	100	131	337
	Median	80	25	51	86	117	216
Plot size (are)	Median	70	25	50	60	100	125
Share (in percent) of							
Rice land in total owned area	Mean	55	37	52	54	62	68
upland in total owned area	Mean	37	55	41	36	29	24

As in many other countries, the poor cultivate their land more intensively. Several studies indicate an inverse size productivity relationship (Barrett, 1996; Randrianarisoa and Minten, 2001; Randrianarisoa, 2002; and Stifel et al. (2002). In addition, based on observations from 2,495 plots included in the EPM-2001 database, rice yields and rice cultivated area were also found to be negatively correlated (-0.31). On average, poorer households show low labor productivity, while returns to a unit of extra land for them are large (Randrianarisoa, 2002).

No background study on gender issues was done for this report. Nevertheless it is clear that land ownership in Madagascar is skewed toward men. Fortunately the situation is less extreme than that in many other countries: EPM-2001 data shows that 52 percent of agricultural plots are in the name of the man, 15 percent in the name of the woman, and 23 percent in their joint name (Table 3).[6] Several anthropological studies mention a *gender bias* in land ownership.

Certain groups have traditionally been excluded or, at least, discouraged from land ownership.

[5] This steeper poverty-land ownership gradient in Lac Alaotra can be explained by the fact that the quintiles for this sample are based on a measure of the value of farm assets, including land, zebus, machinery, and so on, rather than on per-capita expenditures, as in the EPM-2001.

[6] This presumably refers to the name or names on any land documents that exist, whether they be formal titles or informal *petits papiers*. In the majority of cases, as will be seen below, these will be informal documents, which have no legal status.

Remnants of a caste system still exist in parts of Madagascar in which the lowest caste, often descendents of slaves, are socially isolated and denied the opportunity to own land (Randriamarolaza, 2001; Galy, 1998; Evers, 1996). Their only access to land is through sharecropping or rental arrangements.

Table 3: Type of ownership by expenditure quintile*

% of land	Total	Q1	Q2	Q3	Q4	Q5
Individual man	52	51	55	54	49	49
Individual woman	15	16	15	12	17	16
Joint couple	23	21	21	26	21	30
Communal ownership	3	3	3	2	3	3
Par individis	7	10	7	7	11	2
Total	100	100	100	100	100	100

* Source: INSTAT-DSM, EPM 2001
*: Q1: poorest quintile; Q5: richest quintile
*: Par individis: joint ownershiop of heirs

Lastly, despite some recent changes in the law, foreigners are still effectively excluded from land ownership in both rural and urban Madagascar. Just like domestic investors, they can, however, acquire land through a *bail emphytéotique* for a period between 18 and 99 years. Nevertheless, lack of secure land rights is often reported a barrier to foreign direct investment in rural areas.

MOST LAND IS INHERITED, BUT ACTIVE LAND PURCHASE MARKETS HAVE EMERGED IN HIGH VALUE AREAS

The vast majority (91 percent) of agricultural plots in Madagascar are owner-cultivated (Table 4, EPM-2001). Most of these have been inherited (78 percent); only 13 percent of owned plots are purchased, and relatively few are obtained through slash and burn. These figures are not atypical of low income countries generally (Binswanger and Rosenzweig, eds. 1984; Platteau, 1996), and are even comparable to those from countries with much more developed agricultural sectors than Madagascar (e.g., Pakistan).

Table 4: Land and Land Tenure Data from EPM 2001

Land tenure type:	***Frequency***
	(% of all plots)
Owner-cultivated	91%
Tenancy Arrangements: (% of all leased plots)	9%
Share cropping	47%
Fixed lease contracts	36%
"For Free" rental arrangements	17%
Acquisition method: (% of all sample plots)	
Purchase	13%
Inheritance	78%
Gift	5%
Slash-and-Burn	4%

But land market transfers are common near towns and in high-value rice growing areas, like Lac Alaotra (Table 4). EDPLA-2005 data reveal that a remarkable 41 percent of agricultural plots in the Lac Alaotra area were purchased and only 42 percent were inherited. These findings suggest that property rights in land in this area are evolving towards individualization and tradability,

caused by the intensification of production and the increased population pressure. These findings also demonstrate how economic forces are able to change the Malagasy cultural attachment to ancestral land which would in principle severely circumscribe the land sales market.[7] In the Lac Alaotra area, 11 percent of all acquisitions and 27 percent of all land sales were actually between close relatives.

Table 5: Land Documentation for Rice Plots by Mode of Acquisition (Lac Alaotra)

Mode of acquisition and documentation	% of plots	% of plots with document by category			
		Titled			
		up-to-date	*out-of-date*	Untitled	All
Purchased from close relative	11	**8**	**6**	**85**	**100**
Acte de vente		93	91	91	91
Certified *acte de vente*		74	86	74	75
Acte de donation		39	17	16	18
Purchased from distant relative, neighbor, stranger	30	**11**	**6**	**83**	**100**
Acte de vente		98	98	96	96
Certified *acte de vente*		91	87	89	89
Acte de donation		38	18	17	20
Inherited	42	**15**	**20**	**65**	**100**
Acte de patrimoine		50	70	59	60
Acte de notorité		52	71	55	58
Acte de donation		34	21	23	24
At least one of three above		57	77	60	63
Cleared by owner	7	**9**	**0**	**91**	**100**
Authorization for clearing		45	----	28	30
SOMALAC	10	**44**	**5**	**51**	**100**
Acte d'attribution		----	----	85	----
All Plots	100	**16**	**11**	**73**	**100**

Notes : Figures in bold are row percentages for titled status by mode of acquisition.

For Madagascar as a whole, there is little evidence that land markets are contributing to a less equal land distribution. If land transactions among the poor are dominated by distress sales, land markets would contribute to the concentration of land in the hands of a wealthy few (Freudenberger, 1998; Brown, 1999; Razafindraibe, 2001; Goedefroid, 1998). However, figures on the distribution of land market activity may be deceptive in this regard because land transactions tend to be infrequent in more remote areas, where poverty is also more pervasive. And results from one region, Lac Alaotra, show that the poor purchased practically the same fraction of their owned land as the rich. This runs counter to the distress sales argument, according to which poor households purchase little, if any, land.

[7] Note that the areas around Lac Alaotra where nationalized, the land that was redistributed back to peasants in recent times are not part of the present sample. Therefore practically all of these purchased plots must have been ancestral land of the former owners.

SUBDIVIDED PLOTS DO NOT SHOW LOWER PRODUCTIVITY

Malagasy inheritance customs have often been cited as a constraint on the efficient use of agricultural land. The inefficiency could stem from two practices: the continuous sub-vision of plots from generation to generation. and the practice of rotating cultivation between the co-owning family members. Subdividing land generation after generation leads to a profusion of tiny plots that some observers claim are uneconomical to cultivate, particularly using animal or mechanized traction. However, the evidence of production inefficiencies due to small plot size is weak. And the practice of rotational cultivation is only done in 14 percent of cases in the EDPLA-2005. In most cases, one family member retains the cultivation rights, even though the plot is co-owned between all inheriting family members.

Indeed, evidence from EPM-01 shows that the median size of an inherited plot is about half that of a purchased plot, both for upland and lowland plots. However, whether such land fragmentation leads to a significant loss in productivity remains an open question. Interestingly, no such plot-size differential is evident in the data from the Lac Alaotra region, where plots tend to be considerably larger than elsewhere in Madagascar. In addition, in Lac Alaotra, tractor or animal traction was hired on 22 percent of owner-cultivated rice plots. Yet, there is no difference between the median size of plots on which traction is hired and those plots on which no traction is hired. One reason for these contrasting findings may be the relatively active land market in Lac Alaotra. Any initial difference in the typical size of inherited and purchased plots would tend to dissipate over time as more and more inherited plots are sold off to become purchased plots.

An alternative to physical subdivision of an ancestral plot is for several heirs to share control. Co-ownership is practiced on about 8 percent of rural plots (EPM-2001). Depending on how it is organized, co-ownership may lead to incentive problems and increase the likelihood of land conflicts. On these questions the EDPLA-2005 is more informative than EPM-2001. The most common co-ownership arrangement, and, perhaps not surprisingly, the one most efficient *prima facie*, is for one household to retain cultivation rights without giving the other heirs any part of the crop output; crop-sharing occurs in just 12 percent of cases. In another 14 percent of the cases of co-ownership, cultivation of the plot is rotated across households. Rotation creates negative incentives by reducing the private return on each heir's plot-specific fixed investment and land maintenance efforts. Given that the median number of co-owners for inherited plots is five, the disincentives associated with this arrangement are potentially important, although the relative number of plots involved is exceedingly small.

The international evidence on the alleged inefficiency of small plot sizes is also quite weak. In Africa, no evidence for the costs of land fragmentation could be found in countries such as Ghana and Rwanda[8]. China's average land area per household is about 0.5 ha, sub-divided over 5 plots.[9] This level of fragmentation may indeed carry significant economic costs, in particular since there are no land markets in China, unlike Madagascar. However, this has not prevented China from being consistently ranked among the top agricultural performers in the world during the last three decades. In addition, policy analysts suggest that farm consolidation—the logical

[8] Blarel, Hazell and Place, 1995.
[9] Ministry of Agriculture

policy recommendation—would carry with it a number of serious risks, including higher production risks, a worsening of income inequality, and increased unemployment. It seems that similar risks would exist in Madagascar, while no empirical evidence of a loss of agricultural productivity due to progressive subdivision exists for Madagascar. This leads us to suggest that *farm consolidation should probably not be considered a policy priority.*

LAND RENTAL MARKETS ARE LIMITED, BUT IMPORTANT FOR THE POOR

Even without buying land, households can rent land to align operated area to their other resource endowments. Nationwide, however, only 8 percent of lowland plots and 4 percent of upland plots are cultivated by someone other than the owner (Table 6). However, as with land purchases, there are large regional differences in rental markets. In Lac Alaotra, a high-intensity area, for example, comparable figures are 28 and 8 percent, respectively.[10]

One explanation for the limited overall extent of land tenancy in rural Madagascar is the relative absence of land ownership concentration mentioned earlier. Under such conditions, the need for families to rent land in and out would mainly be linked to the typical life cycle of a family. The amount of cultivated land would then have a tendency to change depending on the needs (i.e. the number of consumers) and the family's labor force (number of workers). This changing consumer-worker ratio would be one source of demand and supply of rental land (Chayanov, 1966)[11].

Table 6: Tenure systems by expenditure quintile for land cultivators*

	Total	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*
% who owns land	95	97	96	95	94	91
Rice lowland						
% owned	92	93	94	91	90	89
% sharecropped	4	3	2	5	5	5
% rented in	3	3	3	4	4	4
% for free	1	1	1	1	1	3
Rice upland						
% owned	96	98	96	97	94	94
% sharecropped	2	1	3	1	3	2
% rented in	1	1	1	1	3	2
% for free	1	0	1	1	1	2

Source: INSTAT-DSM, EPM 2001
*: Q1: poorest quintile; Q5: richest quintile

As expected, land rental markets are more active in areas close to roads and urban centers and in higher valued rice land areas, as for example in the Lac Alaotra and Marovoay areas (Minten et al., 2003). Sharecropping and renting are both used across all regions: those that have high levels of sharecropping have also high levels of rental land. Land markets are more active in the north and the west of the country, also the areas where most immigration is noticed. In these

[10] The fact that absentee landlords were not interviewed in the EDPLA-2005 survey could lead to an underestimate of the percent of tenanted land. However, absenteeism is probably only a significant phenomenon among landlords within the former colonial rice perimeters, areas that are not included in the present sample.

[11] Chayanov, 1966.

areas, getting access to land for migrants often involves going through rental agreements first. They can then later be changed to permanent ownership. Land markets are least active in remote areas, such as the eastern and southern part of the country.

Another reason for the low amount of land rentals is that one form of tenancy, sharecropping, is illegal. As a practical matter, however, the law is largely irrelevant because enforcement is nonexistent. Indeed, about two-thirds of leased plots are sharecropped.

Finally, land rental markets may be limited by a lack of tenure security. In particular, landowners may eschew long-term rental agreements for fear that their tenants will eventually lay claim to their land. But data from EPM-2001 do not show inordinately short lease durations; the median (ongoing) lease has lasted five years. And, as explored further below in the Lac Alaotra area, we find no evidence of a relationship between land rentals and tenure security.

Land rental markets are particularly important for giving poor households that could not otherwise afford land (or buy it on credit) access to larger operated area.[12] The most common reason stated by respondents in EPM-2001 for renting rather than buying land was lack of money. In Lac Alaotra, a relatively active rental market, 40 percent of operated area of the poorest quintile is leased in, compared to just 8 percent among the highest quintile.

The empirical evidence of the effects of land rental on productivity is contradictory. Randrianarisoa and Minten (2001) report a slightly *higher* productivity on lands under rental agreements, based on EPM-1993 data. But EPM-2001 data show significantly *lower* yields (Table 7). The latter could be explained by the illegality issue and other disincentive effects of the rental contracts. For instance, the land owner very rarely contributes to the inputs in the agricultural production process under the existing sharecropping arrangements.

Table 7: Rice yields under various tenure arrangements (EPM 2001)

	Median Yield (kg/ha)	***Average Yield (kg/ha)***	***Number of Observations***
Owner-Cultivated	1,340	1,990	2,249
Tenant-Operated	1,070	1,610	229
Sharecropping	890	1,410	123
Fixed Rent	1,200	1,560	94
For Free	1,080	2,010	47

Lower yields on rented land, or on sharecropped land, does not necessarily imply an economic inefficiency. Land rental, and in particular share cropping, is usually a so-called "second-best" adjustment to inefficiencies in the rural market for credit, and the resulting credit rationing experienced by owners of rented plots, or by sharecroppers. Credit-constrained owners may prefer to rent out land on fixed term rental, and in the absence of an opportunity to rent out the land, may not cultivate the land, or cultivate it with even fewer inputs than the tenants. They

[12] On the other hand, land tenancy lowers incentives for certain land-specific investments as compared to ownership (see, e.g., Jacoby and Mansuri, 2004). Sharecropping is also sometimes found to reduce land productivity through attenuation of tenants' effort incentives. There is no convincing evidence yet of either such effect in Madagascar.

would therefore even get lower yields. Sharecropping may be preferred because it shares the risks of crop failure between the owner and the tenant which cannot otherwise be insured, while at the same time overcoming credit rationing of the sharecropper. In the absence of the sharecropping arrangement a risk-averse and labor poor owner might try to cultivate with less inputs, in particular of labor and supervision, again leading to even lower yields than under sharecropping. The policy of outlawing sharecropping is therefore not warranted, on economic efficiency grounds. Nor would it make sense to limit the crop shares which owners can obtain, as is done in certain states of India. Both policies are usually unenforceable. If they were enforced, moreover, they may make the sharecropper, the intended beneficiary of the legislation, even poorer. Improvements in the terms of tenancy and sharecropping contract need to be achieved by strengthening the bargaining power of the tenants/sharecroppers, by distributing land to them, improving labor demand via public works, or improving their access to credit. (Binswanger and Rosenzweig, eds, 1984, 1986)

4. HISTORY OF LAND TENURE

Based on a review of the existing literature describing customary and statutory tenure regimes in Madagascar, we will assess to what extent the customary tenure regimes in the various regions are adapting to increasing population pressures through processes of induced institutional innovation. We will then assess the statutory tenure regimes, and end by reviewing the interface between these property rights regimes. The analysis will conclude by indicating where, and what type of, formalization of property rights would have the highest chances of success, given factors such as population pressure, extent of agricultural intensification, level of land prices per hectare, and local and national capacity to manage land administration systems.

Customary and statutory land rights co-exist in Madagascar, which might lead to conflicts. The customary rules dominate in remote areas or where there is little presence of the state, and land is often still abundant. The statutory rules dominate in areas where the state has an historic interest in the area (e.g. around parks, protected or classified areas, rice irrigation schemes) or in densely populated urban and peri-urban areas. The interaction between the two regimes is difficult, despite many efforts made in the past to facilitate the transition from customary to statutory property rights in land.

THE CUSTOMARY REGIME

Legally, all non-titled lands belong to the State. However, in practice, land, even in uninhabited areas, is often already allocated under customary tenure. Available statistics suggest that over 50% of plots of land in Madagascar are held under customary tenure (INSTAT-DSM, EPM 2001). If land not farmed, but otherwise used for pastures and hunting and gathering were included, the figure would be much higher.

In many rural areas of the country, then, custom still governs landholding to a greater or lesser degree. In remote areas such as those in the South-West, the custom governing landholding still is strongly interwoven with traditional notions of identity and authority, and land has spiritual as well as economic value. Leisz (1990) provides a profile of the land tenure system of Madagascar that highlights the continuing importance of customary land tenure, while Leisz et al. (1995) detail the importance of custom in several case study sites in the southwest, including complex regimes for preservation of natural resources (forests, springs) with spiritual dimensions. Freudenberger (1996) indicates how important custom remains even in a village in the central highlands, with regard to both farm and forest resources. FIDA (ca. 2004) in its studies for project preparation in the west, found custom still the base system of tenure but with tenancy arrangements developed to accommodate migrants from the other parts of the country and informal systems for recording transactions in land.

Malagasy people do not need to farm their land in order to maintain their land rights under the traditional system. While land tenure regulations differ between different ethnic groups, a Malagasy family can generally pass the right of usage (guaranteed by the community) down from generation to generation in most groups. Appropriation of land by families often occurs early in the formation of a village community (Pryor, 1990; Keck et al., 1994). In many areas of

the country, customary rules have evolved under the pressures generated by economic change. Practice, and what is acceptable under custom, has changed, supporting the Boserup hypothesis that increased population pressure on and market access to land resources leads agricultural intensification and to the increased individualization and ultimately the tradability of property rights. And in some urban, peri-urban, irrigated, and high-migration areas, land held under custom can now even be sold to outsiders (i.e. non-villagers), without the need for explicit approval from traditional authorities, signaling the "end" of the prohibition of land sales to outsiders and the "beginning" of full tradability of land. This is an important transition in the evolution of individual property rights within customary property regimes under increasing population pressure the world over.

Land under customary tenure may be held under individual or common property rights. Most farmland and residential sites under customary tenure today are held as individual property. This means that the owner makes decisions on the use of land as well as on land transactions, including sales to outsiders. Upon the death of the owner, land is transferred to his heirs. Owners shift to an *individis* system involving joint ownership by the various heirs when the size of plots becomes too small due to the division of plots over different generations. Around 7% of the agricultural plots are managed in such a system.

But even where customary tenure has evolved toward fuller individual rights, substantial areas of commons continue to be managed by the community. Common property of land is prevalent for forest and pasture land. It also exists in some of the more land-abundant regions for agricultural land. For example, in areas dominated by the Tanala or Betsimisaraka tribes, the head of each clan is the owner of traditional land rights. The clan's chief decides on the repartition of land between households and on land use and access to agricultural land has to follow customary rules.[13]

THE STATUTORY REGIME DURING THE COLONIAL PERIOD

The statutory regime for land in Madagascar has a long and complex history.[14] Prior to the imposition of French colonial rule, the Merina Kingdom had already altered customary tenure patterns through the extension of semi-feudal structures to much of the island. This was documented by the end of the 18th century, during the reign of King Andrianampoinimerina.[15] The land belonged to the king, who gave it out to his subjects against payment of a tax: the *isampangady*[16] The king levied additional taxes on rice plots and the slaughtering of cattle, and also demanded a certain number of days in labor duties from his subjects. The lands were allocated to the *fokonolona*,[17] and after that to the various families making up the *fokonolona*. The *fokonolona* held the land in common property. However, through a gradual process of continued labor investments in the land certain plots become more and more individualized,

[13] For a discussion on the case of the Beforona zone in the East, see Barck and Moore, 1997.
[14] This section draws heavily on the background report prepared by M. Andre Houssein, University of Antananarivo.
[15] King Andrianampoinimerina (1747-1810) was one of the sovereigns of a dynasty which had reigned on Imerina (the Madagascar highland) well before the 16th century.
[16] "Isampangady" literally means the "tax for the person handling the spade". It was a head tax imposed on working people.
[17] The fokonolona is made up of the inhabitants of a particular territory who belong to the same clan or lineage. It existed before Andrianampoinimerina, but he strengthened their cohesion by giving them a clear territorial basis.

subject to the rules set by the community. These rules included that:

- plots of land awarded by the fokonolona to build houses or grow crops other than rice could be alienated or mortgaged, but only within the same community, defined as individuals descended from the same ancestor;

- rice fields could only be held continuously by individuals if they were developed and cultivated;

- land could be inherited by succession or will;

- the use, and hence the income, of mortgaged plots could be ceded to the creditor in lieu of interest payments (the so-called "*antichresis*").

The first legislation to define property rights in land was the 1881 "Law with 305 articles", signed into law by Queen Ranavalona II (1868-1883). For instance, this law recognized the right of an individual to mortgage land. More importantly, two fundamental principles of land law that prevail today were also established. The first is that land, unless alienated, belongs to the state. The second is that the state can alienate land, and does so into full private ownership.

Alienation of land to foreigners was restricted. Several treaties between 1881 and 1885, sometimes after wars, attempted to relax these restrictions on English, American, German, Italian and French citizens, who were starting to settle on the island. However, by 1895, France waged a war against Madagascar and subsequently annexed it, first as a protectorate, and then as a French colony.

To the French, the Malagasy were merely usufruct holders on land allocated to them by the sovereign—they did not hold legal title to it. Conversely, foreigners were not allowed to own land, only to rent it under long-term leasehold. The colonial government did not deem this a sufficiently secure arrangement for its settlers and negotiated the introduction of a law which would introduce full ownership.

In 1896, the first year of the colonial era, an edict announced a law on indigenous land tenure. It created three parallel land tenure regimes in the country:

- *individual land title*: privately-owned land created by grants from the state and registered through a title deed registration system under which the state guaranteed the validity of the ownership and the ownership became uncontestable in court;

- *customary and ancestral land*: land consisting of recognized ancestral claims on land, but legally defined as state land, and

- *"native cadastre" land*: customary land formally registered to the indigenous population.

During the entire colonial period (from 1896 to 1960), land tenure would be governed by this 1896 law signed by Queen Ranavalomanjaka III of Madagascar (1883-1897) and the French colonial administration.

Individual title (1896)

The 1896 law provided for the possibility of the creation of titled property, following surveying and adjudication. Introducing the law, the Queen described her support for this law as follows:

> "My desire is to develop our country in order to bring us closer to civilized nations, that is for your peace and happiness. O! People. To achieve this goal, it is essential to carry out some reforms. What I want first and foremost is to establish the inviolability of property, so that you may enjoy it in peace. Because, without it, you could neither develop your farms, nor make the necessary expenditure to improve them. You would indeed not be sure that you would collect the fruit of your work and expenditures. You are aware that there used to be violations of this principle, violations which have caused you trouble and concern for your possessions. In the future, this will no more happen because each owner will be able to get a title with a plan certifying his property boundary, and when the owner has this title, nobody in the world, not even me, your queen, will be entitled to interfere with your possession."

Note that, in order to facilitate French settler agriculture, the French colonial government did *not* introduce the French system—the Code Napoleon. Under the Code Napoleon, property rights are registered, but are not guaranteed by the state and can be contested in court by other citizens. Instead, the French opted for a "foreign" system, the Torrens system, which originated in Australia, but was also used in Germany and in formerly German parts of France, the Alzas region. Under the Torrens system, the State guarantees that the person whose name is on the title deed is indeed the uncontested, and, in a court of law, uncontestable, owner of the land. This system served the colonial authorities and its settlers well, because it effectively annulled any existing rights of the indigenous population on the land targeted. After titling, the land would now be subject to French legislation.

The objective of creating legally unassailable rights is achieved through *adjudication*. Adjudication is the process of final and authoritative determination of the existing rights and claims of people to land. The process of adjudication[18] should reveal what rights already exist, by whom they are held and what restrictions or limitations there are on them.

Title deed registration is decreed as *direct* when it applies to privately-owned land referred to in the 1896 law. This means in practice that someone who wants to register a title deed using the direct method will need to be able to trace and prove ownership since 1896. Title deed registration is called *indirect* when it applies to plots of land granted out of state land, real or presumed.

Customary ancestral land (1896)

The 1896 law also legally recognized land as *tanindrazana* or ancestral land. The law stipulated that "the soil of the kingdom belongs to the state, but the inhabitants will continue to dispose of the land on which they had built or used to farm as they see fit before the promulgation date of this law." However, final recognition of these rights could only be established through direct

[18] The process of adjudication may be sporadic or systematic, as with registration. Sporadic adjudication is a parcel by parcel approach, usually triggered by some specific event, like the sale of the property.

titling.

Land transactions between locals were often documented by the so-called "petits papiers" (see below). These do not prove or guarantee ownership under the law, but can only be used to prove in the courts that transactions have taken place, thereby helping to prove ownership**.**

Native cadastre (1929)

The native cadastre was not broadly implemented. In 1929, a legal procedure was established to allow for *systematic registration, canton by canton, of native individual ownership titles by a mobile tribunal*. Oral testimony would be allowed into the adjudication process. The costs of this systematic titling process, which would culminate into a native cadastre for each canton were to be born by the government. The objective of the exercise was to establish a parallel to the Torrens titling system, similarly uncontestable in court, for the indigenous population. There were two draw-backs to the native cadastre. First, the roll-out of the process would have to follow the implementation strategy of the government, constrained by its budget. The cadastre seems to have been successfully introduced in the seven urban centers of the Malagasy highlands. However, between 1929 and 1960, in addition to these towns, only 50 cantons were adjudicated, and only 20 cantons completed the titling procedure by issuing individual titles. Second, land thus titled could not be alienated or mortgaged for a period of 30 years. Finally, the holders of these cadastre titles would fall under customary, not French, law.

"Colonization" perimeters

The colonial state also set up a number of high-intensity agricultural projects, usually irrigation projects. The objective was to then allocate fully titled plots for "immediate possession" on these projects to the French settlers—the "colonizers". For the purpose of this report, a survey in one of these areas, Lac Alaotra, was conducted to assess the economic benefits of titling, given the long history of titling in this particular "colonization" perimeter.

Native reserves

At the same time, urban and rural native reserves were created to cater for the subsistence needs of the indigenous population. These reserves were legally state land, but allocated to local communities, the *fokonolona*, for their use. If an individual developed his property, the authorities could transform the use rights into an individual property right transferable *within* the community, as under a typical common property regime. These reserves were located in Ambatondrazaka, Morondava and Diégo-Suarez.

THE STATUTORY REGIME AFTER INDEPENDENCE

During the 1st Republic (1960-1971), Law No. 60-004 dealt with the private domain of the state, confirming state ownership of land. Its main purpose was to address the land tenure legacy left by the colonial period, with its discrimination against the majority of the population. Hence, the "colonization perimeters" and the native reserves were abolished. The law also firmly established the role of the state as a land owner:

> "the State is presumed to be the owner of all land that is not titled, registered in the

cadastre or appropriated by concessions or following the principles of public and private common law. However, this presumption cannot be used against individuals or communities which occupy plots of land on which they exercise individual or collective possession rights which could be formalized by issuing a land title in accordance with the present law."

However, contrary to the colonial law, from now on, the burden of proof to establish ownership would fall on the state when dealing with land developed by a Malagasy.

Moreover, it provided that individuals and communities that were occupying land could have those lands titled to them. Access to land for nationals was facilitated through a system of grants from the private domain of the state, unused land was confiscated, and settlement programs were instituted. The Torrens and "native cadastre" systems were unified under the Torrens system. Law No. 67-029 instituted a special cadastral procedure, rather like that formerly used under the "native cadastre" for *collective registration* within the Torrens system.[19]

Land grants, sales and leases out of state land

Law N° 60-004 also contained the following provisions to facilitate easier access to land by the majority of the population:

- free delivery of a "titre déclaratif", for urban plots and for rural agricultural or forestry plots below 30 hectares, if they have been effectively and personally developed for 10 years;

- granting of a concession title for a fee or by auction (for urban land) with development conditions attached;

- free titles for rural plots less than 10 hectares for veterans, graduates of agricultural colleges and newly weds;

- land grants without size limits to local communities—a case needs to be made as to why a title is needed to the commission that examines the application, but the land need not meet the same development conditions as for land applied for in individual property right; and

- leases (short or long) with development conditions attached.

Relative tenure security (GELOSE)

Under the 2nd Republic (the National Democratic Revolution, from 1972 to 1991), the main goal of a 1974 land tenure law was to extinguish whatever remained of feudal or colonial relationships. The law introduced the right of the state to confiscate land which was sharecropped. The law also restricted foreign ownership of land by requiring foreigners to obtain approval from the Minister of Home Affairs.

[19] Under articles 18 and 26 of Law 60-004.

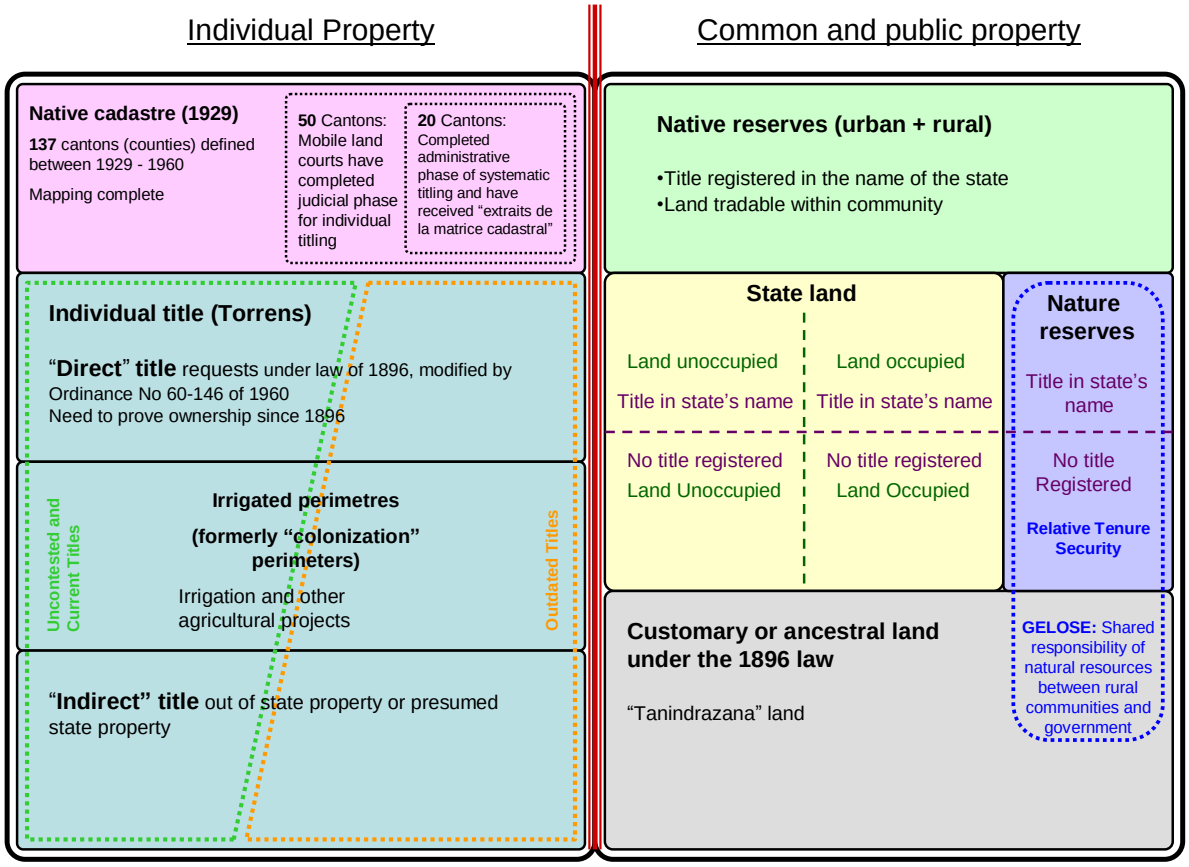
Also introduced was the so-called "Loi GELOSE" (law no. 96-025). The law sought to establish "Gestion Locale Sécurisée" or "secure community-based management" of customary and ancestral lands, within the private domain of the state. To support this new policy, law no. 98-610 established a new regime of "relative tenure security", intended as a less costly, more rapid and simpler system for providing secure tenure.

The approach was inspired by the *Plans Fonciers Ruraux* in the Ivory Coast. A community would be able to make a sketch map of its boundary and the individual plots, using aerial photographs on a scale of 1/10,000, which would then be enlarged to 1/2500. Ownership and area of each plot would be recorded. A community could obtain an exclusive right of use over its land, but this was seen as a transitional step toward eventual registration of title under the Torrens System. Only when the title was registered would the land become legally the property of the community; until that time, the land remained part of the private domain of the state. In fact few communities have been able to complete the long and demanding titling process, for reasons that are explored below.

LAND UNDER FORMAL PROPERTY RIGHTS REGIMES

In this chapter, we have described the history of statutory land tenure in Madagascar. The result of this complex legal history is a mosaic of different property rights regimes (see Figure 1). However, from a purely legal perspective, one can distinguish several categories of property rights in land. First, for individually titles property, land will fall under three categories, depending on the origin of the titling: (i) direct registration; (ii) irrigated perimeters; and (iii) indirect registration. Second, for common and state property, land will fall under the following categories: (i) former native reserves; (ii) customary and ancestral land; (iii) state land; and (iv) nature reserves. For titled land the distinction between up-to-date and out-of-date titles is important, because as time passes, it is likely that out-of-date titles are replaced by other, more current documentation. In other words, the tenure security of the title deed slowly diminishes.

Figure 1: The complex mosaic of existing property rights regimes



CONCLUSION

In conclusion, the terms on which land can be moved from the customary system to the statutory system of land tenure have fluctuated over the years. The one constant is that all such land is considered part of the private domain of the state and that property rights arise only by virtue of alienation by the state to private individuals or groups. Today citizens who hold land customarily can apply for property rights as individuals for urban plots, and for rural plots up to thirty hectares, based not so much on their rights under customary law, but upon their having developed the land (the notion of "*mise en valeur*").

While it is possible to move from the traditional, informal to the formal, State-recognized land rights, the process is complex, slow, cumbersome and costly. *Annex 3 provides the details of this process (take from Houssein).* The formal laws are not well understood by the general population because of their extreme complexity, the French language, and the legal jargon used.

This poor performance is the result of the imposition by the French colonial authorities of a very demanding titling system (the Torrens title deed system, in which the State guarantees the ownership of the land). Registration of a title in this register legally guaranteed land ownership to the colonial settlers, extinguishing any indigenous claims to the land. While this system served the colonial authorities well, the post-independence administration did not have the

capacity and resources to sustain it, let alone extend it to the population as a whole. As a result, inheritances and transactions have gone unregistered, and the situation on the ground today bears little resemblance to what is documented in the title deed registry.

Most recently, Law No. 2003-029 and Decree No. 2003-908 modify the process under Law no. 67-029 to provide for three stages of security of tenure within collective registration category, depending upon the level of socio-economic development of the rural community concerned: 1) simple delimitation and recording of holdings, with the deposit of cadastral documents constituting a *guichet foncier* in each community, but leaving customary land administration in place; 2) confirmation of the right of property by a Mobile Land Tribunal, intended for communities which govern their land tenure through the *dina* (a written text reflecting customary rules) or other written code; and 3) registration of titles, for advanced communities. We will return to these new policy reforms below.

5. CURRENT PROPERTY RIGHTS REGIMES

PROPERTY RIGHTS REGISTRATION: TIME AND COST

Formalization of individual property rights takes a long time and is extremely costly. To obtain an individual title, the titling procedure requires more than 20 stages and takes years to finalize (Teyssier, 2004). Moreover, land registration offices are understaffed and under-equipped and users often have to pay for all the costs incurred in the process. Hence, the total costs of a title are high and amount to an average of about US$350 (Teyssier, 2004). This cost represents a large part of the value of an average agricultural plot and is prohibitively high for remote areas (where the values of plots are lower) and for smaller plots.

Table 8 gives an estimate of the number of steps and days required *at a minimum* to complete the process of obtaining formal property rights under both sporadic titling (i.e. "on demand") or systematic titling (i.e. as part of an area-wide process).

In spite of this, there is an impressive demand for titles, but given the high transactions costs of establishing legal ownership, the land registration offices have only been able to deliver a tiny amount of the titles requested. It is estimated that during the last century, 300,000 titles or only about 100 titles per year per *circonscription* have been registered. And in the last fifteen years, only between 650 and 1,750 titles have been registered at the national level per year (Teyssier, 2004). The land registration office therefore estimates that only about $1/15^{th}$ of the national land area is properly titled. Current government capacity is estimated at about 1,000 titles per year. With a backlog of about half a million applications, this means that updating the title deed registry is impossible.

A micro-study comparing registry records with facts of landholding on the ground for a small section of the irrigated perimeters in the Lac Alaotra basin suggests that this is the case even for highly commercialized land.[20] .This confusion creates room for opportunistic behavior and corruption.

[20] Andriherisoa Rarivoharison, 2005 "Le Titre Foncier face a ses Réalités; Etat des Lieux de l'Immatriculation Foncière" Unpublished Powerpoint Presentation. Projet de mise en valeur et de protection des Bassins versants du Lac Alaotra. Ministre de l'Agriculture, de l'Elevage et de la Pèche (Abatondrazaka:CIRAD/Agence Francaise de Développent.

Table 8 Formal registration: time and cost

Property right	Procedure for formalization		Number of steps (cumulative)	Number of days (cumulative)	Average cost (2001)
Sporadic titling					
Title deed land (Torrens)	**"**Direct" registration under the 1896 Law, amended by Order N° 60-146 Need to prove private ownership since 1986 - Un-opposed - Opposed without appeal - Opposed with appeal	II, i	16 22 28	100 258 411	$US 769 (per title)
Grant out of state land	"Indirect" registration under articles 18 and 26 of Law N°60-004	III, ii	37	202	
Sale out of state land	"Indirect" registration under Article 45 of Law N°60-004 - Provisional title, surveying and registration - Audit of effective development - Delivery of final title	III, ii	34 35 43	184 after 3 years 279	
Systematic titling					
Title on customary land (ex: 10,000 ha)	Systematic registration under Law N°67-029 - surveying - adjudication - registration and titling	III, iv	8 11 12	300 570 720	$US 63 (per title)
Title on irrigated or high-potential land (ex: 200-300 ha)	Systematic registration under Law N°60-004		21	305	$US 61 (per ha)
Relative tenure security	Procedure under Law N°98-610	IV, ii	8	138	$US 8 (per ha)
Optional levels of security: - **relative** - **intermediate** - **optimal**	New procedure under Law N°2003-029 - surveying (community-based registration) - adjudication (certificates) - titling	IV, iv	7 11 12	103 183 203	$US 63 (per title)
National Land Tenure Reform pilot	Procedure: - Individual certificate of occupation - Development of plot - titling		13 16	300 3 years 60	

Other negative side-effects of the high costs of titling are apparent as well. The rich hold relatively more secure titles to land than the poor and there is evidence that the rich and more educated might get formal titles at the expense of the poor (Healy and Ratsimbarison, 1999; Faroux, 1996). Table 9 shows that 28 percent of owned land was reported to be titled in the National Household Survey (Enquête Permanente de Ménage) of 2001. While the absolute number is overestimated, probably due to confusion on what titling means (and might not always reflect legal titles in the name of the owner), the reported percentage of titled land illustrates a

major gap between poor and rich: the percentage of land registered is as high as 42% for the richest quintile compared to only 22% for the poorest. Hence, while the poor have access to less land, they also seem to have less secure legal rights to the land they do own. Moreover, even if there are titles for the plots of the poor, it is more often not in their name – the registration not having been kept up to date -- than for the richer households.

In the case the household did not own a title, a follow-up question was asked in the national household survey on the reason for not acquiring a title (Table 9). The most common answers are that households do not know how to acquire a title (26% of the answers), lack of money (18%) and the perceived inutility of a title (25% of the answers). While the poor have less formal titles to their land than the rich do, they also feel less the need to have a title: 27% of the poorest quintile reports not to need a title compared to only 18% of the richest quintile.

Table 9: Property rights by expenditure quintile

	Total	Q1	Q2	Q3	Q4	Q5
Judicial situation (% of plots)						
Titled land	28	22	26	28	25	42
Cadaster land	11	6	10	13	12	17
Terrain domanial	8	7	10	8	10	5
Terrain ancestral with witness	37	40	37	34	43	28
Terrain ancestral w/o witness	16	25	18	17	10	8
Total	100	100	100	100	100	100
If title, in name of whom?						
Chief of household (%)	59	52	53	62	60	63
If no formal title, why not?						
Do not know how to acquire title	26	28	30	29	23	15
The cost of title is too high	8	7	9	8	8	5
Lack of money for title	18	18	15	17	20	23
Lack of time for demand title	4	5	1	4	6	5
Too many procedures to follow	8	7	9	7	9	11
Land belongs to state/village	3	3	3	5	3	3
Do not need title	25	27	27	27	23	18
Procedure underway	2	2	3	2	2	4
Other	4	4	2	2	5	15
Total	100	100	100	100	100	100

Source: INSTAT-DSM, EPM 2001

Notes: Q1: poorest quintile; Q5: richest quintile
titled land : owner possesses a legal deed; cadaster land: land is registered in the files of the Domaine Foncier (through mapping and delimitation of plots) but owner does not have a legal title in his name; terrain domanial: state-owned land; terrain ancestral: land obtained through customary arrangements.

EXTRA-LEGAL PROPERTY RIGHTS REGISTRATION: "PETITS PAPIERS"

Because of a lack of accessibility and the high cost of formal titles, the people either continued to use the traditional system ("dina"), or invented their own system of recording of transactions ("petit papiers"). However, these alternative systems do not produce a property right recognized by the law, only a record of a transaction. This situation contrasts with many other countries in Africa, where dispositions under the customary system are recognized in the courts when not contradicted by registered dealings.

The spontaneous development of informal land documentation, the so-called *petits papiers*, throughout Madagascar, demonstrates an effective demand for some form of formalization, over

and above the rules of customary law. This formalization "from below" of property rights in the form of "petits papiers" has developed in most areas in the country where local authorities, often at the fokontany (community) or the commune level, deliver a document in the case of land transactions. This document is signed by the president of the fokontany or the mayor of the commune in the presence of witnesses, often neighbors, to attest the authenticity of the document. This type of document is commonly used at the local level as proof of ownership, and is sometimes deposited in local government offices. But there is no institutionalized system of depositing these documents with local government offices for safekeeping and easy reference.

Because so little is known about the nature and prevalence of these documents, the EDPLA-2005 was specifically designed to gather information about them. What these data, summarized in Table 10, principally show is that there are multiple papers and that they differ according to how the land was acquired.

Most (93 percent) of land purchases in the Lac Alaotra area are documented with a "petit papier"—an informal "acte de vente", for lack of a better term. This is usually handwritten and lays out the particulars of the transactions, such as the location of the plot and the parties involved. The informal *acte de vente* is normally signed by witnesses (median number of witnesses is 3) and, in 86 percent of cases, by the chief of the *fokontany*. In a fifth of the cases, additional formalization of the transaction was obtained by having the head of the commune notarize the signatures of buyers, sellers and witnesses. Clearly, one of the purposes of such a procedure is to give the buyer greater assurance that the plot has not already been sold to someone else, but it can also later serve him as proof of a land sale and support his claim of ownership.

A second type of local-level land documentation is the *acte de donation*. This paper, given by the commune, indicates that a specific person has transferred a well-demarcated parcel of land to another person. The *acte de donation* is far less common than the informal *acte de vente*, existing for only 14 percent of the purchase plots.

Ownership of inherited plots is generally less well documented than that of purchased plots. EDPLA-2005 data show that 56 percent of inherited plots are mentioned in an *acte de patrimoine*, a document issued by the *Direction des Impôts* which itemizes the estate of a deceased person. For half of all inherited plots, the name of the respondent is listed on an *acte de notorité* (issued by the *Services des Domaines*) indicating that he is an heir of the deceased.

A document linking each heir with the contents of the estate—i.e., the equivalent of a will—does not appear to exist in rural Madagascar. Given the frequently large families in Madagascar (the average number of heirs in Lac Alaotra is three, the median is one), this lacunae raises the potential for conflict. The *acte de donation*, which does link plot and owner, though apparently only after an individual has established *de facto* control of the land, in any case only exists for 20 percent of the inherited plots.

Not all plots have the same "petits papiers". For 18 percent of the inherited plots, the owner has all three of the abovementioned papers. For 35 percent of these plots, the owner has no paper. Interestingly, plots that are co-owned are far less likely to have any of the three papers. In the case of the *acte de donation*, this may be due to a reluctance to attribute the plot to just one

household. For the other papers, perhaps those testators who want to bequeath specific plots to specific heirs are more likely to document the inheritance.

The wealthiest landowners in Lac Alaotra appear to have better documented land than the very poorest. This is true to some extent for all four of the papers relevant to purchased and inherited plots just mentioned (see Table 10). For inherited plots in particular, 21 percent have all three papers when the owner is in the wealthiest quintile as compared to 9 percent when the owner is in the poorest quintile. Moreover, 41 percent of inherited plots owned by the poorest quintile have no paper at all, which is true of only 21 percent of plots owned by the wealthiest quintile. Differences in land documentation among the three middle quintiles, on the other hand, are generally slight, as are differences across education level of the household head (i.e., with and without completed primary schooling). It is not exactly clear, then, why the poorest households have the least demand for formalization.

There are the 13 percent of plots that the owner himself created through clearing bush or forest. In most of these cases, the owner did not obtain written authorization for the exploitation of the land in advance; 15 percent of the clearances were authorized at the *fokontany* level, 8 percent at the commune level, and 8 percent by an agent of the Ministry of Water and Forests.[21] Such an authorization could help in securing recognition of ownership. Otherwise, there are few options short of formal title. An *acte de donation*, for example, is not applicable to plots that have not been transferred between two parties.

Respondents mentioned other documents that could be used as evidence of land ownership, the most widespread of which is a land tax receipt and the registry of the tax payment in the commune headquarters. A few also reported that they could use the fact that their plots were included in a cadastre as proof of ownership. While the cadastre does not mention the owner by name, it is one of the steps in the process toward a formal title.[22] Although, none of the documents noted in this section can actually be used to establish legal ownership in court, they might nonetheless provide owners with a sense of tenure security that affects their behavior. This question should be addressed in future research.

Finally, does having a formal title obviate the need for the *petits papiers*? There are several reasons to doubt this. The informal *acte de vente*, for instance, is obtained at the time of purchase, before a new title application, and appears to serve foremost as a sales receipt. Documentation of inheritance with the *acte de patrimoine* and *acte de notorité* is as much a necessity for titled land as untitled land. The *acte de donation*, in linking a specific plot to a specific individual, comes closest to serving as an "ersatz" title. The data show, however, that purchased and inherited plots with up-to-date titles are three times more likely (45 versus 15 percent) to have an *acte de donation* than those without up-to-date titles. So, in fact, the two documents are more complements than substitutes. Obtaining the *acte de donation* may be a natural first step toward formalizing ownership, a process culminating in a formal title.

[21] Surprisingly, given the increasingly stringent environmental regulations, plots cleared more recently are no more likely to have an advance authorization.

[22] Oddly, however, most plot owners reporting that they could use a cadastre as proof of ownership also report that they do *not* have a title or even a title application pending for that plot.

A wide array of local-level land documentation thus exists in Madagascar; there is no single *petit papier*, but rather different *petits papiers* for different situations. This has implications for the way one thinks about land tenure reform—there is not one type of "petit papier" which could easily be upgraded in all situations. And owners of many inherited plots have no written documentation whatsoever. Outside of the high value land areas in Madagascar, such as the Lac Alaotra region, the vast majority of plots in Madagascar are inherited.

On the other hand, the fact that informal documentation of land transactions is widespread, especially for purchases, indicates that local demand and capacity is in place to implement some form of a community-based land registry. For example, near Antsirabe, communities are forming their own cadastre over all land, titled and non-titled, starting at the "hameau" (neighborhood), verified at the fokontany (village), and ending up at the Commune (municipality). The majority of local conflicts and court cases are land-related, while the unresolved duality between the two property rights systems often leads to opportunistic behavior, including corruption. Hence, the question becomes: what sort of "supply" of formalized rights will meet this demand and at what cost? Obviously, the expected economic and financial benefits should be large enough to be able to cover the costs of the maintenance of the new system. The principle of fiscal sustainability is very important, otherwise the new system will be as unsustainable as the old one.

6. LAND TITLING

In this chapter, we will provide empirical evidence from one of the most intensively cultivated rice growing areas in Madagascar that the economic benefits associated with the existing titling system are modest. Hence, the design and implementation of the proposed community-based land registration policy should ensure that its costs justify the anticipated benefits.

Theoretically, the various economic advantages of title deeds guaranteed by the state are derived from the increase in tenure security that title deeds would bring. Titles can thus enhance productivity via: (1) providing better incentives for long-term investments in land; (2) facilitating land rental; (3) lowering the transactions costs of selling land; (4) reducing costly conflicts over land; and (5) allowing land to be used as collateral for loans. The empirical questions are, first, whether any of these mechanisms is relevant for rural Madagascar today, and, second, what the order of magnitude of economic benefits of titling would be.

We use the data from Lac Alaotra to give preliminary answers to these questions. Given that this area is characterized by high-intensity agricultural production, the estimated benefits can be considered as an upper bound for titling benefits for rural Madagascar. Due to its history of French settler farming, the Lac Alaotra area contains a large number of titled plots, both inside as well as outside the irrigated perimeters[23]. Focused on the most valuable plots—the lowland rice plots—the survey allows us to measure differences between titled and non-titled land, whether irrigated or not. About 900 households were surveyed from 29 randomly selected communities lying wholly outside the irrigated perimeters, and 800 households were sampled from within the irrigated perimeters. The economic analysis estimates how much farmers would stand to gain from extending the current titling system to untitled areas[24].

Titled land is only a small part of all land, even in high value areas. Past data, including EPM-2001, substantially overestimate the extent of titled land in Madagascar. This is mainly due to questionnaire design and confusion among survey respondents about what constitutes a formal title. The Lac Alaotra survey (EDPLA-2005), however, is more careful in the way it determines whether a plot is titled. Land owners were asked whether they had a title deed at the *Service de Domaine* in Ambatondrazaka, the sole land office for the region. *About 10 percent of plots outside the irrigated perimeters had formal title.* This is not much higher than the national average of 7 percent. Titles are relatively more abundant among the more valuable lowland rice plots than for uplands and forest plots, with little difference between the latter two categories.

[23] Excluding land not owned by the household, but rented in, the sample was comprised of 3,232 rice plots owned by 1,604 households.
[24] The detailed analysis of can be found in Jacoby and Minten (2005).

However, more than half the land *within* the irrigated perimeters of Lac Alaotra was titled. And the productivity of land within the irrigated perimeters measured either by yield, net revenue, or land value, was about 40 percent higher than on land outside the perimeters, at least for the 2004 crop. Below, we will investigate whether or not this productivity difference can be explained by titling.

One indication of the value of a title relative to its cost is the number of pending applications. *In the Lac Alaotra region, landowners have made title applications for only 7 percent of untitled plots*; with a somewhat higher percentage for lowland rice plots. The median time since the demand was made is 4 years. In these respects, there is practically no difference between purchased and inherited plots. Among inherited plots, however, those that are co-owned are less than half as likely to have a pending title application. Perhaps the difficulty of attributing ownership to one individual constrains the demand for titles in such cases. More generally, the main reason given for not applying for a title is that it is not worth the time or expense.[25] Indeed, when existing title-holders were asked, if they had it to do all over again, would they apply for a title now on the same plot, their response was negative in 18 percent of the cases. Interestingly, those who said "no" tended to have acquired their title more recently than those who said they would reapply, and also are more likely to have a title in the name of a current household member. These farmers are evidently more aware of the burdensome procedure involved in obtaining a title today.

The high cost of the titling process discriminates against the poor. As described elsewhere in this report, the titling process needed to make a formal land transfer (sale, gift, or inheritance) is cumbersome and costly. Other evidence suggests that the titling process discriminates against the poor and uneducated landowners, and this is confirmed by the Lac Aloatra data. While we find little difference in proportions of titled plots across wealth quintiles, very substantial differences emerge in the proportion of up-to-date titles. Only a quarter of the titles reported by the bottom quintile bear the name of a current household member as compared to two-thirds of the titles of the top quintile. Similarly, the proportion of untitled plots for which a title application is pending rises with household wealth, though not nearly as sharply. Given the high monetary cost of the titling process (Teyssier, 2004), these results are not surprising.

[25] The second most common response was that the owner intended to make a title demand at some future date. Once again, among owners of inherited plots, those with co-owners are much less likely to be interested in obtaining a title in the future.

Table 10: Land documentation in Lac Alaotra region

Type of documentation	percent of all plots	percent having doc.	Wealth quintile 1	2	3	4	5
Purchased land	43						
Informal *act de ventre*		93	85	93	94	92	96
Acte de donation		14	10	13	10	9	22
Inherited land	41						
Acte de Patrimoine		56	47	56	54	54	70
Acte de Notoriété		50	41	46	44	52	67
Acte de donation		20	11	21	23	22	21
Owner has all 3 papers		18	9	20	22	20	21
Owner has none of the 3		35	41	41	39	32	21
Land opened by owner	13						
Authorization for clearing		31	24	33	33	26	35
All Land	100						
Title		10	13	12	8	8	12
Up-to-date title		5	3	4	4	4	8

Source: EDPLA 2005

Since titling costs do not depend on plot size, and poor people tend to have smaller plots, the lumpy investment needed to title a plot creates a bias against the poor. In fact we do find that *titled plots tend to be somewhat larger than untitled plots*. For lowland rice plots, the median size of untitled plots is 1 ha compared to 1.25 ha for titled plots. A similar difference shows up between untitled plots for which a title is pending and those for which the owner has not applied for title. Regarding education, however, household heads who completed primary school are, if anything, less likely to have a titled plot than those with no schooling or incomplete primary. But primary school finishers are significantly *more* likely to have made a title application on an untitled plot. As with wealth, though, the differences here are not dramatic.

In about half the cases, the information on the title is out of date. Only about half of the existing titles are in the name of a current household member, 38 percent are in the name of a deceased relative, and about 11 percent are in the name of a non-deceased relative. Furthermore, in the latter two cases, the median year that the title was obtained is at least 20 years earlier than for titles under a current household member's name. *It appears, then, that only 5 percent of all plots around Lac Alaotra have an up-to-date title.* Given that most households covered by the survey are well within a day's journey of the *Service de Domaines* in Ambatondrazaka, the national figure (encompassing, as it does, far more remote areas) is probably even lower.

While inherited plots are much more likely to be titled (17 percent) than purchased plots (5 percent), titles for purchased plots are more than twice as likely to be up-to-date as those for inherited plots. These differences may be explained as follows. In the case of inheritance, the old title has a relative's name on it and the heir may still consider it a valid document, not in need of an update (even though this undermines much of the value of a title deed—absolute and final proof of ownership, uncontestable in a court). In the case of a titled plot purchased from a close relative (and recall that nearly a third of purchased plots are obtained in this manner) may also be considered effectively titled by the new owner. If, however, a plot is purchased from a non-relative, then the new owner will not claim he has legal title unless he has gone through the

formal titling process himself. Hence, we observe that purchased plots have more up-to-date titles, but fewer titles overall.

Notwithstanding the considerable costs and waiting time, many farmers clearly would prefer to have a title over any of the "petits papiers". In Lac Alaotra, ninety percent of farmers questioned in our survey saw *protection against competing claimants as the chief benefit of a title*. On the other hand, when asked whether they had heard of cases of households having lost land because they lacked proper documentation, 91 percent responded rarely or never. Most of those who had heard of such cases (69 percent), identified large landowners or powerful individuals as the instigators of the trouble. About 14 percent attributed the cases they had heard about to co-heritors and 11 percent attributed them to migrants. *Hence, the principal fear is that the non-transparent issuance of new titles could allow influential people to dispossess peasants of their ancestral lands*.

As indicated earlier in this report, the fear of the Lac Alaotra farmers is not unique to Madagascar, but confirms the experience with the introduction of poorly-executed titling programs in Africa and the rest of the world. The policy implication is significant. Even if the economic impacts of existing titles, such as can be found in Lac Alaotra, turned out to be large, this would *not* imply that introducing a land titling program into a previously untitled area is necessarily a good idea. This depends on the extent to which the issuance of title deeds creates tenure insecurity on non-titled land. The larger the insecurity imposed on those *without* title, and the more difficult it is to make titling universal, the more likely it is that a new land titling initiative would be ill-advised.

Table 11: Perceived Benefits of Land Titles by Formal Credit Status

Most important benefits of having a land title	***First most important***			***Second most important***		
	Received formal credit in past 3 yrs.			**Received formal credit in past 3 yrs.**		
	yes	**No**	**total**	**yes**	**No**	**total**
Protects against competing claimants	91.9	90.1	90.3	6.0	9.2	8.8
Facilitates inheritance	4.7	6.7	6.4	66.7	72.1	71.4
Facilitates sale	0.4	0.6	0.6	7.1	6.0	6.1
Serves as collateral	3.0	2.3	2.4	20.2	12.5	13.5
Other	0.0	0.3	0.3	0.0	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Notes: A total of 13.6% of households received formal credit in past 3 yrs.

As indicated earlier, a large fraction of land titles in Madagascar are out-of-date; i.e., in the name of a deceased person. There is good reason to believe that an out-of-date title still confers considerable protection. First, in most cases of inheritance the title will bear the same family name as that of the current owner. Secondly, the issuance of the title, even if many years in the past, implies that the parcel is part of the title deed registry and its boundaries and title number appear in the cadastral record at the office of land administration. Consequently, it would be extremely difficult to have a new title issued for land incorporating a previously titled parcel, even one subsequently subdivided among several co-heritors. By contrast, it would be far easier to exploit the modern titling system to nullify an informal ownership claim than a formal one.

Table 12: Perceived Problems of Land Documentation

	"Have you heard of cases of..."	
	"…households having lost land because they lacked proof of ownership?"	"…the same plot having been sold to two people at the same time?"
Never	72	53
Rarely	19	29
Occasionally	6	11
Regularly	3	7

Notes: Column percentages based on responses from 1726 households.

TITLING DOES NOT FACILITATE LAND SALES

Land titling may lower transactions costs in the land sales market. A title is the ultimate proof to the buyer that the land is actually the property of the seller and that no outsider will come later to challenge the original owner's right to sell. Furthermore, by relinquishing the actual title deed to a buyer, even without a formal transfer, the seller can provide an assurance that he has not already sold the plot to someone else. Buyers, especially outsiders without access to village information networks and lacking familiarity or trust in village institutions, may therefore be willing to pay a premium for titled land, as a sort of transactions insurance. On the other hand, buying titled land without easily being able to update the name on the document exposes the buyer to the risk that a relative of the seller, sharing his family name, might subsequently claim the plot or challenge the transfer.

Practically no farmer surveyed in Lac Alaotra said that the most important advantage of having a title would be to make land sales easier and more transparent, although this was reported as a secondary benefit for around 6% of respondents (Table 11). The survey also asked farmers whether they had ever heard of cases of the same plot of land having been sold to two different people. Although the vast majority (82%) said that such swindles rarely or never happen, they appear to be more common than land expropriation.

However, keeping a title deed up-to-date is costly. Paradoxically, *because* updating a title is very expensive for a typical peasant household and requires a long wait; the market for up-to-date titled land is more limited than that for untitled land. In other words, when titles are perceived to be valuable but are costly to transfer, having a title may *lower* the incentive to sell land. The paradox is that one of the supposed advantages of a titling system is that it should make land transactions more transparent and hence *less* rare.

Evidence of this sort of phenomenon can be found in the Lac Alaotra data. When titled land is transferred from one household to another in Madagascar, the transaction must be formally registered in order to maintain the legal validity of the title. The procedures are very burdensome, as described elsewhere in this report. Subdividing the land for purposes of sale or inheritance, raises additional bureaucratic hurdles, among which is the necessity to resurvey each sub-parcel.

In the case of inheritance, however, the old title will usually carry the same family name, so that the heir may still consider it a valuable document and, consequently, may not bother trying to update it. This explains why a far larger percentage of inherited plots are titled as compared to

purchased plots, and titles for purchased plots are relatively more likely to be up-to-date: 64 versus 43 percent. Similarly, titled plots that have been purchased from close relatives, with whom the buyer might share a family name, are less likely to be up-to-date than those purchased from distant relatives, friends, or strangers (56 versus 66%).

Under the conditions found in Madagascar, in which updating titles is costly, the impact of land titles on land sales transactions is probably negative. On the other hand, to the extent that titles attenuate transactions uncertainty, titled land may be easier to sell. However, *given the relatively low overall levels of tenure insecurity and the high transactions costs, titling probably has a negative impact on the efficiency, and given the high transactions costs, the equity, of land sales markets.*

TITLING HAS NO IMPACT ON THE LAND RENTAL MARKET

If land titles increase tenure security, owners of titled plots could feel more confident to rent out their land than without title. For this to occur, however, there must be a significant danger that renters or sharecroppers would lay claim to the plot that they have been renting and successfully appropriate it. Absent other effective means of property rights protection, a title provides the landowner with the security necessary to be willing to rent out his land. The risk of appropriation causes the supply of land for rent to go down and lowers the incentives for the land owner to invest in the land.

The link between land titles and land rentals can be examined using the Lac Alaotra (EDPLA-2005) data by comparing the propensity to rent out land and the duration of the rental agreement between titled and untitled plots owned by the same household. We control for other plot characteristics. Recall that with respect to land markets (sale and rental) the Lac Alaotra area stands out from the rest of Madagascar. In particular, one-quarter of cultivated plots, comprising one-fifth of cultivated area, are rented in, compared to the national figures of 10 percent for both.

In Lac Alaotra, we find no evidence that titled plots are more likely to be leased out than otherwise comparable untitled plots. We also find no evidence that having land with a title, up-to-date or otherwise, influences the duration of the rental agreement. Whether or not a household decides to rent out land is mainly related to the distance of the plot to the home of the household.

In sum, *we find no evidence that expanding land titling at the margin will render renting out land more attractive to landowners*. This suggests that, despite the informality of tenure on the majority of plots, there is little perceived danger of expropriation by squatting tenants. The most plausible explanation for limited tenancy in rural Madagascar is the relatively egalitarian distribution of land rather than the limited reach of the modern titling system.

TITLING DOES NOT REDUCE CONFLICTS OVER LAND

Land conflicts are relatively rare in Madagascar. In the Lac Alaotra region, conflicts were reported to have taken place involving just 2 percent of owned plots, but this figure encompasses the entire ownership period. Looking back only at recent conflicts, say the ones that occurred within the last five years, shows that even fewer plots (just 1 percent) are involved. There is little difference in the incidence of conflict by type of plot (upland versus lowland) and by mode

of acquisition.

Co-ownership appears to increase the likelihood of land conflict. Taking all inherited plots in the Lac Alaotra sample, one finds that those which are co-owned are about twice as likely to have ever had a conflict than individually owned plots. On the other hand, for only 20 percent of the conflicts is a co-owner of the plot reported to be the other party to the dispute. Thus, co-ownership is not the over-riding cause of land conflict.

Most striking is the finding that conflicts were reported on 6 percent of the titled plots, far more than the proportion for untitled plots. In virtually all of the (admittedly few) cases, the title was received before the conflict started, so it is unlikely that the titling process itself led to the dispute. At the very least, this result suggests that having a title does not eliminate land conflicts and may even exacerbate them, perhaps because titled land presents a greater prize over which to fight.

About three-quarters of the land conflicts reported have already been resolved. The most common arbitration mechanism is through the intervention of judicial authorities (38 percent), but only 57 percent of the disputes that have gone to the judiciary have yet been resolved, and not because these tend to be more recent conflicts. It may be, rather, that only the most intractable disputes reach this high a level of adjudication. Mutual negotiation and the involvement of relatives are the next most common mode of resolution. Few such cases were taken to the *fokontany* or communal authorities. However, given the sheer number of plots and hence the vast *potential* for disputes, even a small percentage of plots with land conflicts cause a situation in which this is the most frequent issue taken up by the rural justice system.

TITLING HAS NO IMPACT ON ACCESS TO CREDIT

Formal credit plays a miniscule role in rural Madagascar: less than 1 percent of households in the nationally representative EPM-2001 survey reported borrowing from formal sources. In the Lac Alaotra region, however, the incidence is much higher. About 14% of surveyed households report that they took out a formal sector loan in the past three years. Most of this credit came from OTIV and CECAM, two institutions, which, although run by NGOs, generally demand collateral. Bank of Africa (BOA) appears to be the only commercial bank with significant operations in rural Madagascar and accounts for 24% of loans in our sample. More than half of these BOA loans are secured with land, as compared to 24% for OTIV and 17% for CECAM. Agricultural machines and zebu are much more likely to be used to secure loans from these latter institutions.

Can the unusually high rate of formal credit use in Lac Alaotra be explained by the high proportion of titled land in the region? Before attempting to answer this question, consider that only 3% of respondents who actually receive formal credit view the main advantage of titled land as being its collateral value for loans (Table 11). Collateral is cited as a secondary advantage of a title among 14% of households overall, and, interestingly, among 20% of formal borrowers. Even this, however, could largely reflect wishful thinking to the extent that respondents view mortgaging land as only a remote possibility.

The analysis concludes the following. *Households with titled plots are no more likely to obtain*

formal credit than those with untitled land. Instead, access to collateralized credit is mostly related to whether or not a particular plot is situated within the irrigated perimeter or not. This is not to deny the value of titled land to financial institutions. However, the lengthy and costly process of up-dating a title deed also negatively affects its value as collateral for a bank: in case of foreclosure, the bank will have to wait a long time and spend a significant amount of money to be able to transfer the title deed. Indeed, among the plots given as collateral for formal credit, 23 percent are titled, as compared to 10 percent overall, so there does seem to be a modest preference for titled land, even though it is not clear whether such land can be more easily repossessed in case of loan default. But other forms of collateral, such as zebus and tractors, are also accepted. Thus, titled land is not necessary to obtain what little formal credit is currently available. In the longer run, widespread titling, accompanied by the establishment of a legal framework for mortgage foreclosure, could induce penetration of private banks into the business of rural credit provision. This would, in turn, undoubtedly increase the value of having a formal title.

THE ECONOMIC BENEFITS OF TITLING ARE MODEST

The Lac Alaotra data set we used can compare outcomes across plots with different titling status cultivated by the *same* household. This allows us to control for a number of important unobservable characteristics of household and observable characteristics of plots that we think could influence the outcomes (investment, yields, etc.) There may be unobserved characteristics of plots such as plot fertility that we cannot control for. The presence of these un-observables would tend to over-estimate the benefits of titling, however.

With this caveat in mind, does titling influence investment behavior? Looking at three types of recurrent investment (irrigation/drainage canals, protective bunds, land leveling), measured in different ways, we find practically no evidence of a positive impact of land titles, up-to-date or otherwise. However, when we differentiated between titles that were up-to-date and titles which were not, we found that up-to-date titles did have a positive effect on one type of investment (viz. protective bunds), whereas out-of-date titles did not.

What can we say about the effect of titling on land values? Land values would, in addition to picking up the value of fixed investments in the land, also incorporate the direct impact of the risk of expropriation, and whether or not titled land would be easier to transact. We found that titled plots were on average 5.6 percent more valuable than untitled plots.

In other words, the market premium for titled plots is at most 6 percent, which is quite modest. To put this into context, Deininger (2003) reports comparable land value differentials in Asia and Latin America ranging from 40% to 80%. Based on data from one of the most productive area in Madagascar, we conclude that the corresponding number for rural Madagascar lies well below this range. This seems to be the result of the existing level of tenure security, perhaps enhanced by “petits papiers” and the lack of a significant formal credit system.

POLICY IMPLICATIONS

The private economic benefits from extending the *current land titling system* in Madagascar would be minor, especially relative to its current costs. The median rice plot in the Lac Alaotra

region is worth about US$ 1000 per hectare, and titling it would raise its value by no more than US$ 60 per hectare. Teyssier (2004) reports that the total cost of obtaining a title in Madagascar today averages about US$ 350 per parcel, which means that it only makes economic sense to title plots in excess of around 6 hectares. Unfortunately, less than 3% of the plots in the Lac Alaotra area (which, because of its focus on mailles areas, are already weighted toward larger plots) have an area of 6 hectares or more. Put another way, the marginal cost of a title would have to fall by a factor of six in order for it to be economical to title the median-sized plot in our sample (1 hectare). Even a comprehensive restructuring of the current land administration would be hard-pressed to achieve an efficiency gain of such magnitude. For Madagascar as a whole, this problem is greatly compounded by the even more highly fragmented nature of landholdings; median plot size nationally is only 0.20 hectares.

If not titling, then what? Instead of fixing up the modern titling system, should Madagascar consider moving toward more decentralized modes of land administration? The enabling legislation passed by Madagascar's parliament in 2005 now allows for the piloting of these new systems. There are a number of questions to consider in this regard, related to the level of precision (and adjudication) to be obtained, the necessary relation between costs and benefits of the new system, and the alternatives to registration to consider.

What is the level of precision targeted by a new system? Internationally, the costs needed to introduce an improved land registration vary widely with the level of precision targeted. Bruce, Migot-Adholla, and Atherton (1997) report that surveying (a process which will establish plot boundaries with a high level of precision) and subsequent registration costs in smallholder agriculture often approach or exceed $100 per parcel. Other estimates range from US$12 in Moldova and US$20 in Thailand, to a high of US$150 in Croatia (Holstein, 2005). In the final chapter, we will estimate the costs of a number of options for community-based land registration in Madagascar, differentiated by level of precision.

When designing new land administration reforms, what level of costs could be justified given the analysis above? Let us assume that a community-based land registration system would provide as much tenure security as the current formal titling system, with all the current drawbacks as described (e.g. out-of-date titles, opportunity for corruption). Let us also assume that a community-based land registration system would *not* have the additional benefit of facilitating land transactions, even though we have argued that the current titling system can be seen to constrain land transactions due to its high costs and lengthy procedures. *Given these conservative assumptions, but taking into account that the return to titling should have been particularly high in the Lac Alaotra region, we suggest that the average costs of registering a parcel under any new system (including the initial implementation costs) must be commensurate to the economic benefits of titling which we estimated for Lac Alaotra, namely on the order of US$60 per hectare.*

Finally, the fact that only a small fraction of land in the Lac Alaotra region is titled does not appear to constrain the land market or access to credit (the so-called efficiency effects). In an environment where the risk of expropriation is low and where collateralized lending is in its infancy, such results are not entirely unexpected. Nevertheless, farmers still reveal their preference by applying for formal titles, despite the high cost. This suggests that land expropriation and perhaps false land sales, though low risks, are massively costly in the event

that they occur. *Better, and more highly publicized, enforcement to minimize land-grabs could lower the risk and costs of expropriation and false land sales, combined with more effective and transparent adjudication of land disputes*.

7. PREVENTING OPEN ACCESS TO NATURAL RESOURCES

International experience demonstrates how difficult it is for the state and local communities to jointly fulfill their role as custodians and "co-managers" of the land. Government agencies, such as forestry and national parks, often have large tracts of land under their control, but too often these agencies act as absolute owners of the state land rather than as (co)managers (with the communities) of the land on behalf of the state. In many countries, laws, sub-decrees and regulations are not harmonized and there is poor public administration and management of land, leading to a lack of transparency and accountability.

In this chapter, we assess the impact of existing property rights systems (formal and traditional), as well as the potential impact of proposed land tenure reforms on the sustainability of the natural resource base. A review of the existing literature, GIS information and consultations with stakeholders and informants, analysis of case study results (from a household and community survey–see below), as well as a scenario analysis of changes in land use stemming from the proposed land tenure reforms, will provide the base for this assessment. Policy recommendations will be made by adapting international experience to the Madagascar situation.

OPEN ACCESS IS THE ROOT CAUSE OF THE PROBLEM

Open access problems are threatening Madagascar's environment. The problem is *not* the misleadingly named "Tragedy of the Commons". The term is misleading because it describes a situation of open access, where there are no property rights at all and access becomes a free for all. It is in that situation that it would be "rational" for individuals to "mine" the resource, because if he or she doesn't do it, somebody else will. Under common property regimes, just as under private and public property regimes, rules and sanctions for the use of the resource should exist and be enforced. It then becomes a matter of empirical analysis as to how well these rules and sanctions provide incentives for sustainable resource use, not of the type of a priori assertion that the term "Tragedy of the Commons" implies.

The literature review reveals the following. Where customary tenure is in place governing both the individual fields and the "commons", viz. grazing areas and the forests, there is a sense of security to land. No large scale land clearing has taken place in customary areas in the last 30 years (aerial photographs, Leisz, 1994). Local dispute resolution mechanisms are in place and often function well. Customary measures to protect common forest resources exist (viz. embargoes, regulations, policing). Sustainable harvest rules for natural resources exist in many communities, and the customary tenure system for water is often well-functioning, based on rotational irrigation. In short, the customary systems are well-understood, accepted and provide security.

However, there is generally a lack of security for communities where State tenure systems predominate (Leisz et al., 1995). State tenure systems are not well-understood (e.g. written in French) and accepted by the communities. Some studies show that investment in private fields and commons is therefore higher than on State-controlled lands (e.g. Andasy IV, Anosivala).

The first threat to environmental sustainability in these areas under customary tenure come from the state-sanctioned issuing of cutting permits to outsiders, by-passing the customary land tenure

system. Certain local state agents sometimes act as "owners", giving loggers access without consent of communities. So insecurity occurs where state tenure is imposed, *de facto* creating open access. Hence, the problem is the "Tragedy of the State", rather than the Commons.

The second threat also emanates from the breakdown of the traditional tenure regime, without this necessarily being caused by State intervention, may also create a situation of open access. For instance, droughts in the South and economic opportunities in the Southwestern region have attracted immigrants to this area. This has led to a break-down of the customary rules and started a race for land leading to the loss of the biodiversity rich spiny forest (Razanaka et al., 2001). *This review has not been able to make an assessment of the extent and the nature of this problem, and would urge future research to look into this matter.*

The third major threat to sustainable resource management is the convention in rural areas governed by formal property rights (viz. State land, and land not falling under traditional property rights regimes) that a claim to ownership and eventual legal title to land must be accompanied by physical acts of development such as cultivation (*mise en valeur*). This rule encourages farmers to slash and burn entire plots in order to stake a claim, rather than conserving, for example, forest vegetation. Freudenberger (1999) shows in the Eastern rainforests in Fianarantsoa that especially the richer households cut down forests with the purpose to establish property rights. Réau (2001) also shows that this is an important factor behind migrant southerners' decisions to convert forest land for maize production, instead of cultivating unoccupied suitable land, leading to overall inefficient land use.

In addition, the principle of *mise en valeur*, which is motivated by the need to keep land resources "productive" from a narrow agricultural perspective (i.e. the cultivation of crops), implicitly discourages other "productive" uses, such as conservation and sustainable harvesting of forests.. This goes against emerging worldwide trends to promote sustainable land management through providing incentives to communities and private owners for another kind of "production", viz. the production of ecological services. Hence, *it is the nature of state intervention and legislation in property rights that is the most important reason for the loss of valuable environmental resources.* International experience demonstrates that these issues can be effectively dealt with through the implementation of credible policies that promote community-based natural resource management. *This review recommends that these lessons from international experience should be adapted to the Malagasy context and inspire the piloting of more secure common property rights regimes under the land tenure reform program.*

INTERNATIONAL EXPERIENCE WITH CO-MANAGEMENT OF NATURAL RESOURCES

A 1997 World Bank review[26] of factors influencing the success of forest and biodiversity conservation projects in forest areas came to the following conclusions. State ownership and management of public forest lands for the purpose timber production and the protection of biodiversity and watershed protection had proven impossible, because of numerous budgetary, institutional capacity, and governance problems, including a lack of the proper incentives to regulate the multitude and growing number of loggers and other forest users. Moreover, the

[26] Banarjee et al., 1997.

majority of people who currently occupy most government forest lands and protected areas are usually poor, vulnerable, and landless, and most had no voice in forestry decision making.

The review found that these situations are usually characterized by illegal logging, corruption, and overall unsustainable use of forest resources, in other words, a situation of *de facto* open access. The key lessons learned included the need to provide secure tenure and rights to forest users, and the proper alignment of incentives by the sharing benefits and management responsibilities. However, the review noted that efforts to provide tenure security face formidable challenges, including the reluctance on the part of government, as the nominal owner of most forests, to grant legal rights to local users for fear that they will lose control and income from forests. Increasingly, the income potential is not only derived from timber use, but also from the potential commercial value of biodiversity products, such as medicinal plants.

Can these challenges be overcome? It is indeed possible for governments and communities to come to successful agreements over the sharing of forest benefits and management responsibilities. Such agreements have been instrumental in resolving tenure conflicts in a number of Bank-financed community forestry projects:

- *Extending long-term, secure property rights to villages in Nepal.* The Nepal Hill Community Forestry project, co-financed by the World Bank (1992), enabled communities to take over forest management of about one million hectares of hill forestry. Some 9,000 Forest User Groups were formed under the project. After successful appraisal and approval of village forest management plans by the Nepal Forest Department, these groups received certificates ensuring long-term rights to forest benefits. As part of the procedure to assign these long-term property rights to communities, the project had to recognize and adjudicate the multiple, and often conflicting, rights to forests by local villagers. A recent assessment of the Nepal Community Hill Forestry, showed that both community livelihoods, as well as forest management, had improved, clearly showing the benefits of proper consultations, involvement of communities from the beginning, conflict resolutions and the clear assignment of property rights to the communities.

- *Forest Protection Committees in India.* In the Bank-financed West Bengal II forestry project in India, written agreements between the state and villages established ownership and use rights to forest protection committees. However, to maintain rights over forests, each committee had to provide evidence of sustainable forest use (Banarjee, 1997).

Note however, that such success is not automatic. For instance, even in places where customary rights over natural resources are legally recognized (e.g. most of Micronesia), the existence of community-based management rules *by itself* was insufficient. These rules needed to be backed up by national legislation. A survey by the World Bank of 30 different sites and 5 different countries indicated that, according to communities' own perspective, community-based rules were not significantly more enforceable than national rules. The most effective management rules were those designed by communities but based on national laws. This ensures, for example, that communities can access the courts to enforce violations (by outsiders) of their own management rules.

A potential problem with both common and state property regimes is that they can be subject to

"elite capture" and abused by the most powerful. For instance, in the Solomons and Papua New-Guinea, absentee chiefs, who have migrated to the cities, were able to opportunistically exploit their traditional authority over the resources. Thus, many community leaders actually sold "their" trees to foreign loggers for quick access to cash. It was only when problems of deforestation became acute that these practices started being discouraged.

EXISTING LEGAL AND POLICY OPTIONS FOR REDUCING OPEN ACCESS IN MADAGASCAR

Individual titling is not an option for common or communal lands with no recognized individual owner. In such cases, collective titling such as SFR (*sécurisation foncière relative*), SFI (*sécurisation foncière intérimaire*) and SFO (*sécurisation foncière optimale*) would be more appropriate forms of property rights. These could be issued within the context of a GELOSE[27] natural resources management contract.

Like similar program in many countries throughout then word, and certainly across the African continent, the GELOSE program is aimed at community-participation in natural resource management, culminating in the allocation of property rights in natural resources to the communities. However, GELOSE and other comparable initiatives have generally stopped at the level of temporary management contracts to communities.

GELOSE has provided some local communities, especially in the neighborhood of protected forests, with a basis for regulating access to land so as to prevent undesirable use of resources. Communal titling would also provide a basis for accommodating immigrants to an area who might otherwise be driven to appropriate state-owned forested land through slash-and-burn agriculture.

Although GELOSE was conceived to provide security of tenure to communities over natural resources (e.g., forest, pasture) as well as land, its implementation has fallen well short of its target. The main reason for this seems to be related to the way the provision of tenure security was implemented. Recall that GELOSE would first provide what was called "relative" tenure security, which was supposed to be faster and less costly to provide than the Torrens title deed. However, it appears that in practice the way in which it was operationalized during implementation was by using the same lengthy and costly mechanisms used to issue a Torrens title deed.

The experience with GELOSE implementation so far points to two main weaknesses, the time and processes required for establishing viable GELOSE agreements—based on sustainable management plans--with communities, and inadequate monitoring. Weak institutional capacity of DGEF, as well as the lack of effective, joint monitoring mechanisms, are important impediments to the enforcement of GELOSE agreements. Although no comprehensive and systematic evaluation has been undertaken, anecdotal evidence points to serious issues of lack of adherence by GELOSE beneficiaries to the agreed land use and management plans (e.g., practice of slash-and-burn (tavy), illegal logging). This is certainly not an indictment of the GELOSE policy itself, but as in many other countries in the sub-region (South Africa, Botswana, Zimbabwe), is indicative of a potential lack of ownership and genuine consultative processes for

[27] Gestion Locale et Sécurisée des Ressources Naturelles Renouvelables

establishing the management plans, as well as a weak implementation capacity and controls.

POLICY RECOMMENDATIONS

Common property arrangements can be one of the most effective ways to manage natural resources, but they require solid co-management agreements, and solid monitoring. Since the new law and land tenure policy provide for a "lesser" title—the certificate foncier—the task at hand is to develop its operationalization in such a way that avoids the pitfall of lengthy, complicated and costly implementation. So far, both the "lettre de politique foncière" and the law do not explicitly incorporate provisions for securing land tenure for communities engaged in the GELOSE process.

The following policy suggestions can be made:

- Undertake a review of the legal framework by PNF, DGEF and the Direction des Pêches in order to harmonize existing legislation (Loi Fonciere, Loi Forestiere, Loi des Pêches, and GRLOSE), and come up with an overall framework that is appropriate for co-management arrangements in protected areas and forest land. This review will need to involve wide and credible consultations across the spectrum of stakeholders, in order to agree on beneficiary community rights and responsibilities, institutional arrangements for implementation--including M&E,--and a provision for capacity building.

- Officially recognize the dina as the owner/trustee of the resource in in areas where the "dina" traditional land tenure regime is functioning effectively, all that may be needed is for the state to

- In other areas, the sustainable use of natural resources will require the development of systems which produce a systematic and documented adjudication and definition of the property rights regime to natural resources, including training and the use of participatory rural appraisal methods PRA. These systems should be piloted, monitored and evaluated as part of the implementation of the national land tenure reform program.

- Particular care needs to be given to the framework governing private sector investment. Private investment holds the promise of economic growth and jobs, but, if poorly managed, also holds the risk of land grabbing and increasing social tensions. The key is to design and implement an effective and transparent process to govern the assignment of private property rights to investors, while respecting existing customary property rights. Such a process will benefit substantially from the existence of local development plans, such as the Plans Communaux de Développement and Programmes Regionaux de Développement, provided these are arrived at in a democratic and participatory manner.

8. FACILITATING LAND ACCESS BY THE PRIVATE SECTOR AND MODERNIZING ADMINISTRATION OF TITLED LAND

This chapter deals with the main land issues that the formal private sector faces. The objective is to give an overview of the "land" constraints faced by investors, nationals and foreigners alike. The main focus is on the legal framework and its implementation. The chapter traces how the general failure to implement and enforce this legal framework has led to what certain private sector stakeholders perceive as a land crisis. It should be emphasized that this "crisis" affects the Malagasy investors first and foremost, while foreign investors face additional problems.

In spite of these perceptions, in international comparative investor surveys, Malagasy do not rank the land issue particularly poorly. For instance, only about one fifth of investors in Madagascar expressed the opinion that access to land was a major constraint when compared to other factors such as taxation, access to and cost of finance, electricity and customs and trade regulations.[28] This puts Madagascar roughly in the same "league" as China, Mauritius, Kenya and Tanzania.[29] Of the top 24 areas that may pose constraints to investment in Madagascar, land related issues were ranked only 16th.[30] There were a number of areas often linked to land and property rights issues which ranked higher than land *per se*: corruption, taxes, regulatory policy, access to electricity and the legal framework in general. Hence, this chapter confirms the finding of previous chapters: land issues are *not* the single most important issue to address when it comes to economic development, but they *do* merit significant attention, especially as part of a broader agenda to improve the investment climate.

Government has already attempted to make certain improvements in the way investors can access land. However, the impact of these has been limited. In this regard, it is important to emphasize that the constraints to investment in land apply to domestic and foreign investors alike. They also affect all sectors, from manufacturing to agriculture, and from mining to tourism, and they affect every stage of investment, from the initial set-up and financing, to maturity and eventual exit. These constraints include:

- the difficulty to access fully formally secured land—land which bears an up-to-date title and has all the necessary transfer documents, as applicable
- the complexity of, and lengthy delays in, land administration, when it comes to titling, purchasing, leasing or mortgaging; and
- the uncertainty of long-term lease conditions.

TITLED LAND IS AT A PREMIUM

Title, under the Malagasy legal system, represents the highest degree of security for it cannot be challenged in any respect and there is no risk of alienation without due process and

[28] Madagascar Investment Climate Assessment, June 2005.
[29] Ibid.
[30] Ibid.

compensation.[31] However, recall that approximately 12 percent of the surface area of Madagascar is officially registered, mapped in the cadastre and titled. And that since the late 1800's Madagascar has only granted new titles at a pace of 1,000 plots per year, resulting in a current backlog and requests for titles are currently backlogged at over 500,000 requests (while only approximately 330,000 land titles currently exist).[32] In addition, of the few titles that exist, a large number are not up to date. In other words, it is common to find titles in the names of deceased individuals, or transfers which have not been properly registered, with the title remaining in the name of the original owner.

The scarcity of titled land is an impediment to investment in several ways. On the one hand, the small number of titles puts a premium on those properties that are properly documented. Their relative scarcity drives up the price. On the other hand, uncertainty as to the legitimacy of a title adds risk to the investment and requires a careful and costly check by the investor of the property's history.

In addition, there are other negative effects of the dysfunctional titling system. For instance, it could lead to an urban bias in investment. Proximity to an urban area is an advantage for property owners in the sense that the administration is nearer and the required documentation for transactions can generally be obtained with greater speed. As a result, a high concentration of accessible land is found around urban areas, to the detriment of investment in rural areas.

On the other hand, attitudes toward the commoditization of land are more advanced in urban areas and less constrained by traditional common property attitudes of the rural areas. In urban areas, land transfers tend to occur at a faster pace and a larger scale anyway. However, just as the administration is more readily available, so are the courts—where property ownership can more easily be challenged and be tied up for long periods.

Hence, despite the physical proximity of the central government, and much in the same way as the rural populations have done, urban and peri-urban populations have sought to formalize their land property rights by turning to local government structures such as the fokontany. These structures put their stamp on land transfer papers (the so-called "petits papiers") and give a semblance of a formally secure property right. However, the central government and the courts, the ultimate adjudicators of property rights and their enforcement, do not guarantee such property rights.[33] The "petits papiers" can only serve as records of transactions.

The scarcity of titled land and the complexity of the property rights system have also put a premium on those few real estate developers who can successfully "navigate" the system. To be sure, this has not substantially constrained real estate developments in urban areas, in particular in the capital city, Antananarivo, and its immediate environs. Office buildings, industrial parks and residential complexes have dramatically increased in number over the past 10 years. In the aftermath of the 2002 crisis which led to the exit of many textile firms as well as slowing demand, there is an excess of built-up factory space currently which has resulted in the average cost per square meter of factory space declining from almost US$4 to a little over US$1-1.50.[34]

[31] See Houssein, June 2005, on the history of the titling procedure and its inviolability.
[32] Ibid.
[33] See Houssein, June 2005 and Jacoby & Minten, 2005.
[34] Client source.

Nevertheless, the ability to develop such real estate is concentrated in the hands of a few developers[35], able to manoeuvre through the maze of the land administrative system and obtain extensions for public utilities (electricity and water) to their sites.

INVESTORS HAVE DIFFICULT ACCESS TO STATE LAND—TITLED OR UNTITLED, THROUGH PURCHASE OR LEASE

Titled land. It is impossible to obtain the exact figures from the Lands Registry on the number and location of titled properties that are in the name of the government of Madagascar. However, ample anecdotal evidence indicates that important titled properties are held by the state, but not necessarily under an up-to-date title which bears the name of the relevant state institution. For instance, large tracts of land were taken over during the nationalization period of the 1970s. These were often titled properties which belonged to private (and mostly foreign) investors. These companies and their properties were then subsequently held by state-owned enterprises or the state itself, represented by the relevant ministry in charge of land affairs. With the more recent privatization of these companies, some of this property, and the out-of-date titles bearing the name of the original owners, is now transferred back to the private sector.

For foreign investors, the problems are aggravated because of the fact that they can only obtain long-term leases ("baux emphytéotiques"), with unclear lease conditions (see below). Note that many of the winning bidders in the privatization process are in fact foreign investors.

Untitled land. Recall that for all lands that are not titled, corresponding to some 85% of the territory, the state is the formal legal "owner". Of these untitled properties, there are two categories: land in the public domain and land in the "private" national domain. Land in the public domain includes land that is deemed to be prime for national security (military bases, airports, coastlines and waterways), as well as land reserved for the public interest (national parks and reserves). All land not included in the public domain and not titled is in the national private domaine.

Investors can request to become owner of a plot which is in the private national domain ("terrain domanial"). The government will grant a temporary title, subject to the condition that a permanent title will only be issued upon the actual development of the plot ("mise en valeur"). The state retains the right to repossess the land in case the development condition is not met. In the majority of cases, the period during which such repossession could take place is excessively long: between 20 to 40 years. This creates prolonged uncertainty and severely limits the ability of the owner to transfer the property—both depress investment.

EXISTING PROPERTY RIGHTS ADMINISTRATION IS COMPLICATED AND NOT TRANSPARENT

A major concern for investors, domestic and foreign, is the lack of clarity and transparency in the procedures when leasing or acquiring land in Madagascar. One reason is the vast array of potentially applicable laws and regulations. Depending on the nature of one's transaction, a different set of laws may apply, and depending on the sector of the activity, additional sector-specific requirements may apply.

[35] First Immo, SIMAD, Zital, Hazovato are the largest developers, followed by GETIM, Filatex, Cassioppee.

The procedure for registration of titled property rights is set forth in the "Ordonnance n° 60-146 du 3 octobre 1960 relative au régime foncier de l'immatriculation" and its modifying texts. Elsewhere in this report, we have detailed the number of steps and the amount of time needed for this procedure. Generally speaking, it involves several agents from different departments[36] and the court system, and there are many delays in the back and forth between these agents to bring a dossier to closure. Motivated clients will often volunteer to carry the paperwork from one department to another, in the hope of expediting the process, but it is clear that such a complicated system discourages the formalization process and increases the chances of fraud and corruption.

In addition, different organizations have jurisdiction over different procedures, and in some cases, several organizations at once have a say in the process. Such is the case, as we will see below, in the procedure that the state uses to assess whether an investor has properly developed his land. Four different ministries (land affairs, environment, public works and of the relevant sector, e.g. industrialization) and the relevant local government are involved in the process. Similarly, when registering a new parcel of land, the paperwork for approval shuttles between at least two ministries and the court system, before final approval can be given. For the registration of a new title with the ministry of land affairs, one must first request the approval of the ministry of public works (or decentralization, as the case may be) and the ministry of finance, responsible for tax collection.

To transfer land one must first request a so-called authorization to transact ("autorisation de transaction") from the Ministry of Public Works' Department of Land Development. As a result of confusion over the applicable administrative procedures, notaries have come to play an important role in real estate transactions because of their familiarity and know-how, both with the system and the persons involved. The important role played by notaries is in spite of the fact that there is no requirement in Madagascar, as in France, that all real estate transactions be notarized. Nevertheless, individuals wishing to avoid the bureaucratic maze for processing papers often hire a notary to do so. This is the case even though notaries are slow and overloaded with work: in all of Madagascar, there are only some 13 notaries, 10 of which are in Antananarivo. In all other parts of the island the "greffier en chef" (lead clerk) of the Court acts as a notary, with the attendant lack of capacity or know-how that this entails.

However, in October 2003, government created the so-called "Guichet Unique des Investissements et de Développement des Entreprises" or GUIDE (essentially a one-stop shop) in order to facilitate business administrative procedures. Since its creation in October 2003, the number of steps and days required to open a business in Madagascar has drastically decreased to between 3 and 10 days. This is due to the gathering in one area of representatives of all the relevant authorities and the greater availability of information and practical advice before undertaking the process of the setting creation. GUIDE would *also* be a one-stop shop for the investor a one-stop for the deposition of all documents needed for land administrative matters. However, because GUIDE has no decision-making power and in most cases no specialized knowledge with respect to land issues, the one-stop shop for lands is merely a mail box. Documents are collected from the applicant and sent on to the ministry of land affairs and other relevant ministries for processing. The GUIDE plans to hire a notary to facilitate registration of

[36] Conservateur, Journal Officiel, topographe, chef de district, greffier, all at different stages of the process.

documents needing notaries. Up to now, the GUIDE's role is primarily to ensure that a dossier is complete. In January 2005, it took 134 steps and 8 procedures (including the courts) to register a property against respectively 62.2 days and 4.6 procedures in East Asia and the Pacific.[37]

Because notaries are not legally required to process all land-related documents, private parties are able to sign private contracts regarding land and register them on the basis of officially verified signatures only. This verification of signatures (i.e. that the signatory is the person he says he is) is typically done by local government, for instance city hall. Hence the proliferation of "petits papiers". However, the proliferation of private contracts, while speeding up land transactions on the parallel market, has also created room for mistakes, omission of important terms and conditions, and the glossing over of thorny issues. *A practical recommendation would be to require that all land transfers not going through a notary be done on government-issued standard form contracts which containing the most essential information to avoid mistakes or inconsistencies.*

Better communication of land administrative laws and procedures would also help. When new laws and regulations come into effect in Madagascar, they are published in an official journal, with long delays in publication, due to the difficult translation or more mundane issues such as printer breakdowns. Once published, they take several weeks to be delivered to subscribers. Sometimes judges are the last to know of the laws in application, while they often do not have the advantage of explanatory treatises or texts for the interpretations of the laws. Hence, there is a perception in the legal community that sophisticated corporate cases, including those involving real estate issues, are difficult to win in Malagasy courts. And corruption adds to the problems.

An example: the 2002 political crisis in Madagascar caused the shut-down of many companies in the recently established tax free zones. In one case, the landlord demanded rent payments despite the lack of any economic activity in the country. After going to court, the landlord received a court order to seal the doors of the factory, trapping inside all the machinery of the company and excluding all of its workers (who could then not resume work once the crisis had passed). The company's assets were trapped for years. In court, the tenant argued an apparently strong case of "force majeure", and outside of court, sought to settle with the landlord. In both cases, to no avail. The company has since left Madagascar, sending a negative message to potential investors as to the unpredictability of Malagasy courts.

THE INTERNATIONAL EXPERIENCE ON REFORMING LAND TITLING SYSTEMS

The poor performance under the Torrens system titling in Madagascar may be remediable by some combination of modernization of the statute and improved administration. It is worthwhile noting a few of the lessons learned by Bank projects which focus on reforming formal land titling system elsewhere in the World:

(i) ***Organization of the land register***: All processes are facilitated if the register is organized by parcel, with a system of unique parcel identifiers. This is a key characteristic of the Torrens model of title registration, and the existing law is satisfactory

[37] Doing Business in 2006, The World Bank and the IFC

in this regard.

(ii) ***Systematic registration***: Efficiency in land registration is dramatically increased if it is undertaken systematically, with an area declared subject to registration and a field process then carried out to survey and adjudicate rights to all parcels in that area. Again, the Madagascar statute is satisfactory in this regard.

(iii) ***Mediation of disputes***: In some countries, including Madagascar, disputes arising during registration go into a quite formal adjudication process involving the courts. Bank project elsewhere, for instance in Cambodia, show that mediation by systematic registration field staff and by specialized mediation bodies set up for the purpose can resolve the vast majority of disputes quite rapidly, with recourse to judicial processes only needed in a few cases. This is a much more efficient system, and should be considered in any revision of the land registration law.

(iv) ***Use of private survey firms***: In numerous countries where the Bank works, greater efficiency in parcel demarcation and survey (especially in systematic work) is achieved through contracting survey work to private firms, with the Ministry providing supervision and quality control. A revised statute should allow (but not require) contracting out of surveying.

(v) ***Use of NGOs in public relations/information***: Up-front investments in information for communities to be affected by the systematic registration process can increase the use of the registry and help deal with the problem of failure to register subsequent transactions and inheritances. Ministry personnel have limited capacity and often no comparative advantage in this area, but contracts with NGOs to do "advance work" has worked well in numerous countries. A modern land registration statute should allow such contracting out of functions.

(vi) ***Reviewing who has legal personality***: Can all holders of significant rights (physical persons, legal persons such as partnerships and corporations, and units such as mosques and villages) be registered as holding land rights? It is not uncommon for some important landholders not to have legal personality and thus be unable to be registered. In a project in Laos, the Bank has been unable to register temples or sports fields to the communities and so has had, less satisfactorily, to register these local resources in the name of the state. The Madagascar statute should be reviewed in this respect, especially with regard to titling land to non-state social groups recognized by custom.

(vii) ***Reviewing the gender dimension of registration***: Can women as well as men be registered as owners of land? Or do the criteria for registration necessarily favor male head of household, regardless of who may have made the effort to develop the land? What messages will be passed on this issue in the local public information campaign before titling? Is joint titling of family land possible? What are the requirements for this to take place? Are the forms used framed to encourage the inclusion of more than one individual owner? Are women to be involved in the implementation in ways that will ensure that gender issues will receive adequate attention? Some of these issues may need to be addressed in a revised law, though others are in the nature of administrative issues.

(viii) ***Overriding interests***: Most modern land registration statutes include a list of rights which are valid even if they are not shown on the land register. These will often include rights and limitations on rights created by operation of law (such as a private right of way created by operation of law, a public right of way created by statute, or zoning restrictions) or very weak, temporary or highly revocable rights (such as licenses to use land, or short-term leases). Consideration should be given to providing an article on this topic in a revision of the Madagascar law.

(ix) ***Legal effect of registration of a right***: For the register to have maximum reliability, the law should make clear that registered transactions have priority over unregistered transactions, that an unregistered transfer cannot transfer title to the land, that entry of a right in the register is conclusive proof of the right, and even that the state guarantees the title. The Madagascar statute does provide for the conclusive and indefeasible effect of registration of a title.

(x) ***Corrections of the register***: A modern registration law will have careful provision on what kind of mistakes in the register can be corrected by the Register, or by the courts. The term "mistake" must itself be defined carefully, to make it clear that technical and not adjudicatory mistakes are meant. Powers of administrative correction will be needed but need to be narrowly framed (limited often to "changes not materially affecting the interest of any party, or changes with the consent of all parties affected"). There should be specific provisions protecting someone what has relied on a mistaken entry in the register.

(xi) ***Disincentives for subsequent registrations***: A persistent problem in many countries has been failure on the part of those dealing with registered titles to register transactions and inheritances. This is in part a matter of public education, but there are also objective reasons for non-registration, and every attempt should be made to remove these. They include taxes on transactions (not modest fees, which are appropriate) and provisions which seek to enforce use restrictions or subdivision of parcels through the registration process. Such provisions drive users outside the registry system.

(xii) ***Fee structures in regulations***: The fee structure for registration services should reflect real costs and be structured to cover the costs of operating the system. This is possible, as Thailand has demonstrated. But it is important that the fees should only be authorized in the law, and not stated in the law but in regulations that can easily be modified in light of inflation and other factors that would render existing fees inappropriate.

(xiii) ***Technology in Regulations***: Similarly, specifications of survey technology and computer technology for registration should not be made in the law itself. These technologies are rapidly evolving and should again be stipulated in regulations or some other legal instrument which can be adjusted without going back to Parliament as technological advances become available.

These issues certainly do not exhaust the needs for revisions in the statute, most of which will be the product of local experience, but simply note some areas for consideration, based on the experience in other countries.

LEASEHOLD PROPERTY RIGHTS

Leasing can be done on a commercial basis (for a minimum of three years) or on a long-term basis (for a maximum of 99 years). Long-term leases offer an alternative for investors unwilling or unable to purchase land. It is designed to give the semblance of ownership, but in practice it does not wholly achieve this goal. In addition, most leases are done out of titled or untitled state land. This is because while it is possible for individuals or moral persons (companies) to lease out land on a long-term basis, investors have found this a risky proposition mainly because of succession issues. Even in the case of land which is the property of state owned companies, it is more common that the land is transferred back to the central government first, before it is given as a lease to an investor.

It is imperative that investors signing leases for *commercial* purposes respect the requirements of "Ordonnance 60-050 du 22 juin 1960, modifié par l'ordonnance 62-112 du 1er octobre 1962". This law is modelled on the French 3-6-9 laws, which give lessees the possibility of extending terms for 3 year intervals and give lessors the protection of at lease 3 years of rent. Since Malagasy law, including this law, has not evolved over time, judges tend to look to French law for interpretation and jurisprudence. In some cases, French law has evolved in ways that make the application of jurisprudence in Madagascar unrealistic and often injects a certain degree of uncertainty if judges are not fully apprised of evolutions in French law (or for that matter, Malagasy law).

Three year minimum terms can be a burden to investors who may wish to have the flexibility of terminating after one year. The outcome of disputes can be uncertain because there is no real central documentation of Malagasy jurisprudence on this or other areas of the law.

Residential leases are subject to "ordonnance n° 62-100 of October 1, 1962", and tend to be protective of lessee rights: eviction is strictly restricted and rent controls are imposed. Residential leases are subject to the same registration fee rates as all other types of leases. Residential leases have been extensively litigated and a rich jurisprudence exists. Consequently, the outcome of disputes over residential leases may be more easily predicted.

The long-term lease or "bail emphytéotique" is regulated by the "Ordonnance 62-064 du 27 septembre 1962 relative au bail emphytéotique". The law was amended in 1996 to allow for such leases to last for 99 years. It also expressly permitted the lease to be mortgaged, and, with the lessor's permission, sold.

Of particular interest, however, is "arrêté n°3976/92 du 9 juillet 1992", which sets forth the form of contract to be adopted for a long-term lease of property belonging to the State. This regulation includes two clauses that are thought to impede investment. One clause gives the state the right of pre-emption in the event of transfer. This right constrains the lessee's freedom to transact a lease and introduces delays and uncertainties in the process.

The second clause is the requirement that the land be developed (condition of "mise en valeur"). The rules of the game applicable to such "mise en valeur" make this a problem for investors. First, for a lease to be approved, the investor needs to submit an investment plan, but without being informed on what criteria it will be judged by the relevant commission. In fact, even the

exact composition of the commission to evaluate the lease application is not known beforehand. What is known is that the commission will have representatives of local government, the ministry of lands, the ministry of environment, the ministry of agriculture, and a person from the topographical service. The latter's field visit is at the expense of the applicant. What is also known is that the law instructs the commission to determine the "development conditions" taking into account the nature of the land, current use, general use in the region, and national economic strategies. The vagueness of these terms of reference leaves the door wide open for disputes and uncertainty[38]. The right to a long-term lease of government-owned land of more than 500 ha which has not been titled must be decided by the head of the government (prime minister) in a counsel of ministers.

Once a lease has been given, the state has the right to terminate it, based on a failure to meet the "mise en value" condition within five years. This right of termination is, again, not problematic in and of itself, but it is the uncertainty surrounding its actual application which is the problem. And in the case of agricultural investments, which may take more than five years to come to fruition, the time period can become a constraint.

In conclusion, two important constraints operate on leases. Firstly, there is the practical, operational definition of what constitutes "mise en valeur". This process should be made clearer and less bureaucratic. In particular, to minimize the possibility of corruption, it should become less subject to the whims of the officers in charge of its evaluation.

Secondly, leasehold should become freely transferable. Government's current right of pre-emption at the time of sale constrains the ability of the seller to freely transfer his property rights, and causes delays and uncertainties.

DIRECT ACQUISITION OF LAND BY FOREIGNERS

Long prohibited in Madagascar, direct purchase of full ownership rights (rather than long term leases) by foreign persons or entities of land or buildings in Madagascar is now permitted pursuant to Law N°2003-028 of August 27, 2003. Restrictions on the ability of foreign investors to acquire land are not unusual in the world.[39] Rather it is the transparency, predictability and efficiency with which such restrictions are implemented which is a deterrent to investment. In this regard, there is room for improvement in Madagascar.

The restrictions on foreign ownership of land are not found in the various laws related to land, but rather on the laws regulating immigration and nationality. Requirements to obtain approval for the right to acquire land (i.e. not the acquisition itself which follows the regular land administrative procedures) are set forth in Decree n° 2003-897 dated August 27, 2003, and amended by Decree n°2004-353 dated 30 March 2004. The main condition is that the foreign investor presents an investment plan, and an attestation of investment of at least US$500,000. If the proposed investment is between US$500,000 and US$1 million, the plan will be submitted for approval by decree by an inter-ministerial committee, composed of the ministry of lands, finance and the relevant sector ministry, after an initial positive recommendation by GUIDE. If the investment is over US$5 million, it must be approved by presidential decree. If the

[38] See Art 46 of "Ord. 62-047 du 20 septembre 1962".
[39] See FAO report on Land Ownership and Foreigners, December 1999.

investment plan is not carried out in a timely manner and to the satisfaction of the authorizing entity, land and fixed investments will return to the ownership of the state.

In addition, the following surface restrictions apply (with exceptions possible):

- the banking and insurance sector is limited to 1 ha, or 10,000 m2;
- the real estate development sector is limited to 1.5 ha, or 15,000 m2;
- tourism is allowed 2.5 ha, or 25,000 m2; and
- all others are allowed 0.5 ha, or 5,000 m2.

To date, only two foreign investors have succeeded in obtaining the right to purchase land in Madagascar. In both cases, the land was undeveloped, but titled land, and the seller was a private person or entity. The GUIDE confirmed that, on average, the time from beginning to end of the acquisition procedure (if the land is already titled) is between 1 and 3 months, assuming there are no complications, oppositions or other problems. If the land is not titled, and the land has to be bought from the government, the GUIDE expects that it would take 3 to 6 months before a final decision is rendered.

The perception of risk associated with the acquisition of property ownership by a foreigner in Madagascar is still high. The main reasons are that the law is seen to be quite vague. As for long term leases, it is unclear whether the investment threshold reflects the value of the land or the investment. And as with the operationalization of "mise en valeur" described above, it is unclear what the evaluation procedure for compliance with the terms of the investment plan will be. Another important limitation of the law is that it is excessively restrictive as to the surfaces to be purchased for specific sectors of activity. For instance, no mention is made of large industrial or agricultural zones.

More importantly perhaps, the new law does not address the "normal" bottlenecks of land administration. Hence, while the authority to purchase property may be given, it does nothing to reduce the general high direct and indirect costs of land transactions in Madagascar.

MORTGAGES

In November 2004, new laws related to the pledging of collateral for secured financing transactions were introduced, reforming laws which often dated back to the colonial era. The laws related to mortgages however, were not amended as part of this reform process and the procedure for registration of mortgages continues to be set forth in the "Ordonnance n° 60-146 du 3 octobre 1960 relative au régime foncier de l'immatriculation" and its modifying texts.

The procedure for registering a mortgage is the following: The mortgaged property must be titled. The mortgage document must be notarized and registered with the tax authorities. The property tax, as noted below, is between 1 and 2 percent of the amount secured. Once the property tax has been paid, the mortgage must be registered with the land registry having jurisdiction over the land, i.e. closest to its location. If outside of Antananarivo, this may add cost and delay. The registration fee ("frais du conservateur") at the land registry represents

another 1 to 2 percent of the amount secured. The amount secured may or may not represent the amount of the principal and interest, but in the vast majority of cases, the lender will seek to secure the full amount.

In the event that the collateral pledged is a long-term lease, the leasehold can be pledged either as a mortgage or as part of the "fonds de commerce" (the going business). For the "fonds the commerce", the registration fee with the tax authorities is minimal (about 1,000 Ariary, or less than US$1). However, the fee at the business registry is 0.1 percent of the amount secured (principal and interest), plus 1,400 or 6.200 Ariary depending on whether the amount to be secured is less or more than 3.2 million Ariary.

For loans denominated in foreign currency, these registration fees can add up. As in most other investment transaction, the land title is at the base of any mortgage transaction. The lien on the property will be recorded on the original title document (retained by the land registry) as well as its duplicate copy (given to the owner).

The first big bottleneck for mortgaging land is related to the requirement that the transaction be notarized. As mentioned above, there are only approximately 13 notaries in all of Madagascar, and where no notaries exist, the "greffier en chef" (chief clerk) of a local tribunal acts as notary. Access to the profession of notary has been limited to a few individuals due to the rules governing the profession, in particular those setting the requirements for becoming a public notary, as a result a new generation of such professionals is lacking. Because of their limited number, their services take time (2 to 3 weeks on average), which to a borrower can be a significant cost. The second bottleneck is the requirement to register the mortgage in the relevant local land registry.

The difficulties involved in offering land or buildings as collateral are compounded by banks' weariness as to the real value of the security presented. There is a negative sentiment within the banking community due to the many bad experiences with supposedly titled properties, whose mortgages simply vanished on legal grounds, because the purported owner was not the right owner, the papers were fraudulent or false, or the land rights simply did not exist when investigated on the ground.

THE ZONE FRANCHE INDUSTRIELLE

The duty-free concept was instituted in Madagascar in 1989-1990. The legal framework allow for two types of tax free zones, the the "Entreprise Franche" (EF) or duty-free enterprise, and the Zone Franche Industrielle (ZFI), or duty-free zone. Duty-free entities (EF or ZFI) enjoy important duty-free advantages in that they are subject only to the specific taxes set fort in the law 89-027, modified by law n°91-020. Such specifically enumerated taxes do not include any property taxes.

An EF is an enterprise which is exempt from the national customs regime. The EF can be located anywhere, i.e. it need not be located within the confines of a ZFI. It can contract with private land-owners for land, which, however, subsequently needs to be fenced in and on which no other activity other than the one permitted under the grant which conferred the duty-free status.

The ZFI is a duty-free zone. A ZFI is a developed zone grouping together a variety of enterprises, all of which fall under one of the four following categories: "Entreprise de Promotion-Exploitation" (EPE), "Entreprise Industrielle de Transformation" (EIT), "Entreprise de Service" (ES), "Entreprise de Production Intensive de Base" (EPIB). To date, there exist two zones that have applied and been granted ZFI status in Madagascar, one in Antananarivo (Androndrakely) and another in Toamasina (Betainomby). These two ZFI's have not yet been developed.

A ZFI can only be constructed on land belonging to the government. The land is leased for a period of between 20 and 50 years, although the lease can be renewed. All construction and improvements on the land are the property of the developer, but the State retains a pre-emptive right on the eventual sale of such property and improvements. If the lease is not renewed, then the developer must be compensated for its investment. Hence, it should provide a certain amount of security for investors, because they are guaranteed compensation for a possible taking of the land that is allocated to them.

If the lease is terminated early by the government, then the developer is entitled to damages for the sudden and early termination in addition to the intrinsic value of the property. If the State exercises the right of pre-emption in the event of a transfer or sale, it must exercise this right within 60 days of the Bureau de Coordination Administrative (the entity regulating a ZFI) becoming aware of such transfer or sale.

In principle, the ZFI would provide a certain measure of security to investors. However, because no ZFI has actually been developed, the EFs have almost all resorted to the signing of commercial leases that are then included in their requests for duty-free status. It is incumbent on this type of investor to first negotiate such a lease, and because it is not yet granted such duty-free zone status, it is still subject to all lease constraints (described above) and the registration fees and taxes.

For the ZFI proper, the right of pre-emption is retained and the length of the lease is limited to between 20 and 50 years. Depending on the profile of the returns to investment, this could present a risk for the long-term investor. If the government retakes the property prior to it being paid off, there are no guarantees that the state can afford to adequately compensate the investor for funds invested. The investors would have recourse only to MIGA and private insurance.

SECTOR SPECIFIC REGULATIONS

Sector-specific rules, regulations and exemptions have emerged because of successful lobbying by certain stakeholders for favourable treatment and government's desire to attract certain types of investment. The end result, however, is that the overall incentive system appears unbalanced and inconsistent to the average investor.

Mining. As with the duty-free zone law, the government has sought to reassure foreign investors interested in the mining sector in Madagascar by providing special expropriation safeguards. The "Loi sur les Grands Investissements Miniers" (LGIM), for example, gives the absolute right to pledge real estate as security interest. Types of interest envisaged include: droit d'usufruit (right to use the land), baux emphytéotiques (long-term leases), droit d'occupation du domaine

privé de l'Etat par autorisation unitalérale ou conventionnelle (right to occupy the land by unilateral government decision or mutual contract).

The law includes a guarantee against expropriation or nationalisation and only allows it if the government has satisfied a four part test: (a) the taking is in the public interest, (b) it is not discriminatory, (c) it is in compliance with all applicable legislation and procedures, and (d) is accompanied by indemnification. This law also provides for international arbitration, by providing for an option open to foreign investors to resolve disputes related to land issues in a venue other than the courts of Madagascar.

A second important concession in the large mining investment law (LGIM) relates to property taxes. First, there is a holiday on the property tax on real estate or buildings for the first five years after construction or rehabilitation. However, this tax break is capped at 200 million Ariary or approximately US$100,000. LGIM also protects against taxes levied at a decentralized level (i.e., not by the central government (taxes parafiscales) that are specifically targeted at the project (i.e. not generally applicable to all persons). However, there is no protection against parafiscal taxes levied by government below the level of the region or province, such as a town. This may cause some discomfort for international investors who cannot know for certain what a local levy might be, while at the same time protecting the right of local communities to tax the investment.

The above provisions apply to large investments in excess of 100.000.000 US Dollars, which have yet to be developed in Madagascar, so the law is untested. All other mining operations are subject to the common law. We note, however, that some of the above provisions provide a useful guide to the direction that reforms could take in future if investors, whether foreign or local, are to be enticed to invest.

Real estate development. The laws related to real estate development are limited to a short pre-independence decree on the co-ownership of buildings divided into apartments (decree n°50-1631 du 27 décembre 1950). The legal framework needs to be updated to reflect modern property development and financing techniques. For example, financing the construction of an apartment complex through advance sales is not possible under the law, because one cannot register a title certificate to an apartment that does not yet exist.

Tourism. Potential investors in the tourism sector must abide by the different legal texts applicable to this sector, starting with the law n°95-017 of August 25, 1995 relative to tourism. In essence, one can only establish a tourism business on a plot which has an up-to-date title or other property right (most often, a lease). Among the various documents required for submission for accreditation as a tourism establishment, the applicant must submit: (1) either a land title or the lease giving him such property right as registered with the tax authorities; (2) a legal certificate with respect to the land ("certificat de situation juridique"), (3) a registered map of the property ("plan d'immatriculation"); (4) various environmental permits showing land use and waste discharge plans: and (5) a construction permit. In short, tourism is restricted to the very limited number of plots which have up-to-date title deeds.

The coastline of Madagascar as well as lagoons and the border of rivers and lakes are classified as "domaine national public" of Madagascar, i.e. in the public domain of the state. Ordonnance

60-099, modified by Ordonnance 62-032, provides that a right of passage is reserved at all times for the general public and that refusal of access to such properties is unlawful. And the right to build a structure on the edge of such public domain requires the builder to first obtain an authorization from the local authority.

Tourism is an area of high potential growth in Madagascar, in particular on the coasts and in the environmental reserves or parks. The Ministry of Tourism has established Réserves Foncières Touristiques in selected areas such as in Nosy Be to facilitate tourism investments. However the process of allocating these reserves to investors is unclear, involves too many parties at both the regional and national levels and lacks transparency. This situation is a deterrent to reputable tourism investors and is being addressed as a risk to the success of the Integrated Growth Poles Project. The conclusion of this chapter is that, when focusing on increasing investment in tourism, Government must take into account land issues, at the same time it studies coastal and environmental impact issues and "standard" tourist issues such as safety, hygiene and licensing. Included in land issues are: access rights for foreigners, beach use issues, construction permitting and other infrastructure issues. At present, there is a lack of coordination and a great deal of sector specific focus among those involved in (a) tourism, (b) the environment, (c) taxation and (d) land.

Agri-business. As noted above, if the land exceeds 500 ha, the right to a long-term lease of government owned land that has not been titled must be decided by the head of the government (Prime Minister) in a counsel of ministers. This rule applies whether the investor is Malagasy or not. In other words, investments in agriculture or pasture land for land of more than 500 hectares requires a decree signed by the Prime Minister if the government owns the land and proposes to lease it to the investor. More recently, the Chef de Region of Antsirabe has been granted the authority to enter into land leases in the Antsirabe region to facilitate agri-business investments. The terms and conditions of these leases appear to be discretionary and the Chef de Region seems to be the ultimate decision-making authority on these land leases.

OTHER REGULATIONS

Other regulations affecting how property rights are transferred or enjoyed in Madagascar include inheritance laws; environmental regulations; and urban development and building regulations. These regulations can often add unforeseen complications to land transactions, resulting in delays that may be costly in time and money for investors.

***Inheritance laws*.** According to Malagasy inheritance laws, upon the death of an individual and in the absence of a will, property transfers undivided to all the lawful inheritors. The inheritance order by category (children, parents, relatives of other kinds) is specified in the law. Spouses are only 8th in the succession line. Deaths are often not reported, because of the thorny issues associated with dividing an inheritance among several inheritors, who may themselves have died but left inheritors of their own. This is a particularly difficult topic in Malagasy tradition because of the principle that all property should be kept in the family. It is also costly, but also because of the costs associated with such transfers: the so-called inheritance and the cost of going to an urban centre to report the transfer. Additional delays involve the courts as they must issue decisions if there are contestations (another problem when a person has married more than once) or if a death certificate cannot be produced. These are some of the reasons why many of

the properties that have formal titles in Madagascar are not up-to-date.

Environmental regulations. The principal law is the "Charte de l'Environnement Malagasy" (Malagasy Environmental Charter), set forth in law n° 90-033 of 21 December 1990, as modified by law n° 97-017 of 6 June 1997. The law sets out the national vision with respect to the environment and puts in place the various institutions charged with ensuring its management and protection.

One institution in particular is important for investment purposes, the "Office National de l'Environnement" or ONE, which retains important responsibilities for issuing environmental permits and screening applications. Any large investment in Madagascar is subject to the MECIE Decree[40], which defines the requirements for environmental compliance for investment projects. The law requires the granting of an environmental permit to proceed with the investment or an environmental action plan. In either case, the plan or permit request is submitted to the ONE (Office National de l'Environnement), the ministry in charge of environment and the ministry that covers the relevant sector.

An environmental action plan must include: 1) a description of the applicant and the permits sought or already obtained; 2) a description of the terrain where the project is to take place, including geological descriptions, biodiversity, waters (both above and below ground), climate and air quality, cultural and archaeological resources and socio-economic environment; 3) a description of the project and the works to be undertaken; 4) a description and analysis of potential environmental damage, 5) a proposal as to how such damage will be limited, mitigated and repaired, including a proposal for each phase of operation; and 6) the financing plan to pay for such mitigation and rehabilitation. These documents are not necessarily legal land documents but they may involve land experts such as geologists, land use experts and land surveyors. Such experts are not numerous in Madagascar. While the intentions for such reporting are laudable, in practice they translate into a costly additional procedure for the investor.

In short, land use regulations may not be familiar to the land service technicians and certainly do not explicitly involve their input, and vice-versa with environmental regulators. Yet, cross-pollination is important if an effort to streamline investment requirements is undertaken. If transparency is a key to attracting and encouraging investment, then such a streamlining of all the possible regulations that may affect any one type of project is essential.

Construction permits. The law applicable to construction is the Code on Urbanism[41]. Construction permits are granted by the mayor of the local authority (commune) or by the ministry in charge of public works. Any request for a construction permit necessarily includes the property information (title number and, if applicable, evidence of the registered lease). The construction request must be signed by the owner of the property or the lessee. The construction permit also requires the submission of various architectural and urban development plans and allows the regulating authority to follow-up with questions and requests for additional documentation. Once a construction permit is obtained, it is valid for a limited amount of time

[40] Decree n° 99-954 of 15 December 1999, relative à la Mise En Comptabilité des Investissements avec l'Environnement, as modified by decree n° 2004-167 dated 3 February 2004.

[41] Decree n°63-192 of 27 March 1963, as modified by Decree n° 69-335 of 29 July 1969.

(generally 2 years maximum) and automatically expires if construction does not begin.

During the life of an investment, one must have an understanding of all the different regulations that may apply, since the effort to secure a land right may be undermined by the inability to secure a construction permit. In short, for investors, a hard look at only the land laws is insufficient, all other areas potentially impacting land should be considered.

COST OF PROPERTY RIGHTS REGISTRATION

The fees to be paid with respect to any formal land transaction are detailed below. Generally speaking, these fees may not be onerous relative to international standards. However, to the average Malagasy, they can be important.

For instance, the cost of registration of property is 11 percent of the value of the property, which is less than the 12.7 percent average cost for Sub-Saharan African countries but greater than the 3.0 percent cost for Europe and Central Asia countries.[42] However, this is only the *direct* cost. The *indirect* costs for real estate transactions can add up as investors turn to notaries, attorneys or even to bribes to accelerate the process. Most importantly, there is the amount of time needed to process a transaction. Two years spent finalizing a property title is time not spent doing business.

The various fees and taxes that apply to real estate transactions fees are included in the General Tax Code, which may be amended on an annual basis by the annual Finance Law. In practice, the categories of taxation do not vary over the years, only the rates of taxation. The figures below are the fees and tax rates set forth in the Loi de Finance 2005.

Land tax. A property tax on the bare value of the land is imposed on a yearly basis based on the ownership situation as it exists on January 1 of every year. The tax is collected for the benefit of local communes (municipalities). The tax is levied against the owners or the occupants of the land. Exemptions are granted for non-profit institutions, gardens, hospitals, schools and agricultural lands that are otherwise subject to IFPB (described below). There exists a 6 year tax holiday for lands recently brought into production, and the same 6 year exemption is given to coffee that is cut back to the stump (recépage) or for tree farms.

The land tax rate depends on the local government (commune). It sets a flat rate per hectare every four years for five different categories of land, and one percent of the intrinsic value (valeur venale) for the sixth.

Property Tax on Buildings and the Additional Tax on Buildings.[43] The annual tax on built property (Impôt Foncier sur la Propriété Bâtie or IFPB) is an annual tax is levied on the first of January for the Communes at 2 to 5 percent of the rental value of the property. The Taxe Annexe à l'Impôt Foncier sur la Propriété Bâtieis is an additional tax, also for the Communes, of 2 to 5 % for buildings already paying the IFPB, and is applicable to those buildings who are exonerated on a permanent basis from the IFPB but that are used for dwelling purposes. In short, the minimum tax is 2 to 5 percent and can go up to 10 percent.

[42] Doing Business in 2005.

[43] Impôt foncier sur les propriétés bâties et la taxe annexe à l'impôt foncier sur les propriétés bâties.

Additional tax to the registration fee.[44] An additional transfer tax (taxe additionnelle aux droits d'enregistrement) of 2 percent of the transfer price applies for the transfer of property at cost, as opposed to a transfer at no cost, such as through inheritance. Consequently, if transferring property for a price, then one must first pay a registration fee (see below) to the central authorities (Registration Service or Service des Enregistrements of the central government) and an additional 2% of the sales price fee to the communes, but collected by the central government at the same time as it collects the registration fee. The total tax due is then 8%.

Local business tax[45]. The business tax is collected by the provinces. It is an annual tax that includes a fixed and a variable portion, with different rates for different sectors of activity. Assessments are quite subjective. Fiscal authorities will often look to the rental value of the offices of the establishment, its materials and equipment. A foreign investor paying rent in foreign currency can therefore find that its business tax is quite high. All businesses are required to make a declaration to the fiscal authorities every October 15, on the basis of which the authorities will calculate the tax for the upcoming year.

Capital gains tax.[46] This tax varies from 5 to 25 percent, depending on the difference between the sales price and the "prix de revient". The latter includes the original acquisition price, investments made into the property over time (repairs, improvements[47], etc.), and interest on construction loans. This is then adjusted by an index set by the government. The tax is levied when the property is sold. The seller, to decrease the tax liabilities, needs to maintain extensive documentation of improvements and repairs made.

Public information on property rights tax.[48] This tax is levied to contribute to the government budget for property rights record keeping. The tax rate is 1 to 2 percent for requests for the registration of title, registration of liens on a property, registration of leases, and any other modifications. The basis for the tax is the value of the building or property at the time of the registration request; for leases: on the value of the lease over the lease term, including all service or improvement charges; on mortgages, on the amount secured by the mortgage.

Registration fees for paid land transfers (sale, lease, equity)[49].

These include the following:

- The sale of property is subject to a 6% tax[50] , to which is added the "additional tax" of 2% noted above.

- Residential and commercial leases are subject to a 2 percent registration fee, calculated on the value of the lease for its entire term. Commercial leases are subject to a similar fee.

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44 Taxe additionnelle au droit d'enregistrement.
45 Impôt locale : Taxe professionnelle.
46 Impots sur les plus-values immobilières.
47 However, construction costs without justification are only partially credited.
48 Taxe de publicité foncière.
49 Droits d'enregistrement sur les mutations à titre onéreux.
50 Tax Cde, section02.02.39.

- Lease financings ("crédit bail") are subject to a registration fee of 10,000 Ariary (US$5) for each property leased.

- The registration fee for long-term leases (Bail emphytéotique) is calculated every 5 years based on the rent, unless rent prepaid at the beginning for the totality of the term. The fee would then be 2% times 5 years times yearly rent.

- In the case of exchange of buildings, there is a 4% registration fee on the value of the lower portion plus the difference in price between the buildings.

- Sharing of property among co-inheritors or proprietors is subject to a 1% registration fee on the value of the property.

- "Apport en capital" or equity contributions of land to a commercial company attracts a fee of 0.1 to 1% of the value of the property.

Registration fees for inherited land [51]

A declaration must first be made in each jurisdiction where the property is located. If the land or buildings are geographically dispersed, this can be an important indirect cost. The inheritance tax itself is between 2 to 15 percent of the value of the property depending on its overall value and certain deductions.

A survey of simple cases of standard transactions should be conducted by the land administration in collaboration with the tax authorities: owning a business on a piece of land, selling a titled plot, inheriting land, etc.. They should then put out simple brochures or guidelines that are user friendly for landowners, whether they are investors or not.

The overall conclusion on the above description of the various land-related taxes and fees is that, while they may not be exorbitant compared to other countries, they are complicated and significantly constrain property rights registration and transactions. They also provide ample scope for opportunistic behavior by government officials. The main reasons are related to the high transactions costs of fee payment and taxation:

- Lack of knowledge by the investor about the full set of fees and taxes to be paid;

- Lack of transparency in the assessment of certain fees and taxes, e.g. the business tax; and

- High cost of making the payment in terms of time spent—this is not "one stop shopping", because fees and taxes are due at different stages of the process and to different institutions.

Finally, there is a lack of transparency and accountability with respect to the use of the tax revenues. Annual statements of taxes collected and the use of these revenues are not published by the local authorities or the Ministry of Land.

[51] Droits d'enregistrement sur les mutations à titre gratuit.

9. REFORM AGENDA, IMPLEMENTATION STRATEGY, AND RECOMMENDATIONS

This chapter discusses the ongoing an planned reform efforts, the remaining reform agenda, and the implementation strategy of the Government. It also summarizes the main recommendation resulting from the findings of the report. The final chapter of the report will discuss in more detail one particular aspect of the government's program, namely the piloting and implementation strategy for decentralized land administration.

The previous chapters show that land tenure security and access are not the most important development issues for farmers and investors, but is a very important or moderately important issues for a between 20 and 40 percent of them. There is widespread recognition of the dysfunctional nature of the existing land administration system and its potential as a source of corruption. Because of the legal complexities and the lack of low-cost conflict and dispute resolution mechanisms, existing land disputes are clogging up the courts in both rural and urban areas. In addition, increasing population pressure and the attendant rising scarcity of arable land are leading to a "natural" evolution from a traditional common property regime under which an individual's use rights are recognized, but sale to outsiders is restricted, towards a more individualized regime, under which property rights become fully tradable. Finally there are significant open access issues to natural resources associated with the lack of clarity of ownership over these resources and widespread state intervention. As a result, there *is* a groundswell of demand "from below" for improvement in land administration, some form of formalization property rights, and improvements in dispute resolution mechanisms.

The political commitment to reform is clearly illustrated by a number of other Government actions, including the adoption of a tight timetable for reform, the recent suspension of the issuance of title deeds, the closing down of all land administration offices to allow for an inventory, the adoption of a new land policy and the passing of a new land law. The Government's vision, as publicly announced and agreed in Cabinet, is to put in place a land administration system which is based on the twin principles of decentralizing land administration to the lowest level of local government possible ("commune"), and designing and implementing policy reforms following a process of piloting and learning by doing.

The Ministry of Agriculture, Livestock and Fisheries in 2004 has already developed a Land Tenure Policy (Lettre de Politique Fonciere, or LPF), whose draft was discussed at a National Workshop on February 8, 2005, under the patronage of the Prime Minister. The new Land Tenure Policy was adopted by Cabinet on May 3, 2005. The legal framework for this decentralization has been created on October 17, 2005 by the "Loi No. 2005-019 "fixant les principes regissant les statuts des terres". Implementing legislation and regulations are currently being drafted and expected to be put in place in the first half of 2006.

OVERVIEW

As already enacted, the reform program represents a significant advance in term of the creation of security of tenure for the citizens of Madagascar. It seeks to address the needs of both urban and rural areas of the country. It reflects clearly the needs to modernize the existing Torrens system of registration. A modernized Torrens system is most appropriate for urban and other

areas of high-value land where land markets are fully developed, and the volume of transactions against which fees can be charged is significant enough to make the system affordable and sustainable. However, a lower cost system is needed for other areas. The policy therefore provides, in the spirit of the existing practice of "petits papiers", a new and less onerous system, more appropriate for the smallholders of very modest means for whom the current system is too slow and too costly.

The new law simplifies the complex mosaic of land rights left by history by recognizing only three broad classes. These are: (i) land of the state; (ii) land of private persons or entities; and (iii) land under special legal provisions, such investment zones and protected areas.

The other main innovation of the new law is that it creates a more accessible formal property right in land, the so-called "*certificate foncier*" (CF). The CF can be created for untitled land of private persons or entities. This property right can now be established and recognized by the local government using procedures also defined in the new law. These procedures must be public and contestable, implemented by a properly composed commission, and recorded in minutes. No CF can be issued for which the minutes record an unresolved dispute. The CF is signed by the head of the local government. The CF entitles the owner to all transactions already allowed with titled land, including sale, inheritance, long-term leases, and mortgages. This means that the CF will be a major new opportunity for investors to acquire land via purchase or long-term lease. The CFs will be most important to rural and peri-urban Madagascar, but may also be appropriate for areas of informal land occupation by the poor in urban areas, and for enhanced land access by investors who have difficulty in acquiring, or do not need or wish to acquire formal land titles.

After the adoption of the new Land Policy and the necessary legal reforms (the so-called Preparation Phase) in mid 2005, Government has now embarked on a second phase—the Pilot Phase. This phase will take approximately two years during which a process of "learning by doing" through the strategic implementation of pilots will be implemented. The final and third phase is the "extension phase".

The "Programme National Foncier" (PNF)—the government's land tenure reform strategy and program—is based on sound principles, rooted in international best practice, and moving ahead at rapid speed. The major thrusts of the reform program can be summarized in the following matrix.

	Major programs	
Implementation activities and systems	*Modernization of land titling*	*Decentralization of land administration*
Legal and regulatory reform		
Training and communication		
M&E		
- monitoring		
- impact evaluation		
Information technology and management		

Legal and regulatory reform: The legal and regulatory reform process has been impressive but remains incomplete. While the new law recognizes the rights of customary right holders, making them effective requires the acquisition of certificates fonciers, whose implementation will be phased over time, leaving many customary right holders in limbo. Second, the environmental legislation and procedures regarding the recognition or acquisition of property rights of communities over natural resources is not yet harmonized with the new land legislation. And third, legal and administrative provisions and systems for the access to land by investors have not yet been reformed and are scattered among different laws and administrative entities and procedures. *A review and reform of all these provisions is required culminating in a single set of laws and regulations, and streamlined implementation mechanisms.*

The *modernization of land titling* will be carried out by a systematic application of all four program elements, in particular legal and regulatory reform, training and communication and the application of information technology and management. At this point in time also involves the conservation of the existing land records and its digital capture, and the clearing of the existing backlog in updating and issuing of titles. In chapter 8, this report reviews international best practices for improving formal land titling systems, makes suggestions for improvements, and on how to ensure consistency between the modernization program and the decentralization program. But the report does not deal with the highly technical matters of implementation of the planned modernization.

The *decentralization of land administration* involves the development of the capacity for land administration at the commune level (the lowest level of local government), where it can be easily accessed by the entire population, and where the information to ascertain existing land occupation and land rights can be managed by close involvement of the populations themselves.

Decentralization will involve the implementation of the legal and regulatory reforms already enacted or in the process of elaboration, which created the new CFs, and designate the local governments as the locus of future land administration. Guichet Fonciers will be established at for individual communes or groups of communes which will support the issuance of the new CFs, and tasked with keeping the land records up to date thereafter. The new land administration will be based on the principle of cost recovery from the users, and therefore has to be adapted to their willingness to pay. These and other principles of the decentralized land administration

system are discussed in this chapter, and in the final chapter of this report. In that chapter different options for land administration which are appropriate and cost-effective for different types of rural, semi-urban and urban areas will be discussed in detail, as well as the plans to pilot and implement them. Since this report has shown that land tenure security, conflict, and open access issues are not equally pressing for all areas and groups, and since users will have to pay for the land administration services, *one of the main recommendation of this report is to focus the expansion of the Guichet Fonciers on areas clearly identified land tenure problems, actual or potential conflict, and/or effective popular demand.*

The next two sub-sections discuss in greater detail the legal and regulatory reforms already accomplished and priorities for completing the reform process. The following section then discusses four priority strategies to accelerate implementation. All the suggested priority actions are also summarized in matrix form in Annex 1.

LEGAL AND REGULATORY REFORMS ALREADY ACCOMPLISHED

Reform of the current legal framework for property rights has been under discussion for some time by GOM. In March 2005 the Ministry of Agriculture, Livestock and Fisheries constituted a Committee for the Revision of Land Legislation. It has produced the already adopted *loi cadre,* a "framework law", that sets out the basic property rights regimes and the relationship of the different regimes to one another, and has also prepared the implementing legislations.

The *loi cadre* starts with the general provisions, dealing with the objective of the law, the legal categories of land, and definitions of key terms. The *certificat foncier* is defined as "an administrative act testifying to the existence of rights based on occupation, use and development, personal and exclusive, relating to a plot of land, established by a specified legal process". The certificate recognizes a right of property which can be set up against third parties unless proof is made to the contrary."

The three classes of land are:

(i) land of the state (national and local governments, and any other state organizations, such as parastatals), covering (i) public land (roads, ports, etc.)—land of the state which needs to be accessible and usable to the public and which can never become private; and (ii) "private" land of the state—land which can be alienated following common law

(ii) land of private persons or entities, comprising (i) land which is titled; and (ii) land which is held by virtue of unregistered property rights, such as a customary right. Importantly, provided here is the possibility of formal recognition by commune authorities of occupation and use of land as a property right. The law sets out certain processes to be followed, including an ad hoc commission responsible for implementation and responsible to the executive of the decentralized collectivity concerned. The rights may be recognized in response to a collective or individual request, either from a collectivity or from a user association.[52]

[52] The rights are created by an "acte domaniale" of the appropriate local authority, and the rights created may or may not be registered in the title registry. It is made clear that the rights so established may be set up against third

(iii) land under special legal regimes, such investment zones, protected areas, forest reserves and land covered by international treaties. Such land can be subject to leases and management contracts, for example for forest management by communities or investment projects by domestic or foreign investors.

The law further sets out the principles for land administration. This includes laying the basis for attribution of land administration authority to decentralized collectivities, and the decentralization of the functions of state land services. Finally, the law indicates that these principles will be implemented and elaborated through more specific laws.

COMPLETING THE REFORM PROCESS

The legal and regulatory reform is not yet complete. It is for this reason that the ministry has made legal reform a continued major implementation activity. There are a number of lacuna in the otherwise excellent new land law. This review has identified a number of specific issues for further work under this activity.

Legal recognition of customary land rights is implied by the new law. The procedures by which the commune will recognize land occupied and held under customary rights contain the required safeguards to protect those rights. However, these rights are still not guaranteed a priori by the law. The law does not define customary rights, or provide their holders with any security of tenure beyond what may eventually be provided by the issuance of certificats fonciers or eventual titling. The basis for recognition of rights of existing user remains occupation and "mise en valeur".

Hence, most landholders in the country will not receive an immediate enhancement of tenure security from the new law, but must wait until the administrative process for commune land administration reaches them. Based on experience elsewhere in Africa, formalization efforts take much longer than anticipated to implement, and customary landholders are left vulnerable pending that implementation. There are serious dangers of decreasing tenure security for those holders by proceeding in this fashion, as experience elsewhere has show that the powerful will seek to appropriate land, jockeying for position in anticipation of formalization. In this respect the draft loi cadre is not consistent with the best of recent legislation in the region, in Uganda, Tanzania and Mozambique. Those laws support formalization efforts, but in the interim the state recognizes the rights of holders under custom, with by explicit recognition of customary rights or by recognition of their possession of the land, and protects their land holding.

Therefore there may remain risks that well-connected and powerful individuals would be able to manipulate the procedures to their advantage and dispossess customary right holders. International experience suggests that these risks are significant. *The report therefore recommends that these rights be recognized a priori via a further amendment to the land legislation.*

Natural resource issues. There is no mention of the relationship between the laws governing

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parties, and that unregistered property rights can be dealt with in the same fashion as any other property rights in land, and so can be alienated for a consideration, inherited, leased, and made the subject of an emphyteusis (a "usufruct mortgage") or a mortgage.

land administration and recent legislation which provided for the vesting of rights in communities for the natural resources which they use (viz. GELOSE—see chapter 7). These tenure security measures – for "land" and "natural resources" should be brought together within a single framework.

As pointed out above, programmes such as the GELOSE program, aimed at community-participation in natural resource management, should have culminated in the allocation of property rights in natural resources to the communities. However, these initiatives have generally stopped at the level of temporary management contracts to communities. One of the major reasons for this is that the processes to provide the so-called "relative tenure security" to communities continued to require the completion of most of the steps needed for formal land titling, resulting in the same costs and delays experienced there. *This report recommends including the recognition and establishment of property rights for communities to natural resources within the same decentralized land administration system, using the "certificates fonciers". This may require further legal and regulatory reform, as well as piloting implementation.*

Gender equality: No special gender background study was done for this report. Nevertheless it is clear that land ownership in Madagascar is skewed toward men. Fortunately the situation is less extreme than that in many other countries: EPM-2001 data shows that 52 percent of agricultural plots are in the name of the man, 15 percent in the name of the woman, and 23 percent in their joint name. Several anthropological studies mention a *gender bias* in land ownership. However, the new loi cadre on land rights does not contain any specific regulations with respect to gender. The new certificats fonciers can be issued to a man, as well as a woman. In all likelihood, existing social norms, including gender bias where it exists, would then be replicated under the new system.

Hence, the new legislative framework which is emerging under the reform process and its implementation mechanisms could have profound effects on the access of women to land, and the equality of ownership rights between the genders. *The report therefore recommends that a careful review of the gender issues be undertaken rapidly, including the variations in ownership patterns and inheritance rules across regions and sectors, and the potential impact on gender equality of the existing and emerging land legislation, regulations and implementation mechanisms. The review should results in concrete proposals on how to improve gender equality in property right over land. In addition the land administration pilots need to be designed to enhance gender equality and monitor their impact on gender equality.*

Conflict resolution: Due to increasing land scarcity, a lack of high economic growth outside of agriculture, and the weaknesses and complexities of the formal titling systems and the courts, Madagascar is characterized by a slowly, but steadily accumulating burden of low-level land disputes in rural and urban areas. This is confirmed by survey data and the high prominence of land-related disputes in the courts. International experience is clear on the risk that such low level conflicts, if not resolved, could escalate into more serious forms of conflict. Decentralization of land administration and the process by which the CFs will be issued have the potential of resolving a large number of existing or potential conflicts, especially in cases where the new procedures will be applied systematically across an entire commune. However, they are unlikely to address inter-commune conflicts, conflicts between herders and farmers, conflicts on

already titled land and conflicts between central state agencies and the population at large. *Moving forward, the government should develop a more comprehensive approach to improve dispute resolution.*

International best practice suggests that such an approach would have the following elements:

- strengthen traditional and modern low-cost dispute resolution mechanisms, such as mediation and arbitration;

- establish a process for giving legal recognition to the informal settlement of disputes;

- provide incentives that reward the settlement of conflicts; and

- disseminate information about rights and options for conflict resolution.

Such a strategy could become a *third* major program of the new land policy, along with the modernization and decentralization of land administration. If the three major programs are properly integrated, this need not add significantly to the overall cost of the Land Tenure Reform Program.

Facilitating access to land by private investors: The main impetus for the government's reform program has come from the problems experienced by the majority of the population. Nevertheless, the National Land Tenure Reform program goes a long way to address some of the main concerns of investors. In particular, program will increase the number of land registry offices and to introduce a third alternative for access to land (in addition to purchase and long term leases) namely the "land certificate". This certificate is not required to undergo the overly lengthy and complicated current process of titling, and should provide the average Malagasy investor with better and more secure access to land. It remains to be seen whether these certificates will be used as collateral by the formal banking system, however. Nevertheless, the comprehensive and detailed review of investor issues in chapter 8 shows that many issues remain. It is therefore recommended that continuing legal and administrative reforms be undertaken with a specific focus on investors' needs, both domestic and foreign.

First, as was done in the case of the companies law and the laws related to secured transactions (sûretés), the laws of Madagascar related to land access by investors should be critically reviewed, be modernized and brought into the twenty-first century. This review should take into account new technologies, and other areas key to investment such as taxation, environmental and land use regulations.

Second, as part of this review and the subsequent reform process, investment requirements associated with the granting of leaseholds for domestic investors should be reduced and the criteria for evaluating compliance with them should be clarified and codified, so as to make the grounds for cancellation of leases more predictable. For foreign ownership, the investment requirements should also be reduced, the surface restrictions increased significantly, and the processes for acquiring ownership simplified.

Third, the transfer of land has been made extremely complicated and costly under the current formal titling regime. Such high transactions costs reduce the efficiency of land sales and rental

markets and tend to drive land market transactions "under ground". Reducing these transaction costs should be a major objective of the review.

Fourth, the gender dimension of registration and other formal land administration procedures needs to reviewed urgently both in the law and the implementation of the program as part of the broader review process.

Fifth, land administration capacity needs to be bolstered, so that the implementation of existing laws can be improved and expedited. Simply put, time lags for carrying out procedures can be reduced by adding and improving technological capacity and human capacity (notaries, bureaucrats and judges).

Sixth, while the granting of the authority to tax land to local government is in principle welcome, the central government should issue practical and specific guidelines so as to avoid certain imbalances, inconsistencies, biases, and subjectivities. Moreover, with the authority to tax should come the accountability to report on tax receipts and expenditures.

STRATEGIES FOR ACCELERATING IMPLEMENTATION

Targeted and demand-driven implementation: As we have seen, while land related issues are not the most important development issues for farmers and investors, there is a groundswell of demand for improved land administration and some form of registration of property rights to which the Government's reform effort is responding. In order meet this demand speedily in a cost-effective way, the resulting implementation program needs focus sharply on the priority problems identified in this report. *Implementation of the decentralized land administration system needs to target communities and communes where land related issues, natural resource management issues, and actual or potential disputes are the most pressing, and/or where effective demand and willingness to pay for improvements is the highest.*

Modernization of land titling: In urban and peri-urban areas, and in areas of intensive agricultural commercialization, a significantly improved Torrens titling system may still be the best option for providing security of tenure in Madagascar. The Torrens system now administered is still an operational system, with many staff seeking to make it work, but seriously under-funded, technologically out-of-date, and in need of fundamental reforms.

Given the problems with the Torrens system, many observers ask why it cannot simply be abolished, and the titles replaced by the Certificats Fonciers as part of the new decentralized land administration program. The main reason is that property rights have been granted and guaranteed under the system which cannot be simply be abolished. Unlike Torrens Titles, the CFs do not provide a state guarantee of land ownership and the holders of title would undoubtedly demand compensation for the replacement of their existing right with a right that is seen as a lesser right. Designing and implementing compensation system would both be complex and costly, and failure to do so would result in endless conflict and litigation. In addition, significant demand still exists, and will most likely continue to exist for Torrens titles on behalf of individual and investors in valuable properties in urban/peri-urban areas, and in special situation such as the tourism sector.

Therefore *modernization and simplification of land records, and the preservation of the existing information, remain a necessity*. This task can most effectively be carried out in the context of that larger reform. Some reform areas deserving attention have been discussed above in the section on land access for investors. Suggestions from the international experience have been presented in chapter 8. Parallel to this catch-up is an important effort to physically conserve and digitally record the many existing property rights documents.

Clearing up the titling backlog. The new Land Policy makes it clear that the government aims to address the backlog now existing in the request for titles (currently estimated at about 500,000 against some 330,000 already existing in the system). In addition, many people who have requested title on previously untitled land, but for whom the process has not yet been completed, will have the option of dropping their request for title, and instead opt for a CF. There is also individual property in the process of being registered under the Native Cadastre of 1929 (recall the various formal property rights regime in Figure 1). Since the costs of CFs will be much lower than the cost of completing the titling process, it is likely that many will opt to do so. This will help clear part of the enormous backlog of applications for new titles. On the other hand, the new procedures will do nothing to clear the backlog for updating the information on existing, but out-of-date, titles, and for situations where records have been lost or destroyed. Is there a way to simplify the process of up-dating titles and decentralize it to the communes? For example, could the same commissions and contradictory procedures being used for issuing CFs be adapted and used to update titles, or where records are incomplete or lost, to issue CFs? The legal and land administrative issues surrounding these questions should be resolved speedily.

Information dissemination: Inadequate information on rights and obligations of landowners, the new land laws, programs, and alternative dispute resolution mechanisms are partly to blame for difficulties in using the existing and future legal and administrative systems, for fostering a sense of insecurity and disputes, and slowing down the application and implementation of the new legal provisions. The information gaps exist not only at the level of the population at large, but also among investor, the legal profession, and government officials. It is therefore recommended to *rapidly develop and conduct separate but coordinated information campaigns for rural populations, urban and peri-urban areas, investors, the legal profession, and government officials*

Improving human capacity to implement the reform process: Capacity is weak at all levels which are involved in the future decentralized land administration process and in the upgrading of the existing system: the community, the commune, the regions, at the level of technicians and university graduates. The department of lands has already initiated discussions with Universities and technical institutions to start to remedy the situation, but no funded action plan is yet ready. The existing and future pilots will provide opportunities for learning-by-doing among community members and communal and regional government staff. The learning-by-doing will have to be complemented by formal short course training programs which eventually can be scaled up. It is therefore recommended *to develop an overall training strategy and start designing and implementing the different training programs for land administration (University, Technical, and Region, Commune and Community levels, including facilitating NGOs).* These approaches need to be carefully incorporated into the rollout of the decentralization of land administration.

Decentralizing Land Administration: The land policy proposes a new system of recognition and registration of land rights, one intended to be simpler, faster and more affordable than the Torrens title registration system. The new system is only stated in broad outline in the new loi cadre, but a thorough legal analysis of the existing legal options and needed changes is provided by Rochegude (2005), and proposed changes have been elaborated in Ministry documents.[53] The proposed reform will take place in the context of an ambitious program of decentralization of government functions to the commune level. The decision to decentralized land administration to the commune level is sound, both in terms of the proven ability of mayors and commune councils to get things done and the progress in democratization of commune level institutions. There will be a need for *capacity-building* in land administration at commune level, where staff and other resources are very modest, and for strengthening the financial resources of commune administrations. This is a particular concern given the many other new competences that are now being passed to the communes, in health, education and other areas.

Decentralization of land administration should be coordinated closely with fiscal reforms to allow communes to generate and retain land tax revenues. A sound strategy would involve:

(i) building toward a broad-based, modest annual charge upon landholding that will sustain commune administration, including land administration;

(ii) avoiding any but the most modest threshold costs to landholders entering the formal system and becoming taxpayers, and

(iii) avoiding fees upon transactions that discourage development of markets and drive those engaging in transactions outside the formal system to avoid them.

[53] The description below is drawn from Direction of State Land Property and Land Services. 2004. "Procedures of decentralized land tenure management of organization of the land tenure one stop local government information centres." Methodological Note, National Land Program. (Antananarivo, Ministry of Agriculture, Livestock and Fisheries).

10. PILOTING AND IMPLEMENTATION STRATEGY FOR DECENTRALIZED LAND ADMINISTRATION

This previous chapter has discussed the reform and implementation strategy of the Government and summarized the main recommendation this report. This chapter focuses on only on the second major axe of the government's implementation strategy: the decentralization of land administration, and in particular on its piloting phase. It makes additional recommendations which are not yet contained in the previous chapter, in particular in terms of the adaptation of the land administration system to different types of rural and urban areas, the resulting demands and willingness to pay, and the requirements of social, institutional and financial sustainability of the new land administration system.

After the adoption of the new Land Policy and the necessary legal reforms (the so-called Preparation Phase) in mid 2005, Government has now embarked on a second phase—the Pilot Phase. The pilot phase is not just important to test out new systems and procedures, but also crucial to allow for more broad-based participation in the formulation of the ultimate national land tenure system, and to avoid repeating the mistakes of the past, in which a system was imposed from outside. Careful involvement of stakeholders and communities during the pilot phase will lead to a land administration system that is fully understood, supported and implemented by communities and local governments.

The pilot phase will take approximately two years during which a process of "learning by doing" through the strategic implementation of pilots will be implemented. The final and third phase is the "extension phase". The decision to start the national land tenure reform program with a pilot phase is in and of itself best practice. The GoM agencies and advisors who have planned for two years of piloting are to be commended.

PRINCIPLES

A close reading of the National Land Policy and the "Loi Cadre", as well as of preliminary implementation plans, suggests that the decentralization of land administration rests on a number of key principles. These can be summed up as follows:

- uniformity in functions, but diversity in implementation mechanisms;
- sustainability;
- learning by doing; and
- one single implementation program.

UNIFORMITY IN FUNCTIONS, BUT DIVERSITY IN IMPLEMENTATION MECHANISMS

Based on the analysis in the preceding chapters, we concluded that there is a generalized demand among the population for some form of formalized property rights. However, it is also clear that the effective demand for different levels of precision and legal strength of this formalization

varies from region to region, and locality to locality. For instance, *in all regions, there is probably a need for the State to improve conflict resolution mechanisms*, because even a few cases can paralyze the judicial system, and most court cases today are about land.

However, in some regions, the traditional system of land tenure is fully functional, land prices are low, and no banking system is in place. In those regions, strengthening of conflict resolution mechanisms might be the *only* state intervention necessary to improve land tenure security. In other areas, e.g. urban, peri-urban and irrigated areas, an improved title deed system might be appropriate and economically justified. In other words, the state need not implement the same mechanisms everywhere. A *differentiated approach is needed*, which is selective in its interventions, depending on the type of problems and solutions needed. This does not contradict the principle that certain key services should be standardized and available to all citizens under a common legal framework.

Hence, all land users, irrespective of where they live should be entitled to receive the same level of minimum land administration services from their local government. These services could consist of: information and advice on land administration procedures and laws; dispute settlement and conflict resolution; local property rights recording and adjudication; issuing and record keeping of CFs; ensuring tenure security over common property resources; and collecting and maintaining basic data for the fiscus, the environment, infrastructure development and private and public investment.

However, the demand for various other land administration services, e.g. computerization and titling, will vary widely, according to population density, proximity to urban centers, and importance of natural resources. Differences in demand will translate into differences in willingness and ability to pay by the population and their communes for services. Therefore, the systems by which land administration services are supplied, must adapt to the different levels of demand. At the same time, these services should be supplied at the lowest level capable of providing them (subsidiarity principle).

We will suggest a first typology, based on a categorization of the main land tenure problems by broad geographic area, different land values and therefore different client demand and ability to sustainably finance particular levels of property rights recording precision and security. The typology ranges form urban areas which are systematically titled, via peri-urban and rural areas where some land has already been titled and the use of “petits papiers” is common, to rural areas where common property regimes are still quite strong and finally to the more remote and highly land-abundant rural areas, in which forest and pasture use are of greater importance.

Table 13 A First typology of the various land tenure situations

Type	*Existing regime and main problems*	*Possible solutions*
1. Urban centers	Formally titled, but not up-to-date	Modernization and improvement of Torrens titling regime
	Lack of research	Conduct policy-relevant research
2. Titled urban and peri-urban areas	Partially or inadequately surveyed, leading to confusion and disputes	More accessible, affordable and transparent land administration
	Significant number of property rights not titled, because of cost and length of procedural requirements	Allow for choice of property rights (not necessarily full title)
	Land administrative information inconsistent with reality on ground	Modernize formal record keeping, ensuring property rights records are up-to-date and readily accessible
3. Rural areas surveyed, but only partially adjudicated and titled	Partially or inadequately surveyed, leading to confusion and disputes	More accessible, affordable and transparent land administration
	Significant number of property rights not titled, because of cost and length of procedural requirements	Allow for choice of property rights (not necessarily full title)
	Land administrative information inconsistent with reality on ground	Modernize formal record keeping, ensuring property rights records are up-to-date and readily accessible
4. Irrigated perimeters	Partially or inadequately surveyed, leading to confusion and disputes	More accessible, affordable and transparent land administration
	Significant number of property rights not titled, because of cost and length of procedural requirements	Allow for choice of property rights (not necessarily full title)
	Land administrative information inconsistent with reality on ground	Modernize formal record keeping, ensuring property rights records are up-to-date and readily accessible
5. Urban and peri-urban areas using “petits papiers”	Extra-legal formalization of property rights through “petits papiers” validated by local government, but often deemed insufficiently secure	Decentralize land administration after building capacity of local government
	Risk of land grabs by third parties	Provide reliable property rights information
	Boundary disputes and conflicts	

Type	*Existing regime and main problems*	*Possible solutions*
6. Agricultural areas using "petits papiers"	Formalization of land transactions through "petits papiers" validated by local government, but often deemed insufficiently secure Risk of land grabs by third parties Boundary disputes and conflicts	Decentralize land administration after building capacity of local government Provide reliable property rights information
7. Agricultural areas under common property regimes	Conflicts between migrants and existing population Risk of open access and land grabs by third parties Boundary disputes and conflicts Lack of research	Securing and formalizing common property regime
8. Forest and pastures under common property regimes	Conflicts between farmers and herders. Risk of open access and land grabs by third parties Uncontrolled expansion of cultivation into communal forests Lack of research	Securing and formalizing common property regime Conduct policy-relevant research

To accommodate the diversity in mechanisms, the proposed implementation plan proposes three different types of "Guichet Fonciers" with different implementation mechanism and unit costs. These are:

- *Communal Guichet Foncier "standard"*, serving one to three communes, with high level of demand, with dedicated professional staff, and fully computerized data management and delivery systems for the CFs.

- *Paper-based communal Guichet Foncier*, served by a Land Administration, Resource and Information Center (LARIC), which is computerized and serves about 10 to 15 (non-computerized) communes. Suitable for rural areas with significant demand, but limited willingness to pay. While the LARIC will need to have professional full-time staff, the communal GF could function with locally recruited staff, who would be trained progressively in all aspects of land administration. They would be selected and paid for by the communes. Some communes may have sufficient demand to fully employ their local staff, while some others may only need part-time staff.

- *Improved system of natural resource management and conflict resolution*. This system would apply to remote zones, where the demand for individual title is low, and the main issues are preventing open access to natural resources and avoiding conflicts. Such a system

would also have to have the ability to issue CFs to individuals and communities. This model still needs to be developed.

Table 14 Decentralized land administration pilots and land tenure typologies

Type of land management one-stop-shop:	*General characteristics:*	*Correspondence to land tenure typology*
Communal GF "standard"	– High level of demand and willingness to pay – dedicated professional staff – fully computerized data management and delivery systems for the CFs – serves one to three communes	2. Urban and peri-urban zones partially registered [54] 3. Rural areas surveyed, but only partially adjudicated and titled 4. Irrigated perimeters 5. Urban and peri-urban areas using "petits papiers"
Paper-based communal Guichet Foncier served by a computerized Land Administration, Resource and Information Center (LARIC),	– Suitable for rural areas with significant demand, but limited willingness to pay. – LARIC will have professional full-time staff, but the communal GFs could function with locally recruited, trained staff, selected and paid for by the communes. – Some communes may have sufficient demand to fully employ their local staff, while others may only need part-time staff. – serves about 10 to 15 communes	3. Rural areas surveyed, but only partially adjudicated and titled 4. Irrigated perimeters 5. Urban and peri-urban areas using "petits papiers" 6. Agricultural areas using "petits papiers" 7. Agricultural areas under common property regimes
Improved system of natural resource management and conflict resolution	– would apply to remote zones, where the demand for individual title is low – main issues are preventing open access to natural resources and avoiding conflicts – would also have to have the ability to issue CFs to individuals and communities – model still needs to be developed.	7. Agricultural areas under common property regimes 8. Forest and pastures under common property regimes

SUSTAINABILITY

Unlike the existing titling system, the new decentralized system must be planned from the beginning to ensure social, institutional, and fiscal sustainability.

Elements of social sustainability are already included in the policy and implementation plans include the decentralized and participatory approach to land administration and dispute resolution, transparent adjudication of land rights, information campaigns and subsequent public access to information in proximity. An outstanding issue of social sustainability is ensuring equal rights for women to land, and equal access to all land administration services. As suggested in the gender section, this will require a review of existing inheritance legislation and practices, and a special effort during the piloting phase, as well as in the M&E system. There

[54] Subject to new legislative provisions allowing a revision of the outdated titles.

may also be unresolved issues relating to caste, which require similar attention.

Elements of institutional sustainability include the clear assignment of the land administration function to the commune, and the radical simplification of the CF system relative to the titling system. The formalization and legal recognition given to traditional tenure and to oral evidence and extra-legal documentation ("petits papiers") is another important pillar of institutional sustainability. In addition, the implementation phase foresees intensive use of the legitimacy, the knowledge and mediation skills of traditional and other local leaders at the fokotany and commune level. While it is anticipated that the Regions will play a role in supporting the decentralized land administration system, their role is not yet clearly spelled out. Finally, the interface between the CF system and the Torrens titling system at the commune, regional and national level requires further work.

Elements of fiscal sustainability are the intention to make land administration at all levels completely self-financing via charging for all services, and integrating the land administration into local government finance. The use of traditional leaders and other volunteers in the roll out of the system will contribute to this. In the longer run, the system is expected to serve local government revenue raising purposes, although detailed plans do not exist. Government subsidies will initially be provided for systems development and set-up costs during the piloting phase. Whether a one-off subsidy for set-up costs will be needed during the scaling-up phase remains an open question.

Provisional costing the pilots is essential *before* major decisions on pilot design are taken. One has to be able to assess *ex-ante* whether a scaling-up of the pilots to a national program would be fiscally and economically sustainable. Hence, detailed cost estimates need to be made of the pilot(s) most likely to be successful. Then, an estimate needs to be made of the total projected capital and recurrent fiscal costs of a full scaling-up of these pilots to cover the entire territory over the full implementation period (e.g. 10-15 years). Finally, a plausible financing scenario needs to be put together, based on likely and sustainable contributions from the Government (including revenues from improved land and real estate tax collection, and cost savings stemming from improved conflict resolution), communities and beneficiaries, and development partners. Only pilots that pass this ex-ante "scaling-up test" for fiscal sustainability should be allowed in the learning-by-doing phase.

Based on the typology established above, the PNF Coordination Unit has made a detailed costing of the roll-out of the pilots. *Initial detailed cost projections for the pilots and a scaled-up system suggest that fiscal sustainability should be obtainable, if the above cost-saving strategies are pursued*. The details are provided in Annex 3.

LEARNING BY DOING

Government has decided to initiate the National Land Tenure Reform Program with a two-year pilot program. This will enable the testing of the above models in different environments and their further refinement. In particular, the questions of social, institutional and fiscal sustainability signaled above can be resolved during the pilot phase. The pilot phase will also result in field-tested operational manuals, information and training programs, and logistics for scaling-up.

The pilot phase will build on four existing rural communal Guichets Fonciers, which have been under way for a number of years, and are ready to issue the first CFs as soon as the implementing legislation is finalized. *Since the existing four GFs are all located in rural areas characterized by intensive agriculture, special attention will have to be given to the development of urban and peri-urban GFs, and of GFs and LARICs for areas with relatively low population densities and significant natural resources.*

In planning and implementing the pilots, it is important to bear some of the following lessons of international experience in mind.

(i) Serious consideration should be given to roles that could be played by NGOs and other civil society organizations, working on contracts for the communes, could play in implementing decentralized land administration. This role should be a facilitation role, assisting the commune and the guichet foncier with the implementation of the pilot, not perform functions for which the local institutions are responsible. The role of NGOs should be piloted over the next two years , and the capacity of these organizations to assist with replication strengthened.

(ii) Piloting strategies should recognize the continuing importance of customary tenure in large areas of the country. Piloting should seek to understand how the certification program will affect those systems, and how best to secure the cooperation of the traditional land administrators, which can be critical to effective implementation.

(iii) In some pilot areas there will be both individual holdings of farm and residential land and also forests or pastures. Piloting should not be limited to the modes of creating tenure security dealt with in the land policy paper, but also with the Loi GELOSE and the decree on Relative Tenure Security, intended to secure natural resources for community use. Communities should be encouraged to develop comprehensive strategies involving all these tools.

(iv) There will be a tendency in pilots to focus on creation of the new arrangements, and neglect to prepare adequately for their maintenance, the "third phase". It cannot be stressed too strongly that certification of transactions and successions begins the day after completion of the second phase, and that any gap can seriously affect the sustainability of the new systems. For planners, these are pilots, but for the local beneficiaries, they are the real thing.

(v) Legal exemptions may need to be provided so that all pilots that seem to be *a priori* appropriate and reasonable can actually be implemented. In other words, which pilots can be undertaken given the existing legal and policy framework, and which will need specific legal and policy reforms or exemptions? This is important, because land tenure is so much a matter of law that it is commonly impossible to pilot reforms without providing a legal basis for the piloting. And it would not be fair to ask rural communities to subject themselves to a piloting process unless at the end of the day they receive their legally valid certificates or titles.

(vi) It is assumed that the piloting of the new solutions envisaged in the land policy statement could be implemented under existing law and institutional set-up. However, piloting may in the end suggest a need to amend these laws, and that is appropriate.

(vii) The final piloting strategy adopted by government should avoid that only one approach is piloted in as many areas as possible. In this regard, we would like to draw the Government's attention to the fact that most donor support is currently focused on a

relatively similar approach to decentralized property rights registration in the rural areas, but that there are no urban and peri-urban pilots planned at the moment. Also, some stakeholders may insist that "piloting" should be merely better resourced case of the existing models or processes within their particular institution. Others may insist that current policy should apply and that no exemptions can possibly be granted to pilots. Considerable communication, debate and awareness building around the fundamental role of piloting in the project is therefore urgently needed.

(viii) Many pilots will tend to be carried out in donors' existing projects areas, but the Ministry, in coordinating these pilots, must think systematically about the diversity of land situations that exists in Madagascar and ensure that some pilots are conducted in each area. However, piloting, like eventual full implementation, should be voluntary, at the initiative of the community.

ONE SINGLE IMPLEMENTATION PROGRAM

Eight development partners, the most important of which is the Millennium Challenge Account of the USA, have indicated their willingness to finance about 30 GFs and/or LARICs over the next two years. The pilot phase will also continue to capitalize on the skills and implementation capacities available in existing development projects and among interested NGOs. For example, the pilots in natural resource-rich areas can benefit from the experience and capacities built under the GELOSE programs financed as part of the multi-donor environment programs.

While the interest of so many stakeholders and development partners is one of the strengths of the national land tenure reform program (PNF), the PNF will confront significant coordination problems during the pilot phase. *The Ministry has therefore proposed that there be a single implementation program*, led by the Coordination Unit of the Ministry.

The one program principle means that there will be a single operational manual, a single budget, a single set of financial management rules, including and a single M&E system. Because no basket-funding has been arranged, development partners will still use their own disbursement procedures. It is hard to imagine that the pilot program could be implemented and become successful without strict adherence to this principle. Therefore, development partners have indicated support for the single program principle. It is clear, however, that the scaling-up phase will need to go further and be financed from a single source, either via basket-funding or through the national budget.

In order to develop a full set of field-tested tools for the pilot phase, i.e. the operational manuals, training program, information and M&E system, the PNF intends to start setting up a LARIC and the corresponding GFs in a single district first. The full set of tools can then serve as the starting point for a second nearby district and all the other pilots. Of course, significant adaptation to urban and peri-urban conditions and to areas with significant natural resources will be needed. It is imperative, however, that the principle of a single set of services and a single operational manual be maintained during the pilot phase. This is best done via a series of workshops among the teams involved in the different pilots, such as a bi-annual joint review of the various program tools. In the end, the pilot phase should lead to one kit of differentiated tools adapted to the major land tenure contexts found in Madagascar.

PROPOSED WORLD BANK ASSISTANCE

Recognizing the importance of a transparent and well-functioning property rights regime to meet the growing demand for formalization, reduce disputes and court cases, improve the investment climate, and promote good governance, the government has made tenure reform one of its key priorities. This report recommends that the World Bank immediately supports the pilot phase of the government's tenure reform program, while preparing the ground for budget support in the medium-term.

During the piloting phase, which will start in earnest in 2006 and will last for 2 or 3 years, the report recommends that the Bank mobilizes resources in its existing projects, or projects under preparation. Specifically, the government could fund pilots and related activities under the following Bank-assisted projects:

- The Environmental Program III, with an emphasis on decentralized land administration pilots which would eliminate open access to natural resources and establish clear ownership over trees, grazing areas and bio-diversity resources for individuals, communities and in some cases, the private sector.

- The Growth Pole Project could finance a pilot in areas of its intervention, where land tenure issues figure prominently in the challenges faced.

Given the Bank's experience with impact evaluation of land administration world-wide and in Madagascar, the report also recommends that the Bank should support the piloting phase by financing the impact evaluation. In addition, the Bank's projects should be open to financing other system development components of the pilot phase.

In the medium term, the report recommends that the Bank assists the government in preparing the ground for the financing of its land tenure reform program through budget support under the PRSC. The existing and planned Bank support as defined above (design of the program, piloting, and impact evaluation) would be key building blocks in preparing the sector for budget support. In addition, to become eligible for budget support, the Ministry would also have to improve its internal organization and accountability systems.

CONCLUSION

In conclusion, Madagascar's land tenure reform program is off to a good start. Developing it further to cover areas so far not included in the policy reform, and implementing it will present challenges to the Government and its development partners. While land tenure reform and improved land administration are no magic bullets for accelerating growth, reducing poverty and improving environmental management in Madagascar, the timing of the reform effort is perfect to ensure that land tenure issues and conflicts do not become a major impediment to achieving these objectives. On the contrary, improved land administration is a significant complement to on-going reform and investment efforts.

ANNEX 1: SUMMARY OF RECOMMENDATIONS ON MADAGASCAR LAND POLICY AND ADMINISTRATION

Issue	Suggested Action	Responsibility	Timing
The land policy reform process is well advanced, but remains incomplete	**Complete the land policy and legal processes in the areas 1 to 5 below**	As specified below	As specified below
1. Recognition of customary rights is implied in the law, but not yet guaranteed a priori	Incorporate provision to guarantee customary rights a priori into appropriate land law	DOL Parliament	December 2007
2. Environmental and land law remain disjointed, community rights over natural resources lack legal recognition, and open access persists	Based on GELOSE experience, incorporate property rights of communities to natural resources into legal and administrative systems of Certificats (CFs) and Guichets Fonciers (GFs)	Ministries of Environment, DOL Parliament	December 2007
	Initiate pilot GFs in areas which suffer from open access to natural resources	DOL donors	January 2008
3. Gender equality	Review the gender equality consequences of current land legislation and administrative procedures, and amend as needed	DOL, Civil Society, Women's Groups, Parliament	June 2008
4. Conflict resolution via courts is cumbersome, costly, and inaccessible to the majority in rural and urban areas	Improve dispute resolution via traditional and modern low-cost dispute resolution mechanisms, and recognize them legally	DOL, Ministry of Justice, parliament	
	Incorporate new or improved dispute resolution mechanisms in all GF pilots	Coordination unit of DOL	
5. Many domestic and foreign investors have difficulties accessing land and regularizing their rights	The land-related laws and procedures relevant for investors should be critically reviewed, and brought under one legal code and set of regulations	Legal committee of DOL, other sectors, Parliament	June 2007
	Following international best practices, modernize and simplify the land registry and administration system for land titles, and clear the backlog	DOL, Donors	December 2010

5. continued	Reduce or eliminate the investment requirements associated with the granting of long term leases to domestic and foreign investors. Make the leases fully transferable. Also increase the surface restrictions associated with foreign ownership. Make these legal provisions more transparent and their enforcement more predictable.	DOL, Other ministries concerned with investment, Parliament	June 2007
Implementation of the reforms has only just begun	**Accelerate implementation by focusing on bottlenecks 1 to 3 below**	As specified below	As specified below
1. Inadequate information on rights and obligations of landowners, the new land laws, programs, and alternative dispute resolution mechanisms	Develop and conduct separate but coordinated information campaigns for rural populations, urban and peri-urban areas, investors, the legal profession, and government officials	DOL, National Radio and TV, Press, with donor support	
2. Weak professional and community/commune capacity in land administration	Develop a training strategy and start designing and implementing training programs for land administration (University, Technical, and Region, Commune and Community levels)	DOL, Universities, Training Institutes, Donors	Second half of 2006
3. Groundswell of demand to implement the decentralization of land administration via the GFs and issuance of CFs	In rural areas where best-practice is well developed, the pilot phase needs to be completed rapidly, with sharp further attention to cost reduction	Coordination unit of Department of Lands (DOL), donor support	End of 2007
	Pilot GFs in remote rural areas, and peri-urban/urban areas. Focus the pilots sharply on social, institutional and fiscal sustainability	DOL, with donor support	June 2006
	Coordinate decentralization with fiscal reforms enabling communes to utilize the improved land tax basis effectively	DOL, Ministry of finance, local government	
	Develop the legal and administrative basis to use the GFs and CFs to deal with the updating of titles	DOL, its legal committee, parliament	
	Initiate a unified M&E systems, the baseline surveys and the impact evaluation of all pilots	DOL, World Bank, other donors	June 2006
	In the expansion phase focus on areas with identified land, natural resource and conflict issues, and/or follow community demand	DOL, with unified donor support	Start in January 2008

ANNEX 2: PROVISIONAL COSTING OF PILOTS

Communal Guichet Foncier "standard", serving one to three communes

The investments for the "standard" one-stop-shop are broken down as follows:

INVESTMENTS			
Furniture unit			$5,000
Computer unit	Laser printer A4	$300	
	2 Computers	$2,500	
	Windows License	$460	
	GIS License	$2,500	
	Ms Office License	$350	
	Ink jet printer A3	$500	$6,610
Electrical unit	2 surge protectors	$150	
	Solar panels	$2,000	
	Or generator	*$2,000*	
	Electrical material	$100	$2,250
Equipment unit	Photocopier	$1,700	
	Bulltetin boards	$130	
	GPS	$1,000	
	Safe	$155	
	Dry stamp	$100	$3,085
Premises	Renovations	$10,000	
	Or construction	$15,000	$15,000
Vehicles unit	Motor bike	$3,000	
	Bicycle	$600	$3,000
Satellite image		$24,200	$24,200
Initial training		$2,800	$2,800

Total amount of the investments **$61,945**

Operating costs (in extension phase)

The operating costs are estimated over a period of 36 months.

Agents'wages		$3,600	$3,600
Operating cost GF	Transport for the agents	$1,080	
	Operating cost and paying off motor bike	$5,040	
	Maintenance and computer paying off	$6,252	
	Administrative documents	$500	
	Supplies and consumables	$2,000	
	Miscellaneous	$1,000	$15,872

Total operating cost: **$19,472 over 36 months, or $ 6 491 per year.**

Land Administration, Resource and Information Center (LARIC) and 10 paper-based GFs

Investments

INVESTMENTS	LARIC	10 GFs	Total
Furniture unit	$5,000	$25,000	$30,000
Computers unit	$6,670	$0	$6,670
Electrical unit	$2,250	$0	$2,250
Other equipment	$3,085	$1,000	$4,085
Premises	$20, 000	$50,000	$70,000
Vehicle unit	$0	$30,000	$30,000
Satellite imagery	$242,000	$0	$242,000
Initial training	$2,800	$28,000	$30, 800
Total investment	$281,805	$134,000	**$415,805**

Which translates to **$ 41 580** per GF which in turn can serve 1 to 3 communities.

Operating costs (in extension phase)

The operating costs are estimated over a period of 36 months.

OPERATING COSTS			
Agents wages	$12,600	$36,000	$48,600
Transport	$2,000	$10,800	$12,800
Operating costs and payments	$0	$50,400	$50,400
Computer maintenance and payments	$6,252	$0	$6,252
Administrative documents	$500	$5,000	$5,500
Various supplies	$2,000	$10,000	$12,000
Miscellaneous	$1,000	$10,000	$11,000
Total operating costs	$24,352	$122,200	$146,552

The total operating cost for the LARIC plus 10 paper-based GFs amounts to **$146,552 over 36 months, or $48,851 per year, or $4,885 per year per GF.**

The two types of systems are compared in the cost table below. Note that full-time wages are assumed for the personnel in the paper-based GFs, which is a maximum cost estimate.

Table 15 Investment and operating costs for Guichets Fonciers, or "One-Stop Shops"

	Investments	*Investments per community* [6]	*Operating cost /year*	*Operating cost per community* [7]
"Standard" one-stop-shop	$61,945	$61,945	$6,491	$6,491
"Land Management Information Center + 10 'papers' one-stop-shops"	$415,805	$41,580	$48,851	$4,885

[6] Considering an average of 1 one-stop-shop for 1 community.

[7] Considering an average of 1 one-stop-shop for 1 community

Table 16 Costs of issuing Certificats Fonciers

	Surveyed and adjudicated plots (per year)	Total surfaces surveyed/ (ha per year)	Operating cost (per GF, per ha) (US$)
Standard one-stop shop			
high hypothesis	1,000	750	**9**
low hypothesis	250	187,5	**35**
for 10 communities:			
high hypothesis	10,000	7,500	**9**
low hypothesis	2,500	1,875	**35**
Land information center +10 "paper" one-stop-shops			
high hypothesis	10,000	7,500	**7**
low hypothesis	2,500	1,875	**26**

Summary of the estimated costs of decentralized land management:

	Cost of land certificate (US$)	**Cost per hectare (US$)** [11]
Standard one-stop-shop	$9 \leq x \leq 37$	$9 \leq x \leq 35$
Land information center + 10 "paper" one-stop-shops	$7 \leq x \leq 28$	$7 \leq x \leq 26$

[11] Estimates drawn up on the basis of 0.75 ha / plot

ANNEX 3: BACKGROUND REPORTS

1. Jacoby, Hanan and Bart Minten, "Land titles, Investment and Agricultural Productivity in Madagascar", Mimeo, October 2005

2. Houssein, André, "Contribution à l'étude économique et sectorielle relative à la revue des droits de propriéte foncière", Mimeo, June 2005

3. Rabenarivo, Sahondra, "Land Tenure and the Private Sector", Mimeo, February 2006.

4. Razafindrakoto, Yolande and Andre Teyssier, "Stratégie de pilotage de la composante *gestion foncière décentralisée* du Programme National Foncier." Mimeo, February 2006.

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