

Decentralization of land management in Madagascar: process, innovations and observation of the first outcome

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Since 2005, Madagascar has committed itself into a deep land reform, based on modernization of the land administration and on decentralization of the land management to the Communes. This paper outlines the original context and the orientations of the land reform, by highlighting the process implementation, its achievements and its limits. It emphasizes the expectations of land reform and reports the first observable outcomes. Lastly, this paper addresses the process for evaluating the land reform, related to different economic and social sectors.

1 Land tenure in Madagascar or the fall of the Torrens system

1.1 A land tenure system adapted... to the first half of the 20th century

At the wake of the 1896 conquest, one of the priorities of the French colonial authorities was to establish a domanial land tenure and system inspired from the Australian Torrens Act, in perspective of the settlement, among others, of rural entrepreneurs likely to develop the agribusiness industries. This is based on a presumption of State property, a principle according to which land is presumed to belong to the Government. Thus, the Government is in a position to grant property rights to those who make an effort to «improve». By establishing a registered property in a land tenure register, the Government recognizes a non-questionable right, opposable to third parties.

The purpose of this domanial land tenure was to provide security to the Colony's real estate projects by establishing the French appropriation on a legal basis which is recognized at the international level. Therefore, the purpose was not to protect the majority, but to grant rights to rural and urban elite aiming to a "modern" agriculture. Thus the Colony could content itself with land tenures services with limited staff, which was mainly required to record a few major surfaces.

An analysis of the registrations performed in a commune of the East Coast confirms the adequation of the land tenure administration format to the schema of colonial development. Out of 137 land titles still identifiable in Ilaka-Est, 130 have been drafted before independance (fig.1). The majority of these lands are still registered to owners who have died long ago, without any update of the inscriptions. These lands are now occupied by the descendants of the agricultural workers of these colonial concessions, who, from a purely legal point of view, have become mere squatters. There is no more compliance between the current occupancy and the names to which the land titles were delivered.

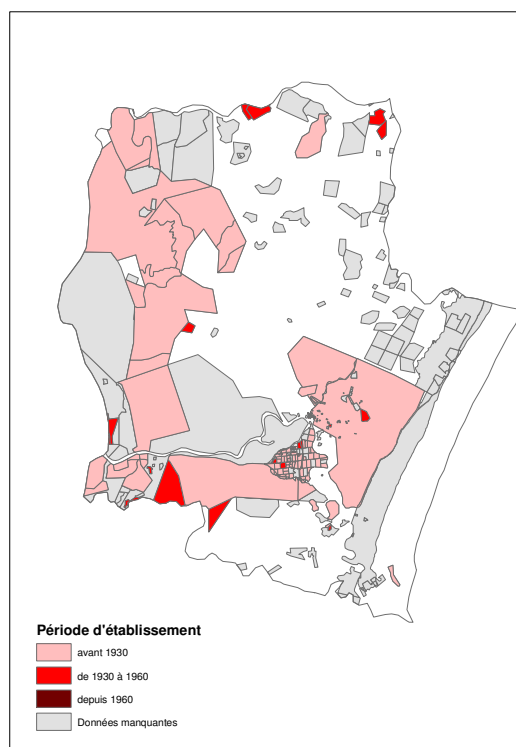


Fig. 1: Periods of Land titling in Ilaka - Est

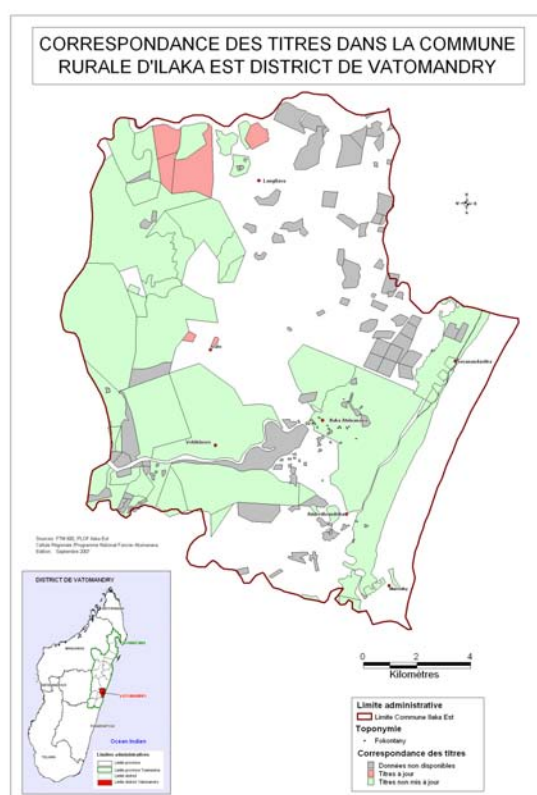


Fig. 2: Compliance between land occupancy and titles

These maps show also that the land administration has practically stopped registering lands since the independence period. That illustrates the progressive paralysis of an administration that has not been designed to manage a massive acknowledgment of individual rights: in 110 years, it managed to deliver only 330,000 land titles in a country that has around 5 millions agricultural and urban lands. Besides, the rhythm of title issuance has slowed down, with an average of 1,600 land titles issued each year in 16 years.

Yet, after almost half a century of independence and a socialist period, Madagascar seems addicted to this domanial procedure used over a century to protect colonial companies' land tenure. This addiction to the Torrens system can seem strange; in fact, the procedure for individual registration turns out to be so sophisticated that it is unlikely to be implemented. This procedure has no less than 24 steps and can last, depending on the user's ability to mobilize land tenures offices, over a decade. According to an estimation that we carried out in 2003, the real cost of this procedure exceeds €300 per title, or even \$900 to include all other costs, according to a more recent study (ECR, 2006). The persistence of these excessively long procedures can be explained by the installation of an administrative and centralization culture, but also by the willingness to perpetuate a source of incomes for the profit of the agents working for an impoverished administration.

This system inherited from the colonial period now turns out to be completely inconsistent with the great demand, presently to insure the citizens' rights on the land. Keeping this system explains the very poor land management capacity of the administrations.

1.2 A confused land tenure information, for an unsure land security

The efficiency of the Torrens system depends on the the existence of an operational administration, correctly compensated and regularly trained. Maintaining this system in a context of decline of the administration that is supposed to implement it has negative effects.



Fig. 3: "Termite-eaten" conservation, Diego



Fig. 4: Archives of the Cadastre of the Complexe d'Ambre, operation performed in 1994-95, World Bank funding, Land administration Diego

The capacity of providing land tenure rights has become overwhelmed if considering the 400,000 requests for acquisition of domanial land, while land tenure and topographic conservations suffers such an advanced degradation that, in some cases, the Government can no longer guarantee the property. An inventory carried out in 2006 provides an alarming status of the situation, as the following have all disappeared: 11 % of the registry plans and individual land tenures files, 12 % of land tenure registers –i.e. 1,300 books with a reference for 65,000 land titles–, 16 % of cadastral plans,... To this percentage, we have to add the portion of documents that have become too deteriorated to be of any use.



Fig. 5: Registry plans, Land Survey office Vatomandry



Fig. 6: Land tenure registers, Land Administration Manjakandriana

When users pay fees to the land administration, they expect the Government to provide a service of land document conservation and hence, a formal security of their rights. Now, the deterioration no longer allows land offices to use this disappearing information.

Criticism is mostly geared towards land department staff. Though their motivation is as limited as their remuneration, the main issue comes from the critical status of the information on titled property, which is the main cause of long delays in establishing the different documents users can request. Also, users must wait up to 11 days before receiving a mere certificate of legal status of a registered land (ECR, 2006). Besides, with the successive transactions that are not recorded, most of the informations remain out – of – date. These certificates only give the situation recorded in the initial registration, which do not provide the requestor with up-to-date information on the current land occupancy. As to obtain a duplicata of land title, the user will have to wait two to six months, depending on the services.

The number of requests by users exceeds by far the administration's ability to meet such requests. In time, pending requests are piling up. Sometimes, the land tenure offices can even no longer draft such elementary documents, when the land tenure registers or files have disappeared for good, when the offices no longer have the basic information to determine the rights.

The topographic information is also severely affected. Half of the titled plots do not appear on the landmark plans. Individual land tenure files include a regular plan, generally in good condition, but without any geographical data. The poor condition of the plans makes it difficult to identify the titled plots in situ and such an effort is already uncertain given that geodetic points have often disappeared.

This information essential to manage registered property is doomed unless something is done in the short term to save it. The stakes is fundamental because we can already question the very existence of the property when the administration cannot even ascertain the right because of a lack of documents, when the limits on a land are no longer visible because the boundaries are not there and when the right holder has deceased and is not the present occupant of the plot, because the transfer was not regularly registered.

1.3 Local land tenure practices not recognized, yet generalized

In the absence of a regulation by the customary authorities and taking into account the paralysis of the land administration, users have invented local land tenure management

procedures that are materialized by various « *petits papiers* ». To protect themselves from any attempt of theft, everyone tries to prove his/her rights by a « paper », stamped by any government office. These are either documents issued by various public services that can certify a right, or private deeds certified by the local administration. Despite the absence of national standards, these « *petits papiers* » are drafted in an identical manner throughout the territory. They mention the identity of the right holder, that of his/her neighbors, an estimated surface, state how the plot is used and the origin of the right. They are often drafted on a computer and are often registered by the communes or their *fokontany*¹. Today, the majority of the agricultural and urban plots are subject to this local land tenure management performed daily and at a lowest cost. These « *petits papiers* » are systematically attached to any transactions on the plot and in some cases, the representation contracts. In some cases, even the management of the registered plots is locally updated through these « *petits papiers* »!

Everyone agrees that such documents have little legal value. Theoretically impossible to oppose, they are at best considered by legal entities as the start of an evidence. The feeling of land tenure security conveyed by these « *petits papiers* » is valid for a local security, but they do not protect from tactics of spoliation from outside.

Thus, the land tenure situation in Madagascar is characterized by the superposition of two levels of land tenure management. The individual or collective use of the land achieves acknowledgment through local practices and the rights on the land are managed by a local procedure of land administration, in parallel to the land service administration. These practices occur against the presumption of State property which denies that the property truly exists, even if it is not materialized by a land title. In a context of liberalization and democratization, those lands that are not registered but are developed, used for farming or housing by the generations of users, can no longer be considered as presumed Government properties.

Therefore, undertaking a renovation of the Malagasy land tenure policy is an attempt to reconcile the legitimacy of the land tenure practices of millions of users, with the legality of the regulatory text, which implementation is expensive and complicated (LAVIGNE DELVILLE, 1998). The issue is to bring the laws that are difficult to enforce closer to the practice locally generalized, which remain to be recognized by public authorities. Without an explicit authorization and or any specific competence, local administrations implement land tenure practices that acknowledge a property drafted « from the bottom up » (COMBY, 1998). Doesn't the local action show the way to go, a diversity of process to be reinforced as a way out of the land tenure crisis? Doesn't the solution lie in a new alliance between the land administration and the local administration that would lead the Government to acknowledge the modalities of land tenure management that are accessible and quite effective, but still with no protection for now? The path toward decentralization recently initiated by the Government of Madagascar allows reconsidering the foundations of the land tenure policy.

2 Decentralizing land management: a challenge on local competence

2.1 The process and the essence of land reform

Maintaining domanial land tenure and refusing to acknowledge local practice of land management have caused a deregulation with serious consequences in Madagascar:

¹ Stripping of the commune, basic territorial link.

- A constant feeling of uncertainty of land rights has spread among Malagasy households;
- Companies, national and international ones, do not have the security they need to commit in middle or long term investments;
- Local administrations have no information to plan for the development or to activate the tax rise. Rural communes fail to collect land taxes, yet, this latter should make up the large part of their budget resources;
- Courts are overwhelmed by cases pertaining to land tenure issues.

The different diagnosis of the land tenure crisis stops as soon as the "lack of means" is raised, and logically, the solutions provided are limited to a list of equipments for the land administration and subsidized cadastral operations, which never convinced public development agencies.

By the end of 2004, a task force to prepare the National Land Program (PNF) is resumed, but this time, it was open to elected local officials, representatives of the Senate and the National Assembly, Chiefs of region and representatives of farmers' organizations. The transfer of land tenure competence is introduced in the debate by a Coordination Unit of the PNF which initiated discussion on a main idea: communes must have a land management skill; for this purpose, their capacity is built by a « **communal Land Management Office** » or *Guichet Foncier*, in charge of acknowledging private property rights by issuing « **land certificates** » (TEYSSIER, 2004).

On February 8, 2005, a workshop chaired by the Prime Minister confirms this fundamental reorientation, formulated in a Letter for Land Policy (MAEP, 2005) validated three months later during a Cabinet meeting. This Letter focuses on four strategic axes:

- I. Restructuring and modernizing land service administration. This component consists in digitalizing the land registers and map archives and securing equipments for land offices. It also aims to reorganize the services of the land administration to only maintain its inner functions and promote the establishment of surveyors' private firms.
- II. Improving and decentralizing land management. This second axis focuses on creating a locally-based land administration, communal or inter-communal Land Management offices, authorized to issue and manage land certificates according to local procedures, public and contradictory.
- III. Renewing the laws to adapt the legislation to the principle of decentralization and actualize, regularize land occupancy according to legal status.
- IV. A national training program to build capacities and insure new competences to manage innovative changes in managing land tenure.

A Land Observatory, in charge of the monitoring and evaluation of the progress and of the measurement of the impacts of the land reform, assists the four axes.

This Letter of Land Policy does not provide for changes of structures and does not envision reconsidering the distribution of the land resources. The all purpose consists in formalizing unregistered land tenure rights and regularizing the situation of registered land tenure rights. Such operation suggests the restructuring and modernization of land offices as well as a

decentralization of competences for a massive and updatable registration of the land rights, in a rapid manner while at the same time, taking into account the limited public and financial means². Therefore, this decentralization of land tenure competence raises the issue of decentralizing the information, land tenure and topographic data transfer from the central administration to local ones.

2.2 Status of progress of the land reform and status of the « social demand »

The National Land Program, officially launched in June 2005, is the governmental entity mainly in charge of the land reform. It has a starting phase of thirty months, after which an extension of the interventions on approximately 1,000 out of the 1,500 communes of Madagascar is expected over a period of 10 to 15 years. 12 donors contribute to its operation and achievements; each support is included in a "Charter of Partnership" which sets forth the support modalities and achieves coherence among the different initiatives.

Communes have rapidly developed strong interest for the local land offices. In 2006, the ministry in charge of land affairs received one request for support from a commune every four days. In December 31, 2007, 39 communal offices, some of which have been operational only for a few months, have logged 12,000 requests for land certificate. They have issued 2,400 land certificates³ covering 2,900 hectares. This number, if compared to the 1,200 land titles issued on average every year by the 32 land circumscriptions, evidences a deep evolution.

2.3 The legal framework and the operating process of decentralized land management

2.3.1 A renewed legal framework for new processes to provide land tenure rights

In April 2005, a Review Committee has prepared what is called a « framework » law, « *setting forth the principles ruling over the status of the lands* »⁴, in order to clarify the entire set of legal status of lands in Madagascar and to present only a sole owner. It gathers these status into three sets:

- lands dependant upon State property, the decentralized administration and other public institutions;
- lands belonging to private individuals;
- lands that make up areas subject to a legal regime of specific protection.

This legal framework contains a major innovation: the private property can always be materialized by a land title, but it is also acknowledged without a title. Paragraph 2, related to « *lands held according to a non titled property right* », exempts the land reform from the principle of State property. Non titled lands are no longer under the Private Domain of the Government if a « *personal or collective land acquired for public purposes* » evidences an occupation. A large part of the lands considered « *tanimpanjakana* »⁵ now corresponds to the lands subject to private property right. Therefore, this law announces a combined system of land management: issuing and managing land titles as pertaining to the land administration, issuing and managing land certificates as new prerogatives of the communes.

² Beyond the formalization of property, this issue is also to protect transactions and direct farming contracts that are prohibited for now.

³ Data compiled by the Land Observatory, PNF-MAEP, 2007.

⁴ Law No.2005-019 of October 17, 2005.

⁵ Litterally, « lands of the prince », usually translated into « State property lands ».

What is remaining is formalizing non titled private property rights by a certificate issued by the Land Management office of a decentralized administrative authority. It is a major institutional undertaking, based on an hypothesis: land management will become more effective and fair if it is placed under the responsibility of local administrations.

2.3.2 Decentralized land management in practice

In compliance with the legal framework provisions and with the non titled private property, the commune has a permanent office, the Land Management office. This office, filled in by communal staff, organizes the procedures designed to acknowledge lands upon users' request, managed information on non titled land and informs land administration services on land certifications.

The Land Management office is a sustainable service, charged to the communal budget. Its operating costs are supported either by transaction fees charged on each operation (issuing of certificate, transfer,...), or by the commune's tax resources. Each commune is free to determine the costs required to issue certificates, depending on a categorization of lands and surfaces peculiar to each regional context.

The Land Management office is not a unique procedure; it adjusts itself to the existing human and financial resources in each administration, but the certification procedures and the public service provided to users are strictly identical.

The procedure for formalizing land tenure rights goes through field trips by a « **Local Recognition Committee** », made up of elected representatives of the commune and the *fokonolona*⁶. This Committee is in charge of drafting a report recording the claimed rights and possible oppositions. On the basis of this report, the office agent prepares land certificates for the mayor's signature.

The boundaries of the certified plots, formalized by this new reconnaissance procedure for the land tenure right, are systematically reported on a Local Plan for Land Occupation (PLOF)⁷.

2.4 Limits of decentralized land management and new perspectives

While the decentralized land management presents many benefits, the new orientation of the Malagasy land policy is actually limited by technological, institutional, and financial constraints.

2.4.1 Constraints related to the deterioration of land records

The serious deterioration of documents under the custody of the land services makes it very difficult to produce local land occupancy plans: landmark plans represent only a small portion of titled lands; some plans are missing or are illegible; titled parcels are seldom geo-referenced, ... As a result, the information provided by the Government to the communes on the parcels already titled is incomplete and barely accurate, which may cause overlapping of certificates with old land titles that are not "visible" on local land occupancy plans.

2.4.2 Technological and financial constraints

⁶ Community

⁷ The PLOF is a mapping of the legal status of plots which determine the land written - rights as it is registered at the land administration services: titled plots, private non - titled plots, and lands under legal regime of specific protection. This way, this map delineates plots under non - titled private status and under titled status.

Though local land occupancy plans can be established from a simple topographic map, it is recommended to use satellite images and the orthophotoplans to produce them. Such images allow users and local recognizance committees to easily identify and plot the borders of parcels to be certified, in reference to visual landmarks such as roads, a stream, characteristic trees, rock outcrop, small causeways between rice fields, etc. Using images helps avoiding mobilizing topographic brigades, but conversely, it involves fairly high initial investments (acquisition of geo-referenced images⁸, use of computers to process images, etc.) that is passed on the cost of setting up a commune-level land office. The use of computerized GIS also raises the issues of know-how and computer maintenance.

These constraints are partly solved by sharing costs resulting from computerized management of land documents among several communes, by setting up Land Resources Centers (CRIF) in the main town of the district (when supplied with electricity) that usually cover about ten communes. The operating costs of the local land office, sometimes supported by funding from the international community, must be funded through the income from certificate issuance in a first stage, then through the communes' budgets that should hopefully increase as a result of the revitalization of land taxation by the local land office.

To solve the technological and financial constraints, a capacity for research & development must be maintained in order to design – on the way, methods to reduce the costs of local land offices, to make available to communes reliable land information, and to revitalize local land taxation.

2.4.3 Constraints related to the low capacity of communes

Overall, the commune workers are poorly trained, especially in rural areas. Risks of procedures being only partially applied whether deliberately or not, differences in interpretation, clientelism to the benefit of the municipal team's close relation are to be feared. The central level expresses doubts as regards the capacity of rural communes to provide the new land competence. The land reform is faced with a paradox at the public authorities level: despite the Constitution and the Madagascar Action Plan⁹ that urge for rapid and effective decentralization, there is a persistent reluctance to transfer of competence in the area of land management, the lack of capacity among local collectivities being the main argument.

Anticipating the consequences of a potential failure at the collectivities' level, the process of land reform must be supported by a big project for training, ongoing support and counsel, and capacity-building.

3 Decentralize land management for a more effective land policy?

3.1 Titles: a land property regime with no impact on development?

There are very few studies on the impact of land policies in Madagascar. The most recent and probably the most well-grounded one is the study completed on a funding from the World

⁸ +/-30USD/ha. It should be noted that the cost of acquiring images must be considered as a public interest investment as the images used initially for the land sector can be used in other sectors such as national mapping, land development, urban planning, etc. as away to increase their value.

⁹ Madagascar Action Plan (MAP), Presidency of the Republic of Madagascar, p. 114

Bank in 2006 (Jacoby, Minten 2005) as part of a review of the land sector (Van den Brink & al., 2006). The study showed that the regime of titled property has little impact on economic and social development: *“Holding a property title has no significant effect on either the investment a parcel or the agricultural productivity and land value. A cost-benefit analysis shows that the current system for issuing formal titles should not be mainstreamed in the rural areas of Madagascar and that a new land title registration system would not be justified unless it has a very low implementation cost.”*

Adopting an econometric approach, the study showed that:

- A land title would increase only by 6% the value of the concerned land parcel;
- A land title does not foster access to credit or land disputes resolution;
- There is no obvious relationship between the registration of parcels and the investments made on those parcels;
- The agricultural yield on titled parcels are 7% higher than that of non titled parcels;
- Land registration does not promote the land market;
- In order to overcome land insecurity, holders are not willing to spend more than 6% of the parcels' value.

Given that land titles have been rarely updated, the analysis has apparently failed to take into account the many cases where the actual occupier of a plot is not the title holder whose name appears in the land register. Obviously, land that is titled to the State or to a deceased relative does not warrant a sense of full security. Therefore, the study shows that a land management system that remains static due to transfer procedures too expensive and too complex, loses its capacity to produce positive effects on economic development. Land security does not consist merely in issuing documents; it depends on a dynamic rights management system under which documents can be easily updated at each transfer¹⁰.

Lastly, this study confirms that the costs of the land registration are out of reach for rural households. These conclusions were part of justification for a radical reform of the titled private property regime and the design of decentralization process for land management. This reform was done within the perspective for a significant reduction of the rights registration costs and for a system likely able to manage with few expenses their transfers.

3.2 Expectations from the reform

The expectations on the land reform related to two aspects:

- A progress in operational implementation of this new land policy, compared to the existing procedure focused on the land tenure registration regime. We expect from a land management transferred to local authorities a greater effectiveness and a greater equity in meeting a considerable social demand for land tenure security
- An impact on the different socio-economic sectors of Madagascar: economic development of households and communities and enabling environment for

¹⁰ “Maintenance issues (mechanisms, cost, etc.), although decisive for the long-term viability of such plans, seem to be somehow underestimated when launching PFRs. As with all registration operations, the land tenure information generated by PFRs is only meaningful if it is kept up-to-date. If it isn't, the certificates and registers rapidly become obsolete and contribute to land tenure confusion rather than clarifying things”. (LAVIGNE DELVILLE, 2005)

investment, impact on social climate, decreasing number of land-related conflicts, and reduced pressure exercised on natural resources.

3.2.1 Hypothesis related to an improved implementation of the land policy

- More effective than land tenure registration, decentralized land management allows meeting a larger number of requests for documents ensuring land tenure rights, within a shorter deadline
- More equitable than land titles, land certificates are issued and updated at a lesser cost
- Transfer of land certificates following different inheritances and land transactions is easier to carry out than title transfer
- The quality of the rights is at least identical, i.e. the level of legal protection by land certificates must be equivalent or above that provided by land titles.
- Households having land certificates feel more secure than those without document or with title.

3.2.2 Hypothesis related to economic progress

- Those who have certified their lands invest more on their plots than those who have secured a title or who have no document;
- Certified agricultural plots are more intensively farmed and have a better yield than titled ones or those without document; they generate larger income;
- The prices of certified lands are higher than those without document or with title;

3.2.3 Hypothesis related to social progress

- The certification of lands entails, by acknowledging property rights, decreasing social conflicts on lands and resources;
- Security through certification has enhanced the formalization of property rights for vulnerable households and women

3.2.4 The hypothesis and their sources

Expectations from the land reform differ according to institutions and individuals involved. The national entity overseeing the reform, the donors, development agencies, rural and urban populations do not necessarily have the same priorities. The land reform process has to deal with this array of expectations.

In the current settings of the Malagasy land reform, we noted the distances between the expectations for increased production for the MAEP, easier access to credit for some donors, stabilization of rural populations and reduced forest clearing for environmental organizations, greater capacity to levy land tax for the communes; and a simple but vital feeling of being able to fully enjoy one's good for the user.

3.3 How to measure the progress of this new land policy?

3.3.1 The Land Tenure Observatory, a tool to analyze the process and assist in piloting the land reform

As the body overseeing the land reform project and counting strongly on land security promotion as leverage for agricultural development, the Ministry of Agriculture, Livestock, and Fisheries (MAEP) expressed the wish to have a mechanism for monitoring, assessing, and generating information on activity progress as well as for measuring the impacts of the land reform.

The information needs led to setting up the Land Observatory in February 2007 (ROCHEGUDE & al., 2006). The Land Observatory is the mechanism for monitoring and analyzing the land tenure related environment in order to support decision-making and piloting the Malagasy Land Policy process.

Its main functions include:

- Monitoring and assessing progress of activities related to the implementation of the land reform by the National Land Program;
- Generating information on and about the reform that will be analyzed and will feed into the orientation and the running of activities;
- Measuring the land reform's effects and impacts in the different beneficiary sectors.

3.3.2 The first observations: comparative advantages challenged by reality

The primary objective of the land reform, as stated in the Land Policy Letter, is “to meet the massive demand for land security as soon as possible and at costs that are adapted to the economic context” (MAEP, 2005)

Under this perspective, decentralized land management has obvious advantage compared to central land management procedures.¹¹ These advantages relate primarily to the times and the costs of issuing a document which guarantees the private property rights. The most recent data available on quality of the public services provided by the land administration (ECR 2006, 2008) showed for 2006 and 2007:

- an average time for issuing land title longer than 6 years, with variations going from 3 to 9 years and half;
- an average cost paid by the user for issuing land title estimated at US \$ 507, with variations going from US \$ 262 to US \$ 667.

An initial assessment of the delay for obtaining a land certificate carried out on 2,374 certification procedures in 25 commune land offices, showed an average duration of 65 days.

Assessing land certificates' costs was more difficult. The cost paid by users corresponds to the total cost of the local land office's operation divided by the number of certificates issued in one year. This cost encompasses depreciation for materials used in the local land office and operating costs, including staff's compensation and trips. Conversely, the initial value of investments – including the costs of photos and maps, is not included.¹²

To date, the average cost paid by users for a land certificate is estimated at about US\$ 24 based on an initial evaluation carried out on 2,374 certification procedures in 25 commune land offices.

The average cost paid by users to secure a land certificate is actually a “political” price as it does not reflect only the costs of producing the land certificate. The cost is also related to the will at the local, national, and even international levels to place fully or partly on users the cost of certification. Some financial partners would like the cost of land certificates to be decreased during their period of support while some communes fund part of the local land offices' operating costs on their budgets.

¹¹ Cf. Appendix 1

¹² The investments in local land offices are currently supported by the international community.

Generally speaking, there is a need to understand whether users should bear the full cost of land certification. This is not the case of land titles, especially when titles are established as part of land registration operation.

The quality of the rights provided by the title and the certificate is practically identical with the subtle difference that the land title cannot be put under law - trial¹³ while a land title can be opposed to a land certificate if a certification procedure poorly carried out caused the superposition of a certificate on a title. All the land transactions implemented with a title can be with a certificate. The land certificate is neither a transitory document nor a step towards a title. It is a document that formally warrants property rights.

Given that a land certificate is almost equivalent to an acknowledgement of rights, we are allowed to make comparisons between the costs and the delays for the issuance of a land certificate and a land title. Based on our first data (that still need to be fine tuned), the cost for securing a land certificate would be twenty times less than that of a land title and the time needed would be thirty-six times less.

Some elements on the solving of disputes over land parcels ownership and delineation have started arising: for years 2006 and 2007, 186 objections were made for a total of 3,688 land certificate requests, which gives a conflict rate of 5%. Among the objections, 20% (or 32%) were solved, i.e. 72 mediations out 377 with a positive outcome.

On the other hand, other comparative advantages cannot be highlighted yet:

- easier and less expensive update of the certificates is conditioned with specific provisions on the fees registration regarding certified land transactions;
- the activation of the communal land taxation thanks to new land data base managed by the municipalities requires the design of tax census tools based on the PLOF and the plot register in the land management offices;
- the collaterals from land certificate is allowed by the majority of the microfinance institutions, but an intensive information campaign has to be organized to generalize its use.

Other data from the early observations show less conclusive results.

In several communes, the number of requests for land certificates does not seem to rise, which contradicts the initial strong claims for a local land office. Surveys conducted in these communes highlighted the following explanations (Brochard 2007):

- Some communes were covered by land registration operations that were not finalized in the past. The local land office can not receive requests for land certificates as long as there is no ministerial decree terminating the operations¹⁴.
- There has not been adequate communication to make known the competence of the local land office and the legal value of the land certificate. Worse, some users who have been victims of swindles in the past remain suspicious as regards rapid and low cost solutions for securing a document that would warrant them rights over their lands. Information conveyed by an agent on a bicycle is far from being enough to rebuild their trust and many of them keep a wait-and-see attitude.

¹³ When it comes to the initial recording in the Land book.

¹⁴ This is the case of the commune of Ambatofinandrahana where a land registration operation decided by the Governor of Fianarantsoa in 1952 was never finalized.

- The cost of the certificate, currently estimated at 9% of the average annual income in Madagascar, seems too high for some farmers. In addition, some claim that they should not be asked to pay for the certificate since the international community already supports the local land offices.
- It seems that the incomplete implementation of the local land offices has limited their use: local land occupancy plans are not available or not adequate; the staff training is not comprehensive enough, etc.

The certification was also observed as lagging compared to requests, which reflects communication and operating process that still need to be fine tuned at the local land offices level.

The first information generated by the Land Observatory has allowed the National Land Program and the concerned communes to respond and make some adjustments. The Observatory will again assess how efficient these adjustments are and will make new recommendations based on this.

The early observations at local land offices that opened a few months ago do not yet provide for elements that would allow for assessing the impacts of land security. However, the first data from the field have allowed for identifying local initiatives that reflect interesting practices and developments, especially as regards access to credit and conflict resolution.

In the last months in Amparafaravola, 35 certificates out of the 800 delivered in the commune have been used as collaterals for loans from two Microfinance Institutions (MFI). A MFI launched a new product: a credit to fund requests for land certificates. It is also worth to note that several municipalities have established their local land office next to the MFI's offices in their communes.

Such indications call for designing a mechanism for impact assessment that is based on observing the strategies of certification uses, their capacity to fulfill projects and to lead to investment, once holders get a sense of security as regards their rights over their lands. The population of households with secure land should be singled out to try to identify significant differences in economic strategies.

4 Approaches for the Evaluation of the Land Reform Impacts

The impacts expected from the land reform cover large areas of analysis due to the multiplicity of the stakeholders and their objectives as well as the diversity of their intervention zones. Taking after Madagascar's Land Policy Letter, these impacts embrace:

- Economic impacts of the land reform: (i) increased private investments at the macro (national) level; (ii) good governance from improved tax income for communes and decentralized planning of urban and rural territories, (iii) increased investments, agricultural productivity and income at the household level, (iv) secured land transactions and increased land value.
- Social impacts: reduction of conflicts resulting in improved social cohesion at the local and commune levels, gender-sensitive promotion of access to formal property rights, especially for women and vulnerable groups;
- Ecological impacts: rational management, protection, restoration, and renewal of natural resources (reforestation, protection of watershed, etc.).

Due to this diverse scope of land reform evaluation, no unique evaluation process can cover every topic which requires the development of specific appropriate assessment methods. On the other hand, the relevance of the impact measurement methodology proposed will depend on the assumption that first impacts due to the reform will emerge in the short and medium term.

Therefore, this section only addresses the short and medium-term economic impacts of the reform that are linked to increased investments, agricultural productivity and household income. The current implementation stage of the land reform suggests that the first observable outcomes would be related to the rural household economy. The evaluations of other types of impacts are not presented in this report.

Our assumption states that land security in rural areas will contribute to improving agricultural use of lands, increasing businesses' rural investments, and setting up an environment conducive to the use of collaterals. Thus, the land reform is a critical component in achieving the goal of increasing productive investments in rural areas and reducing poverty.

The land-related investment to be measured include all activities or expenses which improve productivity and farm income (e.g. fertilization, purchase of agricultural tools, land clearing, labor, etc.). Those investments may also include the transfer from annual crops to perennial crops or reforestation. Non-agricultural or non productive investment such as house building for residence are not considered.

A first evaluation methodology using randomization was developed in July 2007 in collaboration with the research center Poverty Action Lab. In theory, the approach can minimize bias related to the selection of certificate beneficiaries because it randomizes the selection of villages that benefited from a massive certification operation. Indeed, by randomly issuing a land certificate to an individual, the factor effects related to differences between beneficiaries and non beneficiaries are minimized, such differences including a higher level of education, a stronger entrepreneurship spirit, etc. Having groups of beneficiaries and non beneficiaries of land certificates that are comparable, any difference in the average income and investment variables between the two groups can be attributed to the land certification project.

A second option for the randomization approach was to apply different costs for certificates among communes that benefit from local land offices. Assuming that the differences in costs would affect demand for certificates, the selection bias would be minimized by the differences of participation in certification among communes.

However, the application of this methodology has raised serious concerns related to ethical and political issues as randomly selecting villages for an operation of mass certification or reduced certificate price deny such a privilege to other villages, especially in villages where land has become a sensitive issue. In addition, implementing such massive certifications in villages requires mobilizing huge additional human and material resources.

The alternative approach to randomization associated to matching households with land certificates with households without certificates was proposed. The evaluation method resorts

to statistical techniques to establish two comparison groups¹⁵ having the same characteristics as those who received certificates.

Our evaluation approach will consist in conducting a pre-evaluation used to assess the first impact trends at household level in 7 communes¹⁶ and compare samples of household beneficiaries of certificate to non-beneficiaries in the same communes. The pre-evaluation will help to test in field the different assumptions formulated from empirical knowledge and literature review. These assumptions will be revised accordingly.

Once the array of impact trends and hypothesis are refined, a large and recurrent survey will be carried out over a sample of stratified 254 Communes, future beneficiaries of land guichets¹⁷. Households making up the panel of beneficiaries will be selected from the list of certificate holders at the guichets. Therefore, the first survey should take place at least after 6 month- certification in the commune to obtain significant sample size (planned in December 2008). This time period is also deemed sufficient to create reasonable time and required conditions to create the first investment on certified lands.

The three household panels, with land certificates, with land titles and without formal paper will be monitored at least until July 2009.

5 Which perspectives for the land reform?

The first results and effects of the land reform's implementation reflect significant progress. However, the strategies should be reinforced in order to achieve the objective of meeting a massive demand for land security at costs adapted to the economic context. The following issues are raised:

- Which pro-poor strategies should be used to build gender considerations (access for women, underprivileged and vulnerable groups such as migrants, sharecroppers, etc.) into land security? How to conciliate cost recovery on land certificates and social equity? The current orientation of solutions goes towards an in-depth exploration of institutional organization potentialities: instituting an "indigent status", setting up mutual insurance/funding groups in villages, developing the concept of land credit. On the other hand, the issue is to ensure effective participation and representation of stakeholders in decision-making, especially in setting the certificates' price. At the national level, involving the civil society in the reform's implementation seems to be the best strategy.
- How to transfer the necessary technical and financial competence to decentralized collectivities in order to make sustainable the decentralization of land management, currently funded by donors? What types of organizational capacity-building are

¹⁵ Three groups will be set for comparison purposes: (i) the group of « with land certificate », (ii) the group of « with titled land » (updated and registered in their names or not) and (iii) the « group without land certificate » will be made of households who have some "petits papiers" documenting their lands' status, and those who do not have any document on the land they occupy. Other forms of land occupations may be encountered and will be put into this group as long as the parcel occupied is not certified.

¹⁶ Those communes have land guichets operating since 2006 and 2007 and which characteristics are representatives of important agro-ecological and social zones of Madagascar.

¹⁷ Criteria based on physical characteristics of communes (remoteness, population, plot size, existence of microfinance institutions and markets, agricultural potentials, etc.) will be selected to do the sampling.

needed by communes and inter-commune cooperation bodies (OPCI)? What tools are needed for revitalizing commune-level taxation? How about the need for a body in charge of controlling the local land offices (district, region)?

- How to conciliate the customary law that is deeply rooted in several coastal areas of Madagascar and the statute law? Introducing new concepts from the statute law may only strengthen ambiguity as regard land users and access rights instead of solving problems. Specifically, special attention needs to be given to the inclusion of notables and traditional authorities in the make up of local recognizance committees.
- How to make sustainable the Government's land services that are in charge of producing local land occupancy plans – tools that are essential to setting up local land offices? Which legal and institutional mechanism should be established in order to create a land basket fund that will use both funds from donors and the income from land institutions?
- How to establish equitable access to local land offices for communes while their existence is currently dependent on external donors?
- What would be the solutions for squatters that use land titled to former colonists and abandoned since long ago? Some attempts are in process to hand back such land to communes.
- How to encourage national and foreign private investments as part of implementing the policy of facilitating access to land? An inventory of land that may be allocated to investors and the identification of the legal form of their use are currently in process.
- How about the evaluation of other impacts? How can we measure the sense of security? How to monitor the developments of land conflicts?

APPENDIX 1

Comparative analysis of Land Title and Land Certificate

The same quality of rights for shorter deadline and lesser costs

	Land title	Land Certificate
Legal system and field of application	Registered private property Law No.60-004 of February 15, 1960, corresponding laws and decrees	Non registered private property Law No.2005-019 of October 17, 2005. Law No.2006-031 of November 24, 2006. Implementing decree No.2007-1109 of December 18, 2007.
Competent offices and administrative management	Department of State Properties and Land Services and Decentralized Land Services, competent to draft, issue and transfer land titles	Commune, equipped with a communal office specialized and sustainable, the Land Management office, competent to draft, issue and transfer land certificates
Security of property rights	Recording of the rights on the Land Tenure Register, by the competent offices	Recording of the rights on the Plot Register of the commune, by the Land Management office
Issuance procedure	Individual land tenure registration, with the State Property Reconnaissance Committee. – Cost: approximately \$300-900 – Duration: 7 years Collective land tenure registration (cadastre): – Cost: free of charge in principle for users, cost price around \$80 / ha – Duration: depends on public and international funding...	Local certification, with the Local Reconnaissance Committee, public and contradictory, in the presence of the neighbors – Cost: according to the nature and size of the land, estimated average around \$14 per certificate. – Duration: at least 60 days. (Average data)
Legal value	Non-opposable, except for public use Differences to specify for future recordings on the initial title	Rights opposable by third parties unless proves otherwise (opposite evidence = opposing title), except for public use
Uses of the deed	Transfer of land title following the usual procedures of the land offices: sale and other transactions, inheritance, lease, emphyteusis. En case of parceling: new physical survey by a topographic brigade	Immediate formalization of the following transactions at the Land Management office: sale and other transactions, inheritance, lease, emphyteusis. In case of parceling: on-screen delimitation performed before the concerned users by the Land Management office. Field trip by the Local Reconnaissance Committee with concerned parties, if necessary
Settling disputes	Referring the cases to common rights courts	Mediation, according to local practices, during the work by the Local Reconnaissance Committee, then arbitration by municipal authorities. Referral to the court if needed