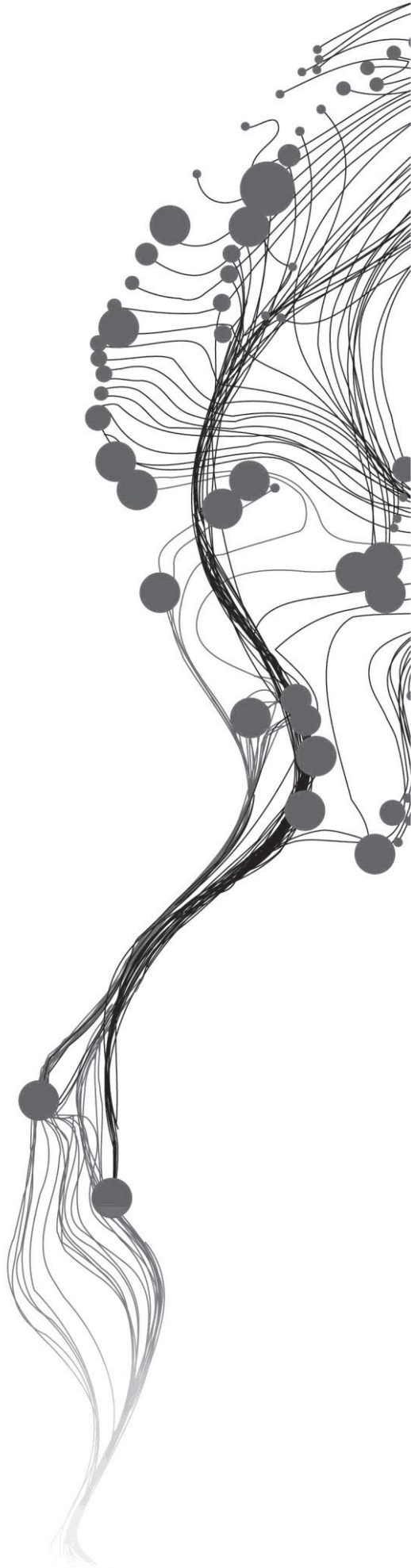


**ENSURING SUSTAINABLE
CADASTRAL UPDATES OF
COMMUNITY PERSPECTIVES
IN RUNDA SECTOR, RWANDA**

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MARCH, 2014

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DISCLAIMER

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ABSTRACT

The cadastre system plays a crucial role by providing information infrastructure that supports land tenure, land value, land use planning and land development indispensable for the sustainable development of countries. Its success is attributed to the participation of the local community in its maintenance by reporting the changes occurred on their land rights. The community participation depends on the awareness and perception towards the benefits and processes of land registration. The objective of this research was to investigate the awareness and perception of the community towards procedural mechanisms of land registration for updating Land Information System in Rwanda.

Qualitative approach, including focus group discussions, interviews and field observation were used to collect data and discuss the results. Five cells of Runda Sector, Kamonyi District in the Southern Province were chosen as the study area. The focus group discussions with local community were organized at cell level while the interviews and field observations were focussed to the citizens conducting transactions at the Runda Sector Office and at Kamonyi District Land Office with some staff of the Land Office.

The research revealed that the citizens are aware of updating the Land Information System by reporting changes occurred on their land rights and have a positive perception of the benefits of land registration. The main benefits given by the local community are based on the past experience such as resolution of land conflicts, to prevail women and orphans' land rights, certificate of land registration as collateral for credits and proof of land ownership in case of expropriation to get compensation and other land related services. The main sources of information are the public campaign organized during the Systematic Land Registration, the neighbours and radio emissions at respectively 65%, 25% and 10%. However, the citizens are not satisfied with the service delivery due to long queues and waiting time spent at sector office waiting to be served, as the land notary is available once a week to notarize the sale agreement. Moreover, the citizens found transactional fees expensive in addition to transport costs as they have to bring at least two witnesses to countersign the sale agreement. Furthermore, the procedure of subdivision is claimed exhaustive as the citizens have to go back and forth at least three times to the District land office before getting the new certificate of land registration.

Key words: Land registration, Cadastre updating, community perception.

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ABBREVIATIONS

A.M.	: Ante Meridian "before Midday"
F.I.G	: Fédération Internationale des Géomètres (International Federation of Surveyors)
GIS	: Geographic Information System
LAIS	: Land Administration Information System
LTR	: Land Tenure Regularization
MINIRENA	: Ministry of Natural Resources
P.M.	: Post Meridian "After Midday"
RNRA	: Rwanda Natural Resources Authority
UNECE	: United Nations Economic Commission for Europe
UNHABITAT	: United Nations Human Settlements programme

1. INTRODUCTION

1.1. Background and Justification

Land Information System is a crucial tool for planning, decision making and a source of revenue for both public and private sectors, especially when the spatial (size, location, land use) and non-spatial information (owner, user, rights, interests) and their relationships are well depicted and can be easily retrieved (Larsson, 1991). According to Williamson *et al.* (1999) the relationships of spatial and non spatial information are complex due to the increasing number and forms of rights, responsibilities, restrictions and their support to decision making towards sustainable development. The multipurpose function of land information has brought some land agencies to gather all information in one land information system for a better management (Henssen, 2010).

Land information is daily changing, yet the land information system like any other information system, requires to be daily maintained and kept up to date in order to reflect the actual tenure situation (Khan *et al.*, 2005). The availability of complete, up-to-date and trusted land information is crucial in decision making process, legal evidence and trusted guarantee or collateral in case of credit and mortgage (Sari, 2010). However, to keep this system up-to-date, there must be a defined and transparent mechanisms for updating the land information based on regulations and modalities regarding land transactions (subdivisions, transfer of full ownerships, etc.). Moreover, Fedhila *et al.* (2012) argues that to successfully keep up to date the land information system, landowners must be involved in the process by reporting changes that occurred on their land rights due to different transactions. This implies that the system is considered and used depending on the way the process of land registration is perceived, its benefits and the risks of non-compliance to its norms (Zaccai, 2008).

Hence, the sustainability of cadastre updating depends on the way the community understand the benefits of land registration, their awareness towards procedural mechanisms of reporting changes, the way they perceive and appreciate the services offered; whether they are accessible and economically affordable to them (Agrarini, 2011; Dudley, 1993; Larsson, 1991; Tuladhar *et al.*, 2003).

Rwanda has been working on the Land Tenure Regularization programme since 2005 with trials in 2008 and full implementation of the first registration from June 2009 upto December 2013. The objective of this programme consists of putting in place a strong system of land administration, improving land tenure security, minimizing and preventing land disputes, promoting investment in land for socio-economic development and poverty reduction. More than 10.3 million parcels have been registered all over the country through systematic land registration (Byamugisha, 2013).

To move from paper based to electronic land register and to perform efficiently the land transactions, a Land Administration Information System had been created. This system enables the Office of the Registrar of Land Titles to collect, store and process land information efficiently at lower cost. (RNRA, 2012).

This research will focus on the maintenance of the cadastre system, particularly to know if the local community is aware of procedural mechanisms of reporting changes occurred on registered land, their perception towards the accessibility and affordability of land services. The fieldwork will be conducted in Runda Sector, Kamonyi District in the Southern Province of Rwanda.

1.2. Conceptual Framework

The conceptual framework of this study (see Figure 1), shows how a sustainable cadastre system is attributed to the awareness and satisfaction of the community regarding the procedures and requirements to update the cadastre system by reporting changes. Land information system can be efficiently updated, complete and accessible only if the community understand the importance of registering changes on land tenure and when the registration procedures are friendly and beneficial to them (P. F. Dale *et al.*, 1988; Larsson, 1991). In some cases, procedures of land registration are technically complex and expensive. Here the customers suffer from heavy costs and most of the time they perform attributions which should be done by the administration (Zevenbergen, 1999). According to Schubeler (1996) participatory relationship are voluntary and the efficiency depends on the customers perception of the benefits of land registration and the satisfaction towards the process of serving their interests. Perception is "the process of gaining awareness and understanding a phenomenon or information while satisfaction is the fact of being pleased or gratification of desire based on the compliance with the desired needs or demands"(Chesoh, 2008).

Making land registration compulsory without considering the community understanding of its benefits and the quality of the service delivery lead to the failure of the system. Land agencies should create an environment of trusted relationship with the local community and other stakeholders in general, and meet their needs at affordable costs in term of transaction costs (Tuladhar *et al.*, 2003).

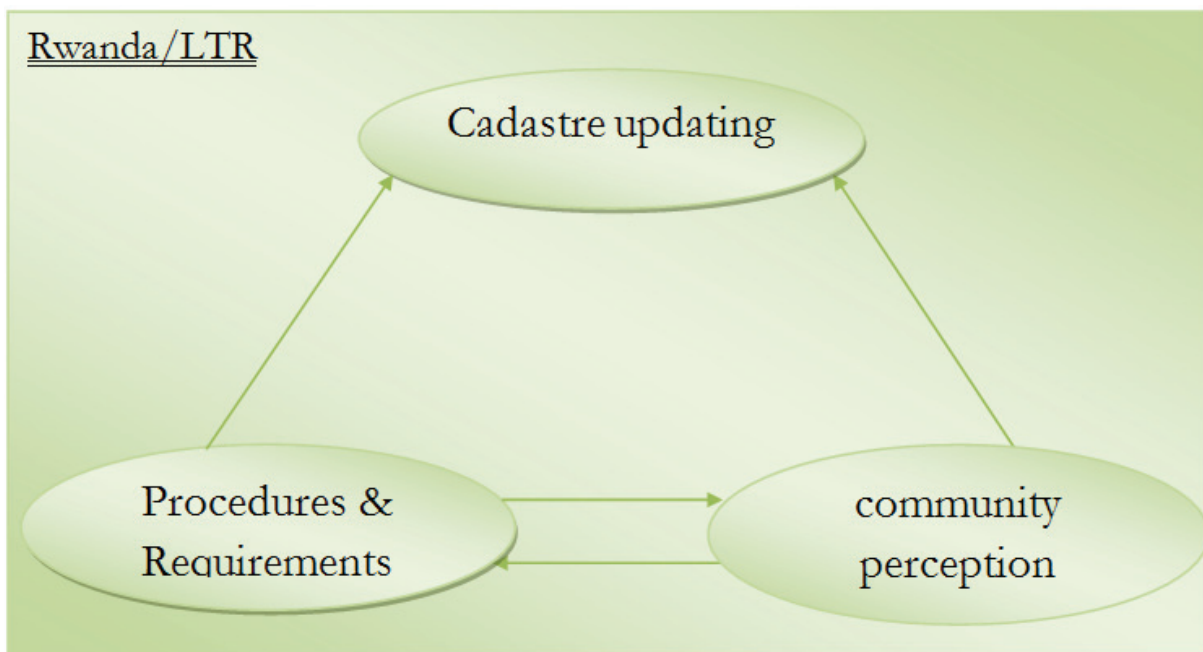


Figure 1: Conceptual framework

The land registration process should be clear and simple, information regarding different services and requirements should be accessible and available to the community, the products/services should be provided in time to meet customers' needs (Ali *et al.*, 2013). The way the community perceive and appreciate the benefits and delivery of services and products designed for their interests influence their relationship with land information system and their level of participation by reporting the changes occurred on registered land. This research will focus on the community perspective, where it will investigate their awareness and perception towards land registration procedures and requirements.

1.3. Problem Statement

Traditionally, land transactions in Rwanda were conducted informally in private conveyance regardless of administrative procedures (MINIRENA, 2004). Land rights were passed on from generation to generation according to Rwandan custom, where the seller and the buyer or grantor and grantee in the case of a gift or inheritance convened family and friends to witness the handover of a piece of land and/or a contract were signed in gentlemen agreement.

Since 2005, land tenure reform has replaced this practice by implementing the new land law determining the use and management of land in Rwanda. Furthermore, the law determining modalities of land registration from which a procedures manual of different transactions were established and a systematic land registration was conducted from 2008 to 2013 covering the whole country (Byamugisha, 2013).

In his research Singirankabo (2011) found that the local community participated in the adjudication process, not necessarily because they understand and appreciate the land registration programme but simply because they feel obliged to participate.

From the above point of view, some may wonder if the community perceives the benefits of registering the land, so that they could actively report changes in the maintenance of the land information system. If this system is not kept up-to-date, there is a risk that in a few years, it would be outdated and lose its relevance and worst the land administration system might go back to informal system. In this light it is important to investigate how the community member perceives the benefits of updating the cadastre system and the service delivered to them.

1.4. Research Objectives

1.4.1. Main Objective

Effective participation depends on users being convinced that the activity serves their interests (Schubeler, 1996). The overall objective of this research is to investigate the awareness and perception of the community towards procedural mechanisms of land registration for updating the Land Information System.

1.4.2. Research sub objectives

The research sub objectives are:

1. To describe the existing procedures and requirements of reporting changes.

2. To examine the community awareness about updating the cadastre system and the perceived benefits of registering their land.
3. To understand the perception of the community regarding the accessibility to land information and land services in general.

1.5. Research Questions

Sub Objectives	Research Questions
Sub objective 1	<ol style="list-style-type: none"> 1. What are the formal requirements for land registration? 2. Who are the actors involved in land registration? 3. What is the actual practice in land registration?
Sub objective 2	<ol style="list-style-type: none"> 4. Is the community aware of updating the changes in their land rights? 5. How did they get the information about updating the land information system? 6. Does the community understand the benefits of land registration?
Sub objective 3	<ol style="list-style-type: none"> 7. What are the community views on the accessibility of land services? 8. What are the views of the community on the affordability of the requirements for land registration? 9. How satisfied are the community with land service delivery?

Table 1: Research questions

1.6. Thesis structure

Chapter 1: Introduction

This chapter defines the research background and justification, problem statement, research objectives, research question and thesis structure.

Chapter 2: Literature review

This chapter will provide an overview of the context of the Land information system, cadastral updating, community perception and satisfaction. The chapter will also relate the historical background of land registration in Rwanda.

Chapter 3: Research Methodology

The chapter will describe the methodology to be applied in this research, the description of the study area, the method of collecting primary, secondary data and analysis.

Chapter 4: Results presentation

This chapter will present the results of the information collected during fieldwork.

Chapter 5: Discussion

The chapter discusses the results based on literature review and field observation

Chapter 6: Conclusion and Recommendations

This chapter draws the conclusion of this research based on the results and discussion, and provides recommendations for further research and practical recommendations for updating the Rwanda Land Administration Information system will be provided.

2. LITERATURE REVIEW

2.1. Introduction

The aim of this chapter is to present a review of the main concepts of this thesis with emphasis on sustainable cadastre, community perception and awareness and land registration in Rwanda. The section 2.2 discusses the cadastre system, definition of cadastre and land information system and the role of cadastre in the country's development. Section 2.3 Presents the concept cadastre updating while the section 2.4 discusses the success of the cadastre system. Section 2.5 talks about community perception and community satisfaction and the section 2.6 gives an overview of Land Administration Information System in Rwanda.

2.2. Cadastre system

The term cadastre system is used differently in different countries and by different scholars. In some countries the term cadastre refers to information about land parcel highlighting the relation object(land)-right separated from land register which contains records about rights on land, emphasising the relation subject-right (Lemmens, 2011; UNECE, 1996). In countries with a such system the agency in charge of surveying and mapping is separated from the one in charge of land registration. However, other countries adopt the meaning of cadastre as " a parcel based, and up-to-date land information system containing a record of interests in land (e.g. rights, restrictions and responsibilities). It includes a geometric description of land parcels linked to other records describing the nature of interests, the ownership or control of those interests and often the value of the parcel and its improvements (FIG, 1995)". This definition brings together the information or data about the land itself (geographical component), people and their interests on it. Furthermore, P. Dale (2005) and Ciparisse *et al.* (2003) call the system interrelating land, people and the interests on land "Land Information System", while Zevenbergen (2002b) name it "systems of land registration". It is this last meaning that is applied for this research, the terms cadastre system and land Information System are used interchangeably (Bennett, van Gils, *et al.*, 2013) to mean the database containing information about land, people and their interrelation.

The cadastre system is not an end itself, but a tool or basic infrastructure aiming to provide accurate and reliable information about land to public as well as to private organizations and businesses. According to Enemark *et al.* (1999) and Bennett, Tambuwala, *et al.* (2013), the cadastre system provides basic infrastructure for managing interrelated systems in land tenure, land value and land use areas. This is emphasized by Williamson (2001) that the cadastre makes available the infrastructure (information) that support operations related to the creation of capital, land taxation and land markets. He further explains that land information plays a crucial role in land use planning, urban infrastructure and in the management of natural resources through the spatial frameworks provision.

For the citizens' perspective Henssen (2010) enumerates some merits of cadastral information effects others as follow.

- Evidence of ownership, which ensures security, decrease or eradicate the risks of eviction and improve incentives to invest in land or real estate.

- Legal security influences the accessibility of financial investment by increasing the possibility of mortgage.
- Improvement of access to land. Land transactions become easier, cheaper, faster and faster.
- Decrease of title and boundary disputes and related litigations which result in the promotion of good relations between neighbours and reduction of government costs.

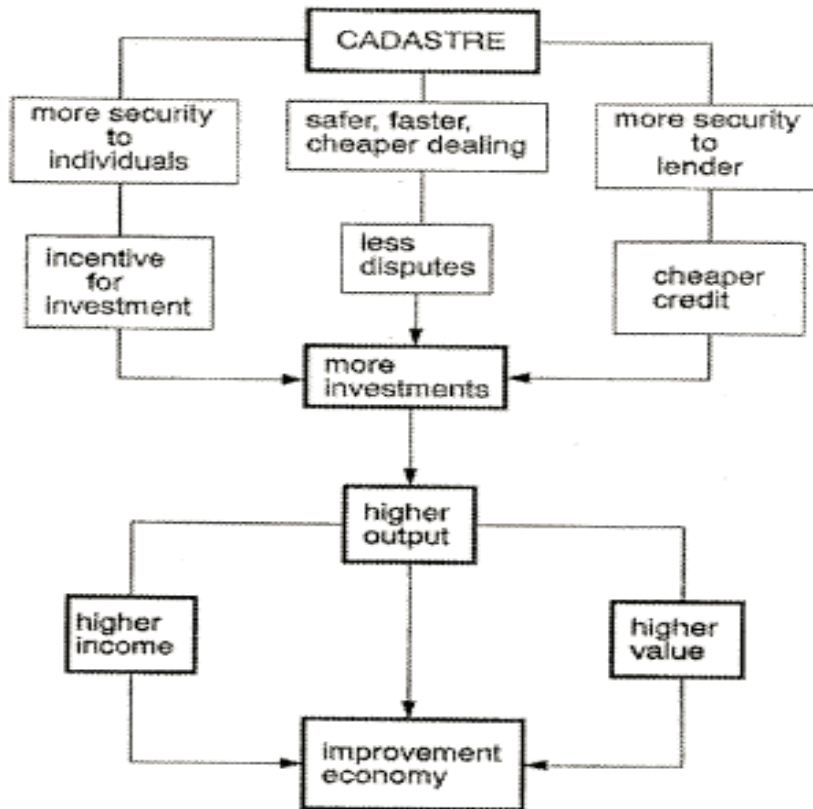


Figure 2: Positive effects of cadastre system for individuals (Henssen, 2010)

Additionally, Henssen (2010) also lists governmental benefits from the cadastral information such as justified levy for land tax or property tax based on the location, size and ownership of land/property, facilitate the implementation of land reform programs like land consolidation or land readjustment, land use planning, expropriation, control and management of public land, among others.

Furthermore, Williamson (2010) summarizes these benefits of land administration system in the four functions which functions are achieved through the cadastre system:

- Land tenure: Related to securing access to land and creating commodity in land and their allocation, registration and security, cadastral mapping and legal surveying to specify the parcel bounds, alienation or transfer of the land property through sale, lease, collateral or mortgage and the management and adjudication of conflicts related to parcel boundaries.
- Land value: an assessment of the value of land and development assets to it, the calculation and collection of revenues from taxation and the management and adjudication of disputes related to land taxation and valuation.

- Land use: the control of land use through adoption of policy planning and land use regulations at all levels of the country, for local, regional up to national level, the enforcement of land use rules and the resolution arrangement of conflicts related to land use.
- Land development: building new physical infrastructure and utilities, implementation of construction planning, public acquisition of land, providing planning and building permission to change land use.

He argued that the integration of a sustainable development requires four functions. These functions are illustrated in the following figure 3:

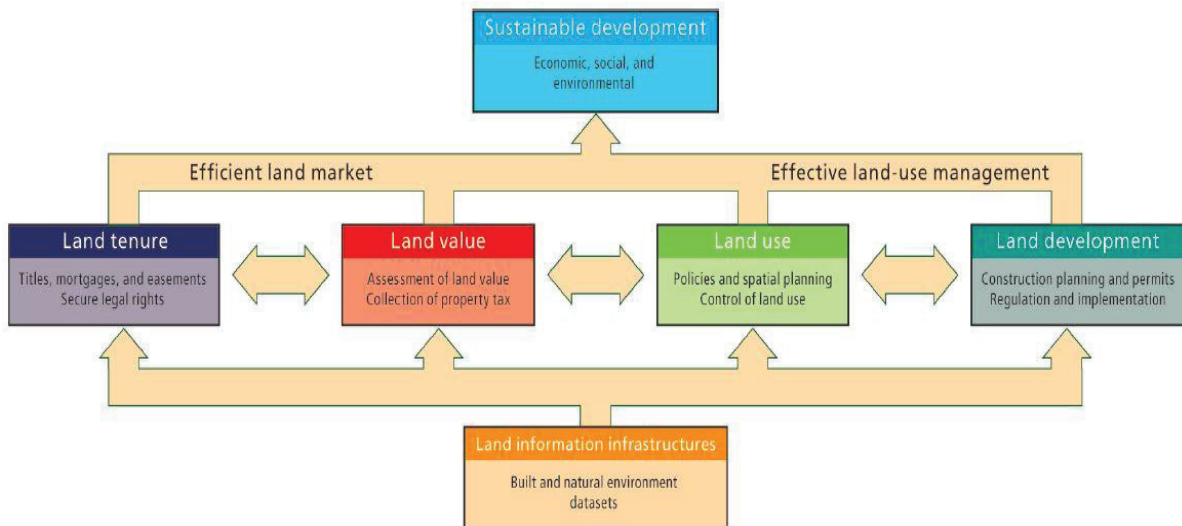


Figure 3: A Global Land Administration Perspective in support of Sustainable Development (Enemark, 2001).

This section review the public as well as private importance of having a cadastre system in a country, it illustrates its crucial role in sustainable development in different domains of life, its role of information infrastructure in public planning, decision making process and implementation of governmental programmes as well as in private organization as the security of land as asset or capital to investment in business world.

Nevertheless, cadastre system like any other information system contains changing information resulting from economic, legal or institutional transactions, Therefore there is a need of maintaining and keeping the system up-to-date to reflect the actual situation of land parcel and land rights otherwise it loses its relevance and become useless (Larsson, 1991; Williamson, 2010; Zevenbergen, 2002a).

2.3. Cadastre updating

The cadastre system can achieve its objectives only if the land information is constantly at a high level of up-to-datedness, by reporting the changes from land transactions as soon as possible to keep the land records up-to-date (Zevenbergen, 2009). These changes are due to the dynamic nature of land information like ownership, land use, and subdivision of land parcel (Henssen, 2010; van der Molen *et al.*, 2012; Zevenbergen, 2002a).

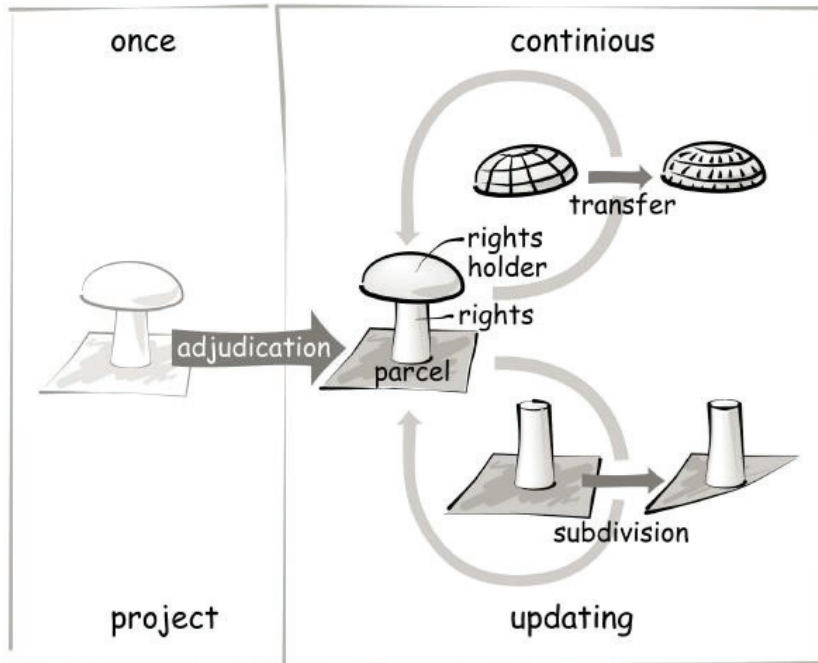


Figure 4: Dynamic model of system of land registration(Zevenbergen, 2002a)

The figure 4 above, illustrates how the first registration is done once through Land Tenure Regularization Project while other change of land holders through transfer of ownership or the changes on land parcel due to subdivision or land consolidation are done continuously and need to be regularly updated.

According to Jing *et al.* (2013) different scholars interpret up-to-datedness in various terms implying "maintenance", "renewal", "updating" and "up-to-date", "change", "evolvment" and others(Jing *et al.*, 2013). In this research term updating is used to mean the process by which transactional changes on land right, ownership or on land parcels are recorded in land register (Ciparisse *et al.*, 2003; Williamson, 2010). These changes derive from different transactions like transfer of ownership, subdivision of land parcel, land consolidation or merging, prescription of land right.

2.4. Success of the cadastre system

The cadastre system cannot achieve its objectives on its own. Its sustainability depends on multiple factors, some are of institutional nature such as management skills, customer orientation of activities, certainty of the quality of services, public awareness among others, while other factors derive from socio-economic and political nature like decentralization of decision making, stability of institutions and governments, effective flow of information(UNHABITAT, 1990).

In the statement on the cadastre, FIG (1995) proposes criteria for measuring the potential success of a cadastre and ensure that changes are recorded. These criteria have been later emphasized by Henssen (2010) :

- Security : The certainty of land ownership should be secured so that the land market can operate effectively and efficiently. There should be also an arrangement of securing the storage of records in case of disaster and protect the system against hackers or other unauthorized users.

- Clarity and Simplicity : The cadastre system has to be clear and simple to understand and to use. There should be a standard form to fill in familiar language. Complex and long procedures don't help the users of the system.
- Timeless: the Cadastre system should provide accurate, reliable and up-to-date information in short time. The customers should not travel long distance to reach the land office and the system should have a high level of computerization.
- Fairness: the system should provide equitable access and at reasonable fees. The process should be transparent with simple procedures.
- Accessibility: The cadastre system should provide sufficient and up-to-date information and services to all users at an affordable cost.
- Cost: land services should be offered at a cost that the users are able to bear. When the cost is high, the users may avoid registering their lands.
- Sustainability : Organizational and management mechanisms and procedures should allow the cadastre system to be maintained over time. This implies the availability of material resources, use of new technologies, staff with professional skills and the education of land holders on the procedures of land registration and the benefits of reporting changes and updating the system.

On the other hand, the success of the cadastre system depends considerably on the community understanding and participation. According to Zevenbergen (2002a) the success of the cadastre system depends on the society view on it. This implies that the society has to understand the benefits of the cadastre system, to realize that it needs it. In this regards the society has to support and rely on the cadastre system and to use the information from it. He further explains that it is the willingness of the members of the society to use and rely on the cadastre system, particularly when they intend to make transactions that affect data in the system and this rely on the way the perception of trustworthiness of the system which is influenced by administration arrangement and daily operations.

This theory is supported by Tuladhar *et al.* (2003) and Zaccai (2008) where they stress that the way the society perceive the benefits of the system, the satisfaction of service delivery, products designed for their interests and the risk of non compliance to the norms influence their relationship with the system and their level of participation to report the changes. This satisfaction may be economic (effectiveness, cost, productivity) or non economic (belief, trust, information exchange).

2.5. Community perception

The term community is used to mean a group of people living in the same place, sharing a common cultural identity (Dictionary), particularly in this research community means Rwandan citizens or foreigners living or having land in the study area. The terms community and citizens may be used interchangeably. The members of the community become customers of land services when applying for conducting different transactions to the Land Office.

The concept community perception refers to the process of reaching the awareness or understanding of the community towards land related program and activities designed for their interest (Chesoh, 2008). The perception is a belief, idea that people have as result of how they understand something (Oxford, 2010). The community perception is the ability of the community to understand, interpret and value land registration, which determine or influence their level of participation in the process of updating the system. Moreover, the community will fully participate in the process of land registration only if they are aware of their benefits of land registration, their legal right and if they are confident to be able to enforce them (Deininger, 2008).

The community perception is measured through two main indicators : The perceived value of the cadastre system and the satisfaction of service delivery (Deininger, 2008; Sanzo *et al.*, 2003). The perceived values of the cadastre system lead to the increase of attractiveness, confidence and appreciation towards land services(Tuladhar *et al.*, 2003) while the satisfaction of service delivery depends on the fact that the services match with the customer needs and demands, efficient exchange of information, easy, cost effective and user-friendly procedures(Hsieh *et al.*, 2008) and both result in the trust in the system (Zevenbergen, 2002a). The community perception plays a major role in the accomplishment of the objectives of cadastre system aiming at a sustainable development.

2.6. Land Administration System in Rwanda

For many decades land tenure system had been operating in a dual legal system, on one hand, there was a customary law which governed almost the all rural and agricultural land which were regulated by social and cultural traditions. This customary system gave rise to the parcelling out of lands through inheritance system from father to son and generations to generations, growing competition of access to land due to the combined effects of land scarcity, population growth, tenure insecurity and degradation of arable land (MINIRENA, 2004).

On the other hand, there was a written law established by the colonial administration, which mostly governed land in urban areas, rural land managed by churches and legal persons and settlers and foreigners wishing to invest in Rwanda to guarantee land tenure security. This system conferred mostly long term lease to agricultural land and full ownership for developed residential, industrial and commercial lands.

For the sake of guaranteeing land tenure security, establishing a rational and suitable land use planning that ensures a sound land management and an efficient land administration the government of Rwanda put in place a national land policy in 2004 (Byamugisha, 2013). It has given the guidance of land reforms aiming at good management and rational use of national land use resources(MINIRENA, 2004). This National Land Policy gives a crucial place to proper land administration as the main key of land tenure security by giving the possibility of registering and making alienable land property. It gave an end to the dual land tenure systems by formalizing the systems to stimulate the economy and a sustainable development.

2.6.1. Land registration in Rwanda

Land registration in Rwanda has been characterized by two methods, sporadic and systematic land registrations.

2.6.1.1. Sporadic land registration

The sporadic land registration was introduced by colonial administration when they introduced for the first time a written law in the country, with the objective of guaranteeing the right to use the lands held by the colonial administrators and foreigners intending to settle in Rwanda. The colonial public officer possessed the right to deliver a title deed. Only settlers and other foreigners benefited from the written law during colonial period while the native citizens' land continued to be governed by the customary law. The written law applied also to religious lands, mostly catholic and protestant missions, as well as in urban areas and trading centres. (MINIRENA, 2004).

The duality of land tenure system continued to be applied in the post colonial period where more than 90% of land were still governed by the customary law while the written law was applied by a small number of landowners, particularly religious congregations and the business communities in urban areas.

Nevertheless, this duality did not help the country to prevent multiple land related problems. Some of these originated in the natural or structural causes such as steep hills, high rainfall which makes slopes vulnerable to water erosion and scarcity of arable land, while others originated in man-made causes such as destruction and abandonment of anti erosive structures due to deaths and displacement, anarchical takeover of protected areas such as parks, marshlands and forests due to a massive return of refugees and internal displacement. Moreover, the scarcity of land resources and bad management of agricultural activities have worsened the soil erosion as 90% of the Rwandan population earn their livelihood from cultivation and livestock (Deininger *et al.*, 2010).

In addition, The customary law did not recognize women's rights to land as land right was a prerogative of men, this was inherited from only father to son, women were therefore excluded from inheritance, hence gender inequality to land right and family land disputes.

2.6.1.2. Systematic land registration

The new land policy of 2004 brought about a land tenure reform program and foresaw that all land in Rwanda would be registered and would be supported by a land registry system that should be applied in both rural and urban areas.

Below are the guiding principles for the clear implementation of the National Land Policy in Rwanda (MINIRENA, 2004):

- *"The right to land property should be correlated to a number of obligations in order to guarantee the development of the land, which is the common heritage of the past, present and future generations";*
- *"According to the constitutional principle of equality for all citizens, all Rwandans enjoy the same right of access to land, without any discrimination whatsoever";*
- *"Land tenure and land administration should guarantee land tenure security for all holders of title deeds and should promote optimum development of land";*
- *Land management and land use should take into consideration different land categories as represented by the various master plans and land classification and land development maps;*
- *"The modes of land management and land use will differ, depending on whether they apply to urban or rural land; the latter comprising hilly land, marshlands and natural reserves";*
- *"Proper land management should include the planning of land use, on the backdrop of the organization of human settlement and the enhancement of consolidation of plots for a more economical and more productive use of the land";*
- *"The process of land transactions improves the value of land and lead to a more productive land use. It attracts investment in land development and enable various land users to look forward to better times ahead";*
- *"Plans and maps are the best means of obtaining, recording, and analyzing comprehensive and accurate land-related information.";*
- *"An appropriate land registry system is essential in order to really understand the land situation of a country and thus plan for any measure of land reform."*

This reform began with the establishment of Organic land law N^o 08/2005 determining the use and management of Land in Rwanda amended by the law N^o 03/2013 of 16th June 2013 and other land-related laws followed. The organic land law made land registration obligatory for all land owners (Rwanda, 2013). The main objective of the national land policy was *"to put in place and operationalize an efficient system of land administration and land management that secure land ownership, promote investment in land for socio-economic development and poverty reduction"* (MINIRENA, 2004). The expected benefits from the systematic land registration are :

land tenure security (certainty of ownership), stimulation of land market, security for credit, reduction of land disputes, facilitation of land use planning and/or land management and supporting environmental management among others.

In the late 2007 and through 2008 field trials were conducted in four cells around the country, and a five years implementation plan of a systematic land registration followed from June 2009 to December 2013. The systematic land registration was undertaken all over the country in all 30 Districts of the Republic of Rwanda demarcating parcel by parcel, cell by cell using a participatory approach and close cooperation of Rwanda Natural Resources Authority through its Department of Lands and Mapping, The District Land office, the cell land committees, village leaders (lowest administrative entity in Rwanda) and landowners all over the country (Byamugisha, 2013).

The demarcation of parcels boundary were done using orthophotos produced from aerial photographs with the help of para-surveyors (local people trained on how to demarcate land parcels using orthophotos) and an adjudication committee. This committee were composed of the five members of the cell land committee, 5 villages elected leader (Milindi, 2011). By the end of July 2013 the whole country was covered with 10.4 million land parcels demarcated, more than 8 million certificates of registration of emphyteutic lease and contracts of emphyteutic lease printed out.

2.6.2. Land Certificates delivered in Rwanda

Three categories of certificates of land titles are issued in Rwanda: The Certificate of registration of an emphyteutic lease, Freehold title (Certificate of full ownership) and conditional freehold certificate.

According to article 5 of law N^o 43/2013 of 16/06/2013 governing land in Rwanda, every person in possession of land in acquired either from custom, granted by a competent authority or purchased is recognized under lease hold (Rwanda, 2013). It is in this context that during the first registration, all land owners received the certificate of registration of an emphyteutic lease, an emphyteutic lease contract and an extract of cadastral plan (appendix 1, 2 and 3).

The Emphyteutic lease contract is a long term contact(up to 99 years renewable) between the state and a person to exploit land in return for periodic fee payment (Rwanda, 2013). This contract is signed by the landowner and the government represented by the Registrar of Land Title or Deputies Registrar of Land Titles in their respective zones. It contains mainly the responsibilities of land owners regarding payment of land taxes, protection of the environment, among others. The certificate is composed of four sections: "Parcel section" where are recorded the information describing the spatial unit, "proprietorship section" with detailed records about land owners, "Charges section" in which are recorded annotations of real charges on the land parcel such as servitude, caveat, etc. and the "restriction section" for annotations regarding restrictions on the land parcel (RNRA, 2012).

However, the article 6 of the law governing land in Rwanda grant full ownership right to land parcels reserved for build up areas of industrial, commercial, residential, cultural, scientific and social services. These freehold rights are granted only in the area where infrastructures are erected and its extent is strictly limited to the area of land as predicted in the master plan. For a group of individuals co-owning land, a business companies and other organizations with legal personality, the freehold title (appendix 4) can only be granted if Rwandan citizens own at least 51% of its shares. (Rwanda, 2013)

The certificate of a conditional freehold land title is granted to persons qualified as investors and falling under the law n^o 26/2005 of 17 December 2005 relating to investment and exports promotion and facilitation who has completed at least a half ($\frac{1}{2}$) of the construction as authorized (Rwanda, 2010).

2.6.3. Institutional framework

Different institutions have been given responsibilities in order to contribute to a good land management. They are striving at integrating ecological, with economical, social and legal principles to improve a good land management and a rational use of natural resources to boost a social, economic and environmental development (RNRA, 2012; Rwanda, 2006b).

These institutions are as follow:

- The Ministry of Natural resources: which advocate for land management at governmental level, and has the responsibility of addressing policy issues through ministerial orders and other regulations regarding administrative procedures, planning and land allocation.
- Rwanda Natural Resources Authority: has the responsibilities of leading the management of promotion of natural resources which is composed of land, water, forests, mines and geology. It is in charge of supervising, monitoring and ensuring the implementation of all issues relating to the promotion and protection of natural resources through programs and activities of all national institutions. Particularly, its department of lands and mapping and the Office of the Registrar of Land titles are in charge of registering lands, issuing and keeping and maintaining the land registry and other activities relating to land administration in Rwanda(Rwanda, 2011).
- District Land Bureau: Lead by a District Land Officer, is the focus of land administration and land use planning at district level. The district land officer is also a public notary in land matters. He is in charge of certifying all land documents and land transactions, keeping and maintaining land records at district level(Rwanda, 2006a). He is the front desk of land administration at local level. Technically the District land officer is answerable to the Rwanda Natural Resources Authority.
- Sector and Cell Land committees: close to the citizens, these committees are responsible for follow up of management and use of land. they are responsible of disseminating information about land administration and land use at their level, monitoring and assessing the implementation programs related to land and protection of the environment, etc(Rwanda, 2006b).

2.6.4. Land Administration Information System

Even though the Land Tenure Regularization program in Rwanda is considered as a great achievement and successful in a short time frame (Byamugisha, 2013), the collected data must be kept in a way that allows a good management, specifically the maintenance of land records changes occurred from different transactions such as transfer of land ownership, subdivisions, merging, expropriations among others need to be registered. It is in this regard that the Rwanda Natural Resources Authority has developed "a Land Administration Information System (LAIS)". According to RNRA (2012), LAIS is "*a web based land registration tool developed based on procedures provided by the ministerial order determining modalities of land registration*" (RNRA, 2012) comprising the data store and the main processing capacity to collect, store, retrieve and disseminate land related information. This system had been introduced as a moving from a paper based system to an electronic way of dealing with different land information aiming at creating a more efficient, cost effective and transparent la registration process(MINIRENA, 2004).

3. RESEARCH METHODOLOGY

3.1. Introduction

A research is a process undertaken to systematically collect, analyze and interpret information in order to increase knowledge answering predefined questions (Kumar, 2000). To achieve the research objective, case study approach was used which is suitable approach when focusing on a contemporary phenomenon within a real life context (Yin, 2003) on updating the land information system and qualitative approach to identify the points of view of the community (Trauth, 2001). We focussed on literature review and data collection looking for describing the community awareness and perception towards the procedures and requirements of reporting changes on registered land in Land Information System in Rwanda.

The data were collected using qualitative methods, focus group discussions and interviews. This process is to collect relevant data to understand the level of awareness and perception of the community in order to report changes on their land right. The fieldwork was conducted on 30th September to 24th October 2013 in all cells of the Runda Sector of Kamonyi District, Rwanda

3.2. Selection of study area

Runda Sector is one of the 12 Sectors of Kamonyi District in the Southern province adjoining the City of Kigali as show in Figure 5 below.

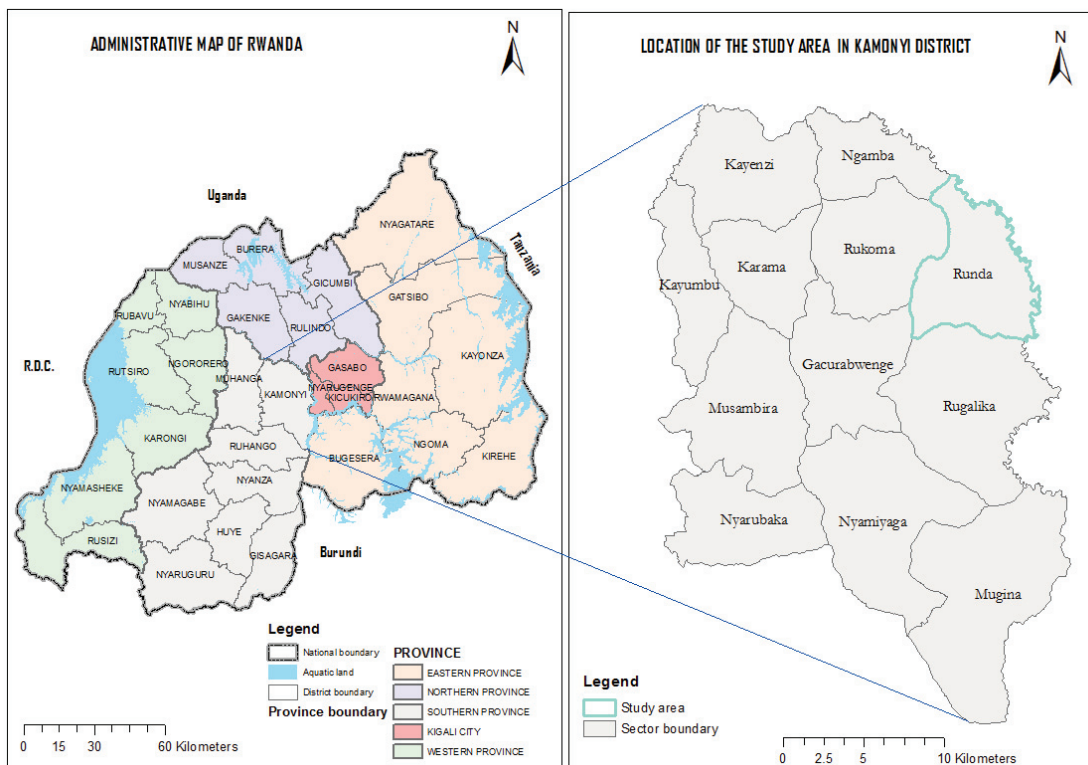


Figure 5: Location of the study area in Kamonyi District

This sector was chosen in this research because of its Peri urban feature. According to Muchai (2009) a Peri urban area is an area outside urban jurisdiction which is in a process of urbanization and progressively adopts urban features, and most of the time the city boundaries are not easily delineated. This sector is progressively growing up in term of infrastructures and built up area due to the migration of population from Kigali city where middle class civil servants in need of building residential houses and citizens expropriated in the inner city of Kigali.

On the other hand, due to the growth of the area in urbanization, Kamonyi District authorities had decided to shift and extend the land use from agricultural to residential and commercial land use. The area is assumed to have many land transactions, mainly transfer of full ownership and subdivision are the major and most practiced transactions in Rwanda. In addition their procedures and costs are quite different: the transfer of ownership involves the parties in the contact, the land notary while the subdivision requires only the land owner and a surveyor to split the land parcel (RNRA, 2012). The figure 6 illustrates the localization of the Runda sector in the administrative map of Kamonyi Districts.

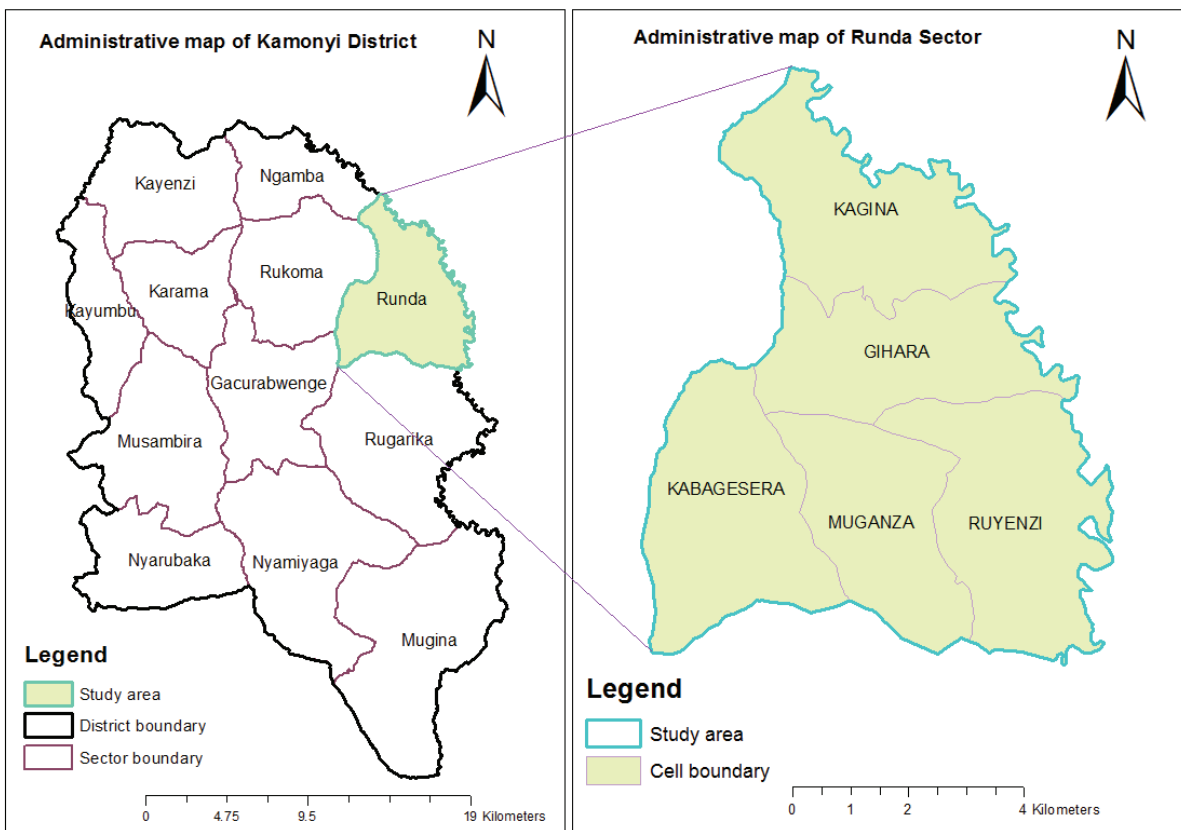


Figure 6: Map location of the study area

This Sector is composed of five cells (Figure 6): Kagina, Gihara, Kabagesera, Muganza and Ruyenzi Cells with 28 766 demarcated during the Systematic Land Registration. The Table 2 illustrates the registered land parcels in all the five cells and their level of completeness of land information.

Cells	Demarcated parcels	Parcels with complete information	Parcels with incomplete information
Gihara	5 024	4 084	940
Ruyenzi	5 268	4 706	562
Kabagesera	7 069	6 182	887
Muganza	6 015	5 357	658
Kagina	5 390	4 581	809
Total	28 766	24 910	3 856

Table 2: Registered land parcels in Runda Sector (RNRA, 2013)

3.3. Data Collection

3.3.1. Primary data

Primary data collection were used to get data for answering research questions and attaining the research objectives through focus group discussions in five cells composing Runda sector, interviews with the customers of land services and field observations.

3.3.1.1. Focus groups discussion

Focus group discussions were the main source of primary data in this research. It allowed us to discuss with groups of participants between 8 and 41 persons per Cell. In this approach, participants influenced each other with their comments and helped to identify their common experiences and concerns (Bolderston, 2012). It was used to get community perceptions and experiences in different cells of Runda Sector, where all villages were represented. The contact persons of the focus group discussions were the executive secretaries of cells. The appointments were planned on the usual official meeting day in every cell, in these meetings the Cell executive secretaries introduced the researcher and requested those who were willing to discuss with the researcher depending on their availability.

	Cells	Men	Women	Total
1	Kabagesera	5	3	8
2	Kagina	4	7	11
3	Ruyenzi	9	8	17
4	Muganza	14	11	25
5	Gihara	16	25	41
	Total	48	54	102

Table 3: Showing participants to focus group discussions

The table 3 shows the number of participants in every group discussion in their respective cells. However, it was observed that the larger group discussions were more interactive than in smaller groups.

3.3.1.2. Interview

Interviews were conducted to get information about the existing practice of land registration, the transaction fees of different services and other additional costs, the number of staff involved in these transactions, how different activities were coordinated to get a land document. These interviews were based on the real practice of registering changes.

	Target groups	Respondents	Number
	Kamonyi District	Director of the land Office	1
	Kamonyi District	Professional in charge of GIS and land management	1
	Citizens	Waiting to notarize sale agreements to transfer land ownership	5
	Citizens	Applying for subdivision of their land parcels	2
	Total		9

Table 4: Number of interviewees and their interests in land registration

The table 3 shows that there were two categories of interviewees; the first category is composed of District land staff where we discussed with the Director of Kamonyi District land Office and the professional in charge of land management and registration. The second category was composed of the citizens in needs of land services; some were in the process of transferring their land rights while others wanted to subdivide their land parcels.

3.3.1.3. Field observation

Field observation was conducted to realize how transactions are practically carried out at the District office, how the landowners are served by the district staff, how much time they spent at the land office. This technique was applied at District Land Office, the researcher observed how the customers who wanted to subdivide their land parcel were received, and at Runda Sector where, in the context of population outreach the Director of the District Land Office (who is also land notary) carry out visit every week to notarize the transfers of land ownership.

3.3.2. Secondary data collection

Secondary data collection were used to understand the basics on the concepts used in this research such cadastre system, community perception and land registration in Rwanda; by reviewing books, research papers and other documents. It was also used to support the analysis of information collected by the help of primary data collection. using documents such as national land policy (MINIRENA, 2004), land administration procedure manual, application forms among others.

3.4. Processing qualitative data

Qualitative method was applied (Walsh, 2003) through focus group discussion and interviews to capture information and explore them in chapter four and five. During field work, some discussions and interviews were recorded using an audio recorder (in Gihara, Kagina and Muganza cells), but participants

in Ruyenzi and Kabagesera cells didn't want to be recorded. Later on, these data were processed and interpreted information from them.

Architect enterprise software was used to design activity diagrams of the activities conducted by different actors involved in the land registration in Rwanda while ArcGIS programme was used to produce administrative maps.

3.5. Research Design

The research activities are classified in three stages (Pre-field work, field work and post-fieldwork) as shown in Figure 7 below:

In Pre-field work, the preparation of research proposal was done by defining the research problem, formulating the research objectives and questions. At this stage the preparations of field work and data collection in the study area were arranged. Questions were focused to local communities and District land staffs in the study area.

The field work activities consisted of all activities described in section 3.3 while secondary data collection was based on reports, land laws and procedures manuals related to land registration.

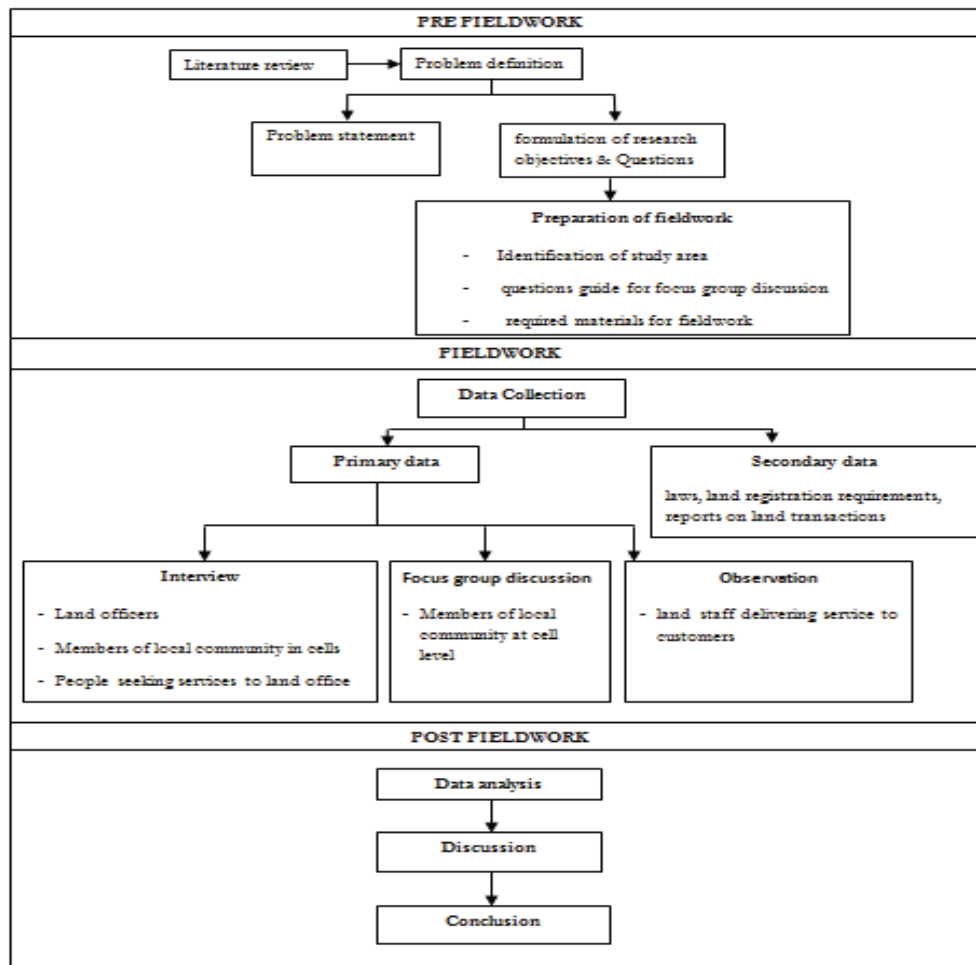


Figure 7: Research design

The post field work stage consisted of analysis of data collected based on focus group discussions, field observation and interviews, discussion of results based on literature review related to land registration and governance.

3.6. Research matrix

The following table 3 shows the research matrix that indicates the guiding research questions, required data and the source of information or methods used for data acquisition to answer those questions.

No	Research questions	Literature review	Focus group discussion	Interview & observation	Data required/output
1.	What are the formal requirements for land registration?			x	Procedures and requirements
2.	who are the actors involved in land registration?	x		x	Actor/ institutions and their roles
3.	What is the actual practice in land registration?	x	x	x	the practice on field of land registration
4.	Are the community aware of having an updated land documents?		x	x	Awareness to report changes/Updating the cadastre system
5.	How did they got that information?		x	x	Means of communication
6.	Do the community understand the benefits of land registration?		x	x	Perceived benefits of land registration
7.	What are the community views on the accessibility of land services?		x	x	Perception on accessibility of land services
8.	What are the views of the community on the affordability of the requirements for land registration?		x	x	Perception on affordability of land services s
9.	How satisfied are the community with land service delivery?		x	x	Views on service delivery and satisfaction with services

Table 5: Research matrix

4. RESULTS PRESENTATION

This chapter presents the results of data collected from fieldwork, the focus group discussions, interviews and field observation. It presents data relating to research questions about community awareness and perceptions towards the procedural mechanisms of land registration for updating the cadastre system in Rwanda. Section 4.1 relates requirements and procedures of land registration. Section 4.2 examines the Community awareness on updating land information, section 4.3 examines the community access to land information. Section 4.4 presents the community perceptions towards the benefits of land registration, and section 4.5 presents community perception access to land services.

4.1. Requirements and procedures for land registration

The requirements differ from the transaction, however, some of these requirements are common for all transactions such as identification of the applicant, proof of right on the concerned land among others while others are specific to a given transaction. In this section we will present the common requirements for all transactions and compiled of specific requirements for the full transfer of land right and subdivision.

4.1.1. Common requirements for all transactions

The common requirements for all transactions are mainly those regarding the identification of the applicants and the land parcels as described below:

- Proof of identity of the applicant. This is a copy of the national identity card or a valid passport for the Rwandan citizens or a valid passport for the foreigners. According to the land officer, the identity comprises the marital status of the applicant to know whether the applicant is married or single, to prevail gender equity principle in case of property in marriage and the prior consent of both spouses to any change on land right or on the parcel itself. The marriage certificate or certificate of celibacy is produced by the executive secretary of the Sector where the applicants are registered.
- The physical presence of the applicant: According to District Land Officer, any transaction on land right requires the consent of all registered land holders. It is in that regard that the persons involved in the land transaction are required to present themselves at the land office or their representatives with certified power of attorney. The power of attorney is certified by a public notary while outside the country, it is certified by the Rwandan embassy and approved by the Ministry of Foreign Affairs.
- Proof of land rights: according to land staff, the first registration had been done all over the country, every land owner is supposed to be in possession of an official land document certifying that he or

she owns a piece of land. This document proves also what kind of real right the person has on land. It may be a leasehold right or freehold right. According to District Land officer, during the adjudication process all land owners had been given certificates of registration of an emphyteutic lease except those who registered their properties in sporadic registration before Land Tenure Regularization and got a freehold title as they legally developed improvements (residential or commercial buildings) on their land.

- A proof of payment of transaction fees, every service requested by the land office is paid by applicants, these applicants are given a bank account number where they have to deposit the fees. A bank slip is given proving the payment for service.

4.1.2. Specific requirements for transfer of ownership and subdivision of a land parcel

The transfer of ownership leads to the change of the right of the landowner resulting from sale, donation, inheritance, expropriation, exchange among others and affect only landowner in the land register by changing their names while the spatial data and the right on the parcel will remain the same. For the subdivision, the transaction brings the changes mainly on the spatial unit, especially the size of the land and its boundaries. It does not affect the land right or the land owner registered on it. According to District Land Officer if the aim of the subdivision is to transfer one piece of the subdivided land, the landowner will first apply for subdivision, then later on will apply to the transfer after getting the new land documents of the subdivided parcels.

Apart from the common requirements described above, the transfer of land ownership from sale requires:

- To fill an application form of transfer of right by sale signed by the seller(s). This application form contains the identification of the applicant, the motivation of the application and a checking list required of all required information for the transfer. This form had been prepared in advance and is found at the front desk,
- To provide a notarized sale agreement signed by both parties, seller(s) and buyer(s) and two witnesses of every part in the transaction. This agreement is signed before the public land notary who is also the director of the District Land Office.

Besides, in Kamonyi District the Land Notary requests the customers to provide a sale agreement signed by both the seller and buyer, the neighbours of the purchased land, village representatives and approved by the executive secretary of the cell office. This document is neither on the checking list of the application form nor in the land administration procedure manual. According to District land staff, this is to make sure that there is no any dispute in both family members of the buyer and the boundary conflict on the purchased land.

In addition to common requirements, the subdivision of land parcel requires:

- A filled application form signed by the registered owner(s) with motivation for subdivision,
- Approved extract of cadastral plan (fiche cadastral) for each piece of the parcel to be subdivided.

However, the article 30 of the law n° 43/2013 of 16/06/2013 governing land in Rwanda prohibits to subdivide a land parcel reserved for agricultural or for animal resources use if the results of subdivision leads to land parcels of less than one hectare size for each of them. in a such case the land owners will be registered in co-ownership. According to the national Land Policy this is to reduce the excessive parceling out of family agriculture land where in 2004 arable land per family farm was about 0.6 ha (MINIRENA, 2004).

4.1.3. Actors involved in land registration

The main actors involved in land registration in Rwanda are categorized in three parts: the customers of land services, The staff of the District Land Office which is the front desk of land services and the staff at the office of the Registrar of Land Titles at provincial level.

The customers of land services comprise the land owners natural and non natural persons, potential sellers and buyers of land properties, financial institutions, private and public institutions using land information as infrastructures such as the Ministry of Agriculture, the Ministry of Infrastructures, Environmental Management Authorities, Districts among others.

The District Land staff comprises the Director of District Land Office who is also the public land notary and coordinator of all land registration activities at District level, the person in charge of GIS and land management who is also the land surveyor and the person in charge of community settlement.

The Office of the Registrar of Land Title is the one ability of delivers the certificate of land registration on behalf of the Government. at Province level there is a zonal office composed of a Registrar of Land Titles who is the head of zonal office and coordinates land registration activities and ability to deliver land certificates, 2 professionals in charge of land registration working on data entry in LAIS database and on the quality control and support the Registrar of Land Titles to promote land service activities through public campaign and train local leaders in land matters and a GIS specialist in charge of working on spatial data activities and the quality control of subdivision of land parcels. The sub-section below illustrates how these actors interact during a transaction.

4.1.4. Actual practice of land registration

This Figure 8 illustrates the activities conducted to perform a transaction and the role of different actors during the process of land registration, specifically the transfer of ownership, the process of subdivision is found in appendix 5.

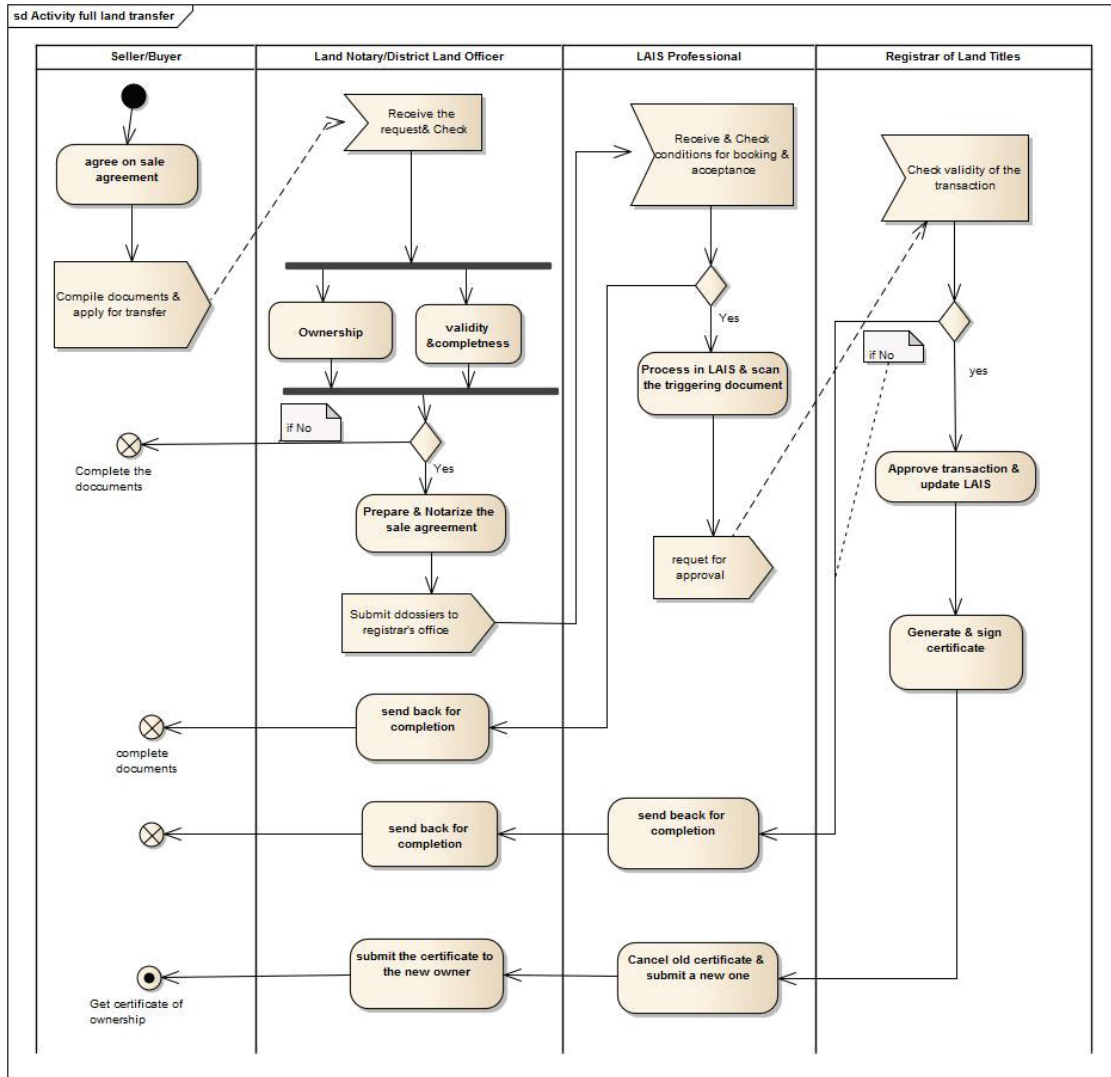


Figure 8: Activity diagram of full transfer of ownership from sale

This activity diagram illustrates the process of transfer of ownership and the role of every actor involved as detailed below:

- The seller(s) and buyer(s) agree to purchase a land parcel and prepare all required documents for transfer,
- Public land notary notarizes the agreement after checking the authenticity and completeness of all documents required for this transaction and bring them to the Office of the Registrar of land titles,

- LAIS Professional: Checks the conditions of booking and acceptance, if the documents meet the requirements the information he/she processes data in the system, if the information or the conditions are incomplete a request for rectification is sent to the applicant via the District land office,
- The Registrar of Land Title: Performs the quality control and checks if the processed data have been done in accordance with the documents of application for the transaction. If complete approves the transaction, signs electronically the new certificate, update the database and new land document will be printed out and sent to the new owner through the District Land Office, if not the transaction is rejected, the processed data will be reversed and returned for correction.

4.2. Community awareness on updating land information

One of the objectives of this research is to examine the awareness of the community on updating land information. Participants to group discussions confirmed that they are aware about reporting the changes occurred on their land due to different transactions.

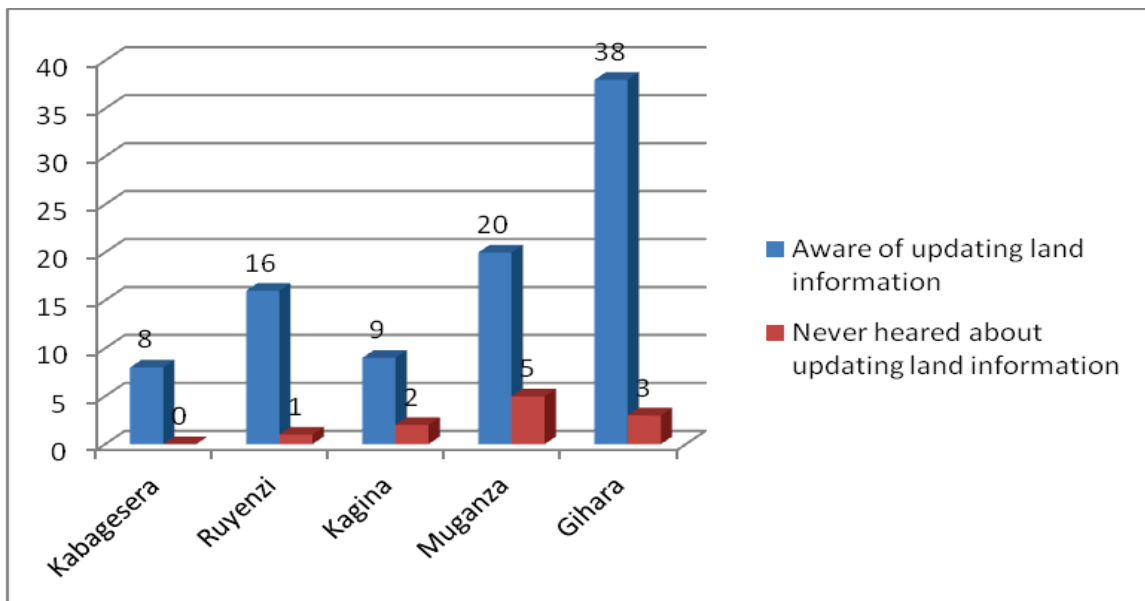


Figure 9: Awareness of cadastre updating

The Figure 9 above shows that 89.2% of participants to group discussions were aware of updating land information after while 10.8% of them had never heard about updating the changes in land information. This illustrates that a high level of awareness on reporting changes on land information.

Although some participants mentioned that they have not been part of a transaction, the majority of them know that the changes have to be reported to the authorities. One of the participants stated " *as our right have been recorded in the book kept by the state, we have to make sure that any changes in our right is corrected, otherwise the state will be keeping wrong information*". The participants put forward that during public campaign of the systematic adjudication, the authorities advised them to report every change occurred to their lands, one

participant noted that *"During the public campaign of systematic land registration the authorities taught us that our land would not be protected by the state if what has been done is not recorded on the books, the government protect only the right registered by the authorities, so what is more important is not the information we know but the one held by the authorities"*.

4.3. Access to land Information

Even though the respondents testified their awareness towards updating land information, the researcher wanted to know how the community get information and what kind of information they possess. The Figure 10 below shows that the public campaign conducted during the first registration on the adjudication process is the first source of information regarding land administration with 65% of while land registration is their neighbours who had been part in a transaction are at a second position 25%.

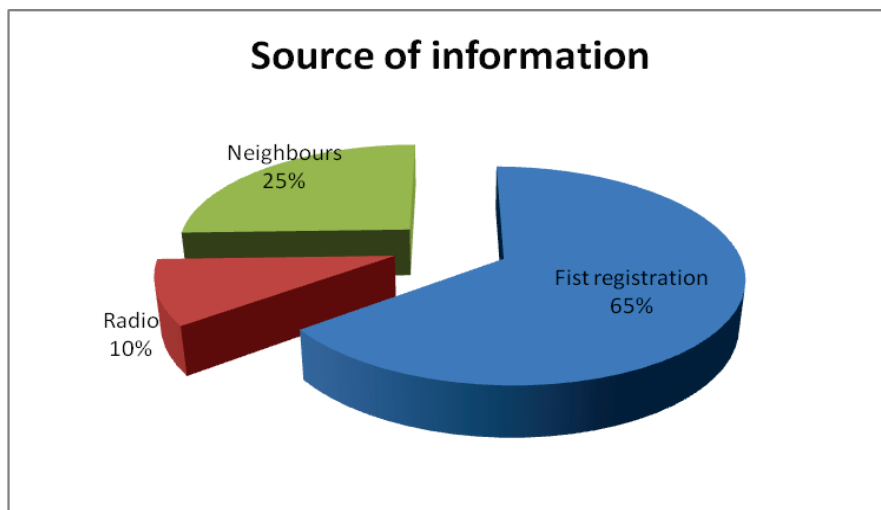


Figure 10: Participants source of information

Only 10% declared to have followed radio diffused emissions on the procedures of reporting changes. Furthermore, All five interviewees showed their dissatisfaction regarding the lack of communication between the land office and the community. One of the interviewees had this to say *"it is impossible to get the service in one day as we do not have all required information at hand, the first day we came here they told us what is missing in our documents, they gave us a list of all requirements and went back to look for them. All this because we could not get these information before"*.

However, these information are not always accurate, for instance, in three out of five group discussions many participants still believe that the cost of subdivision of a land parcel is still 60,000 Rwandan francs, the cost which had been revised to 10,000 since July 2012. Moreover, some participants of Kagina and Kabagesera cells do not know where to report changes, they believe that these changes are reported at the cell office as it is where they collected their land certificates during systematic land registration.

The researcher wanted to know if the authorities have ever carried out a public campaign at cell or Sector level or provided fliers informing them about updating process of the cadastre system, only the participants in one cell (Kagina) out of five recognized to have once discussed on updating land information in public meeting, others negate to have had any kind of administrative communication on cadastre updating.

The researcher was curious to know why participants in all focus group discussions had almost same responses to different questions on land registration, the Director of District Land Office replied that there were many public campaigns aiming at bring the citizens to participate in the process of adjudication and these campaigns were hosted by the same coordinator in all cells of Runda Sector.

In summary, the main sources of information were the public campaigns conducted during the systematic land registration (first registration), the neighbors who had been part in some transactions and radio emissions for a small number of participants. One out of 5 cells recognized that authorities promoted to report changes on land in a public meeting after the systematic land registration.

4.4. Perceived benefits of land registration

It is necessary to know the perceptions of the participants in the group discussions of the benefits of land registration, the community perception influence their willingness to report changes in the cadastre system. To the question relating to know if the participants perceive any benefits register their land property, many views were based on solving problems the community experienced in the past such as land conflicts related to inheritance, increasing the tenure security, strengthening women's right to land and protecting orphans' right on land, helping the community to sell their land. Some participants talked about other benefits of financial nature like mortgaging the land and compensation in case of expropriation.

During the group discussions, the majority of participants appeared to be aware of the benefits of registering and reporting the changes and completed each others at certain points. One participant noted *"in the beginning of systematic land registration, we were reluctant to register our land as we were asked to pay fees for registration and because we were not really aware of its benefits, but by the time after experiencing how problems were handled with the participation of the community we realized that registering our land was the best way get away from our longtime land disputes, now we know that we have right and no one can come and grab our land"*. Some participants are confident that the state is the guarantor of the security of registered land only, on had to say *"we have to register the changes in the register to avoid further conflicts, because by registering the land the government insures the security of our properties"*.

Another point raised by the participants in the group discussions is the security of the money invested in land properties; the buyer to make sure his money is not parried there is a practice in place where the buyer cannot pay the total amount of the purchased land before signing the sale agreement before the land notary, in this regards one respondent put this forward *"as long as my name is not written in the register at the district office I cannot be sure of the security of my money. The seller can sell it for the second time to another person, we never know"*.

Apart from the security of their land rights and their investments the respondents gave another reason they have to update land information on time. They cannot get any land related services without having a land certificate, one noted that *"nowadays you cannot build or restore your house without a building permit, even erecting a fence requires to get the permission from the authority, to get this you have to prove that you own the land before developing it and the only proof is the land certificate"*. Another point discussed on the perception of updating the land information is that there are many expropriations going on all over the country aiming at building social and development infrastructures such as roads, health care centers and public markets, no one can be compensated if he does not have a land certificate.

The community members perceive the importance of updating the cadastre system because the updated information allows them to get loans from financial institutions. An interviewee noted *"After systematic land registration banks are offering loans easily to those who provide their land certificates as collateral, the first guarantee they ask for is mortgage of land, even though the loan is foreseen for other business without any relation with the land, you must possess the land certificate registered in your name to get this advantage"*. For the participants to group discussions and interviews all these benefits cannot be acquired without prior possession of an updated land certificate.

In this section, it has been observed that the participants perceive the benefits of updating land information or land registration in general based on their past experience on land conflicts and other related problems such as family conflict based on inheritance, boundary conflicts. The participants believe that registering their land increases the tenure security of their land, protecting orphans' land rights and strengthening women's right to land. Updated land certificate is also perceived as proof of land right in case of compensation during land purchasing, expropriation or as collateral of bank credit.

4.5. Community perception towards access to land services

The way the community appreciate the quality of service delivery influence their relationships with land registration services and their level of participation in reporting the changes occurred on their land. The previous results described the community knowledge about up-to-datedness of land information, this section describes how the community perceive the access to land services and transaction costs.



Figure 11: Administrative entities/levels in Rwanda

The figure 11 illustrates hierarchical administrative entities in Rwanda and where land services operate in. The front desk of land services is at the District level, it is where the citizens have to apply for different land services. The District Land Office is a decentralized service which coordinates all land related services at local level and works daily with the Office of the Registrar of land Titles at province level where the Deputy Registrar of Land Titles is able to approve different land transactions and deliver land certificates. The Rwanda natural Resources Authority through the Department of Lands and Mapping coordinate land management activities at national level.

4.5.1. Community perception of access to land services

The front desk of all land services is the District land office at district level. As a public office this office is open from 7:00 A.M in the morning up to 5:00 P.M in the afternoon from Monday to Friday. The main land related services delivered by the District Land Office are: To receive all land related applications, to demarcate and approve cadastral plans, to issue land certificates, construction permit, authorization to modify, rehabilitate or demolish buildings, to issue occupancy permit of buildings, collect land taxes and other land related fees, inform the general population about land management activities among others (Rwanda, 2006a).

In the context of population outreach, the Director of District Land Office conducts field visits at sector level every week to notarize the transfers of land ownership, all other transactions are applied for at the District level. Even though the land notary moves to sector level, the respondents to interviews declared that it is still difficult for them as they still have to bring two witnesses each part in the sale agreement, which implies transport costs and refreshment for them. One respondent said " *Even though the notary comes every week to the Sector office, it is still a burden for us to come with two witnesses, for whom we have to pay transport costs*

and sometimes we have to give them a compensation (per diem) as they didn't do anything for their families. The land notary should come at the cell level or we come with at least one witness". Moreover, participants noted that they are not even sure to get the service needed in one day as most of the time they are not sure of having all required documents at hand, which means they have to go back to look for missing documents.

In addition to this, the seller and the buyers are requested to have signed a sale agreement witnessed by neighbours and village leaders and approved by the Cell executive secretary. According to respondents this complicates the process while they already have their land certificates as proof of ownership. According to the land staff, they request this informal document to make sure there is no any dispute or opposition made by family members or neighbours on the sold land.

The application for subdivision of land parcel is submitted at District level. Even though subdivision transactions are not because of the restriction of parcelling out the land designed for agricultural activities which have less than two hectares. Those involved in subdivision found its procedure complex and costly. One respondent argued that *"The procedure of subdivision is complex, first we have to travel to the District office which is already at a long distance, we have to go there at least three time before getting the land certificates. We have firstly to apply for the subdivision by filling the form and hand in required documents, if all requirements are fulfilled, they give you an appointment by coming to split the land parcel, the second time you go there to sign the new cadastral plans and the third time to collect the land certificates"*.

In addition to this, participants raised the obstacles they are facing in case of succession, where the land parcel co-owned by the members of a family which fall into the restriction of subdividing a land parcel with less than 2 hectares for agricultural use. They noted that one cannot easily sell his/her shares when there is no member of the family in co-ownership who want to buy them. One participant gave an experience his neighbours are facing *" my neighbours are four orphans, sharing a family land, one of them sold his share as he didn't want to cultivate the land, when the buyer wanted them to go to the land notary, they were told that the land cannot be divided. The problem is that the brothers don't want to sell their shares and the seller has already used the money, up to now the problem is still there"*. It is also not possible to mortgage one's shares if the co-owners don't collaborate.



Figure 12: Customers waiting to notarize the sale agreement before the land notary at the Runda Sector office.

The Figure 12 shows the customers waiting to be served by the land notary at Runda Sector during fieldwork. Due to the long queue of persons waiting for signing their sale agreements, one can spend three to six hours waiting for the service without hope of being served.

The researcher wanted to ask one of the clients waiting to be served, unhappily answered "*Just tell them that it is time consuming, look! I have spent here four hours waiting and I am not sure yet if I will be served today, I came with my neighbours to sign as witnesses in the sale agreement, but they are now telling me that it is time consuming they want to go back to their daily activities*". Another interviewee expressed that "*there should be a way of giving fixed appointment to everyone, in that case we will be aware of the time we have to come and be served immediately instead of spending hours waiting, I requested a leave of one day from my boss, if I am not served today I am not sure if I will get another one next week. They may call us or use sms to fix an appointment, it would be better*". They argued that sometimes the appointments are cancelled without prior notice when the land notary have been appointed to other emergencies, the only way of informing the public is a written notice at the sector office where transactions are supposed to be signed.

The distance from the farthest cell of the Runda Sector (Kagina Cell) to the District office is at 28 kilometers and the nearest is at 17 kilometres from the centre of the cell, while Kagina and Gihara cells are at 7 kms and 3 kms respectively to get to a public transport. According to participants in group discussion of Kagina cell it requires to travel for one hour and a half or 2 hours by foot or 30 minutes on a motorbike to get the sector office, in case they have to go to the District office they would then have to take a public transport for 45 minutes.



Figure 13: Accessibility of the study area to the District Land Office

This Figure 13 shows road infrastructures from the study area to the District Land Office. As it appears on the map, the National road crosses Ruyenzi cell and at the extremity of the boundaries of Muganza and Kabagesera Cells, there is neither District roads nor National roads serving the big part of the study area. The public transport in this area uses only national road and district roads, which means that the citizens have to use motorbike as means of transport and it is more expensive than the public transport in the area.

4.5.2. Perception of the community on the affordability of transaction costs

The parties in a transaction have to pay the fees and other related costs. A total cost of 33,700 Rwandan francs (\approx 35.5 Euros) is paid for the transfer of ownership in terms of 20,000 Rwandan francs for transfer fees and 13,700 of other related costs. This is the same amount paid for inheritance when there is no subdivision needed. In case the inheritance requires subdivision, 10,000 Rwandan francs are added to this amount per every piece of land subdivided.

However, participants in group discussions claimed that apart from these administrative fees, they spent a lot of money in transport as they have to bring their spouses and two witnesses per each party in the contract and their refreshments when they may spend more than four hours waiting to be served. Some participants do not pay much attention to the transactional costs instead, they wish to spend less time waiting to be served. While others, especially from rural areas claim that the costs are expensive and suggest to not use flat price of transaction instead using price categories depending on the purchased value of the concerned land.

This section shows that the citizens spend a lot of time at the sector office waiting to be served by the land notary as there is only one land notary in the whole District and is available in this Sector only one day per week. They may spend more than four hours at the office while they have invited their neighbors to come witness the sale agreement. The respondents claimed that parcel subdivision procedures are complex and time consuming as they have to travel to the District Land Office. In some cells respondents claimed that they take long distance to reach the Sector office as they don't have access to public transport and the cost are high.

4.6. Concluding remark

This chapter presented the results of data collection from group discussion, field observation, interviews. The research revealed that the participants are aware of updating land information and had good knowledge about the benefits of registering their land. However, some participants proved less knowledgeable regarding the requirements and modalities of land transactions while others had experience and advanced knowledge in land transaction due to the fact that they had been part of the transaction, either as buyers, sellers or as witnesses. The communication between land services and the community is not efficient, especially about communication of new procedures and changes in land laws, where some participants are not aware of the change of transaction costs, some citizens don't know at which office they apply for land service, and the main source of land information are the neighbours who had been part in a transaction and radio emissions.

The participants claimed that the transactions are time consuming due to the long queue of people looking for notarization of sale agreements and costly, particularly for subdivision of land parcels where some applicants have to travel for three or more hours to reach the District Land Office and going back and forth at least three time before getting the land certificates.

5. DISCUSSION

The previous chapter the researcher analyzed the fieldwork results on awareness of the citizens towards cadastre updating, their perceived benefits towards land registration, and how they appreciate their access to information and services delivered by the District Land Office. This chapter provides discussions on these findings.

The chapter starts with the requirements and procedures for land registration, the community awareness of cadastre updating, the perceived benefits of land registration by the citizens, the level of access to land information, services and related costs.

5.1. Requirements and procedures for land registration

To ensure the uniformity of approach to registering changes in land information collected in the first registration, to update the Cadastre system and addressing all issues arising from landowners, the government of Rwanda established a land administration procedure manual with detailed processes to be followed and forms to be used while applying for different transactions. These forms contain information on the applicant, motivation of the application and a checklist of required documents to process the changes and the requirements are based on the constitution and laws in place.

These requirements are basically in relation to the identification of customers, including their marital status to preserve the principle of prior consent of the land owners before proceeding to any change to their rights and the gender equity, identification of the land parcel and the proof of their land right.

Apart from the formal requirements, the research revealed that Kamonyi Land Office request that sellers and buyers have to provide documents proving that the local authorities and neighbours had approved the ongoing transaction as a requirement before notarizing the sale agreement. This might imply that the notary is not sure that all objections to transfer land right and land disputes have been reported and registered in land registers.

5.2. Community awareness

In less than five years Rwanda recorded 10.3 million of land parcels with considerable resources gathered by both the Government and International development partners. These efforts invested in this Land Tenure Regularization Project were done with the aim of realizing a sustainable socio-economic development by reducing land conflicts, boosting the land market and increasing the capital for citizens.

To ensure the proper management and the maintenance of land information system, the effective participation of both the government and the landowners is crucial for the sustainability of the cadastre system and the attainability of the desired objectives. One of the research objectives was to know if citizens were aware of updating the land information system. The research showed that all participants in Kabagesera cell, 94.1% in Ruyenzi, 81.8 in Kagina, 80% in Muganza and 92.7% in Gihara cell confirmed to be aware and have heard about updating land information in case there are transactions taking place. This means that the majority of the participants to discussions are aware of reporting changes. These figures imply that the citizens are informed about reporting changes on their land right. The community awareness is a major tool to strengthen collaboration between actors involved in the process of land registration. According to Törhönen (2004) public information enables strong community participation in the process of land registration and develop community trust and consequently influence the citizens to provide information on their land rights. This is a positive factor in updating the cadastre system if there are no other constraints in the process of land registration.

5.3. Source of land information

Communication between land administration institutions and the community is a crucial factor in the sustainability of the cadastre system. The exchange of information influences the community perception of the benefits and maintaining a good relationship which leads to trust and mutual reliance. On the other hand, if there is no effective communication between the administration and the population there is a big risk that the benefits of land registration are perceived in different ways and the citizens' participation to update the system will not be effective.

The research revealed that the main sources of information are respectively the public campaigns of the adjudication process during the first registration (65%), the neighbours who have been part in transactions (25%) and radio emissions (10%). This means that during the systematic land registration the public campaign by the government played an important role of spreading land to the citizens. As this campaign was specific to the adjudication process of the first registration without details of the process of updating the land information system the citizens managed themselves to get information about the process of reporting the changes with their neighbours who have experienced or heard about the process. These sources of information are not always accurate and may sometimes mistake citizens' perception towards updating land information system. Unfortunately, most accurate and updated source of information (radio emissions) is used by a small number of citizens. In his research Agrarini (2011) revealed that the effective information medium is through village leaders, as the villagers do not have the culture of reading or many of them are uneducated. This might imply that if the land authorities provide updated materials such as brochures, posters and posters to the village leaders would be a valuable improvement in information provision to the citizens. The increasing number of users of Information Communication Technology,

more than 6.7 millions of subscribers of cell phones before September in Rwanda (RURA, 2013), is also an advantage to be exploited in spreading land information and making these information more accessible to more citizens.

5.4. Perceived benefits of updating land information

The perception of the community of the benefits of updating the land information constitutes a major factor influencing their participation to update the cadastre system. The benefits perceived by the citizens are mainly to ascertain the ownership on land, resolution and prevention of land conflicts both in families and between neighbours, increase the security of tenure, strengthening women right to land, proof of ownership in case of expropriation to get compensation and when. All these benefits are more oriented to their past experience before the systematic land registration.

Moreover, the Land Tenure Regularization Programme came up in a period where the government and financial institutions were heightening public awareness to form cooperatives so that they could stand for their guarantee to get loans for the small and medium enterprise. Land registration came as a solution to this concern and the citizens understand well this opportunity. The community had also the concern of inheritance where in Rwanda custom land ownership was a prerogative of men, land right were inherited from father to son, women were excluded from inheritance; the new constitution gave equal right to both children and land registration came as a tool of putting this into practice. Beside housing policy made compulsory to require a construction permit before developing any improvement on land, such as building residential or commercial houses, even for erecting a fence, to get this permit citizens have to prove the ownership right on the concerned land, this is proven only by a certificate of land registration.

These results show that the citizens have a positive perceived values of land registration which are in contrast with the findings of Singirankabo (2011) where he claims that the community participate in the adjudication process not necessarily because they understand or appreciate land registration, but because they feel obliged to participate and fear to lose their right on land. Two main reasons may be at the cause of the difference between these results. Firstly, the research of Singirankabo was conducted at the beginning of the adjudication process, the community had not yet digested the benefits of the program as the fieldwork was conducted after only one public campaign while this research came almost two years after, the citizens were given their certificates of land registration and attended at least three public campaigns. Secondly, this research came after the citizens had experienced the practices of land registration, demarcation process, correction and objection period where they had been part in solving some land disputes and some of the citizens had already used their land certificates as collateral in banks and others had made transactions (transfer of ownership or subdivision). These practices might play a major role in the improvement of their understanding towards the benefits of land registration.

5.5. Access to land services

One of the main factors to consider to make sure that changes are reported or recorded is that registration and related operations are easy, timeless, affordable and decentralized. One of the objectives of this research was to know how the respondents appreciate the services offered by the District Land Office. As described in the previous chapter, the respondents to the interviews are not satisfied with the time spent at the sector office due to a long queue of customers waiting to be served.

The waiting time is due to the fact that only one land notary is competent to notarize the sale agreement for the transfer of land title in the whole District and this is done one day a week in different sectors. Besides some of the customers have to travel for more than two hours before getting to the sector office, which makes the whole day to be spent for signing the sale agreement to transfer land rights. Beside the waiting time, the research revealed that the procedure of subdivision is also time consuming and costly. The citizens claimed that travelling distance from their cells to District level, which is at more than two hours from some cells is exhausting as they have to get there at least in three different times; for application, signing the extract of cadastral plan and to pick their land certificates.

This illustrates an institutional arrangements which may result in considerable obstacles to the efficiency of the process of the cadastre updating where only three persons are in charge of dealing with all transactions in person of one Director of the District land Office who is also the land notary and coordinates all activities in the office, one person in charge of land management and surveying and one in charge of community settlement in the District. This staff is very limited considering the size of 655.5 square kilometres and a population density of 404.8 inhabitants/Km² with 12 sectors, 59 cells (KAMONYI, 2013) with more than 400 000 land parcels. Therefore, during systematic land registration the citizens were used to get land registration services at cell level as it was the unit of adjudication now they find that it has been pushed far away from them. For Henssen (2010) the process of land registration must be clear and simple as complex and long procedures don't help users of the cadastre system and may result to force the citizens to avoid registering their land. If the citizens find the procedures and other arrangement tiring, they may lose interest in the system.

5.6. Affordability of the community to transaction costs

Transaction cost is one of the factors that may influence the community members to report the changes on their land rights. At this point, the participants to group discussions argued that the cost are not affordable to their level. But they confirm that it aggravated by transports and sometimes refreshments of the witnesses that they are obliged to bring to the land notary. Some interviewees met at the office on the other hands claimed that what is more costly for them is the waiting time spent before being served and sometimes they leave without being served and have to go back another day.

In this regards the fees should be fixed at a cost that the community members can afford and the institutional arrangement should be improved to make procedures and processes friendly.

According to Larsson (1991), it has been observed that when the cost of land registration are high, the citizens tend to avoid registering their land and delay the efficient maintenance of the cadastre system. These fees are not only the transaction costs, but also additional costs involved in the transaction based on the distance to cover. Considering that the collection of land taxes and fees are not the only aim of registering land. The fact that the cadastre system plays the function of information infrastructure to other development projects it is crucial that the government establish service fees affordable by the citizens, and if needs arise set a fixed cost at lowest cost. To overcome the constraints of time and long travel scholars propose decentralisation and one stop office and high level of computerization of services (Kaufmann *et al.*, 1998).

5.7. Limitations of the research

The Kamonyi District Land Officers were not able to provide figures of transfers and subdivisions conducted in Runda Sector after the Systematic Land Registration. Thus it's was not possible to realize how many transfers of land rights and subdivisions of land parcels had been conducted so far.

Due to the short time allotted to the fieldwork research and the rainy season, the group discussions were planned the same days as official meeting at cell office. During focus group discussions and interviews the participants did not want to be recorded or taken pictures. Only participants in three out of five cells accepted to be recorded.

6. CONCLUSION AND RECOMMENDATION

This chapter provides the conclusion of the research by sequentially describe the sub objectives to address the main objective of investigating the awareness and perception of the citizens towards procedural mechanisms of land registration for updating the Land Information System.

6.1. Conclusion

The research described the existing procedures and requirements of land registration to report changes in land information system in Rwanda, examine the community awareness and perception towards the benefits of land registration and the perception of the community regarding accessibility of land service delivery. The research covered five cells of the Runda sector in Kamonyi District of the Southern Province, namely: Gihara, Kagina, Kabagesera, Muganza and Ruyenzi.

Qualitative method using focus group discussions, interviews and field observation were used to understand the perception of the community towards land registration instead of quantifying the number of respondents to different research questions. The following three sub objective and 9 guiding questions enabled the research to conduct this research.

6.1.1. Sub objective one

Sub objective	Research questions
To describe the existing requirements and procedures of reporting changes	<ol style="list-style-type: none"> 1. What are the formal requirements for land registration? 2. Who are the actors involved in the land registration process? 3. What is the actual practice in land registration?

The government of Rwanda has put in place a land administration procedure manual detailing the processes to be followed and explaining the requirements to register different transactions with standard forms specific to every transaction containing a checking list of required documents basing on different law in place in order to update land information collected during the first registration and to ensure the uniformity of approach all over the country. The front desk office of all land transactions is the District Land Office but to get closer to the customers the Land Notary visit every week the sector office to notarize sale agreements.

However, Kamonyi District Land Office requests customers to provide an additional sale agreement signed by the buyers and sellers, their neighbours, their village representatives and approved by the cell executive secretary to make sure that there is no unregistered conflict or dispute which could be an objection to the transfer of land rights.

6.1.2. Sub objective two

Sub objective	Research questions
To examine the community awareness about updating the cadastre system and the perceived benefits of registering their land.	<ol style="list-style-type: none"> 1. Is the community aware of updating the changes in land right? 2. How did they get the information about updating the land information system? 3. Does the community understand the benefits of land registration?

The majority of citizens are aware about updating the cadastre system, about 89.2 respondents confirm to know that they have to report changes. The government public campaigns during the first registration constitutes the important source of information at 65 %, followed by the neighbours who had been part in a transaction at 25 % and radio emissions with 10%.

The citizens have a positive perception of the benefits of land registration. The main benefits enumerated by the citizens are: to ascertain right of ownership on land, to increase the security of tenure, strengthening women's right to land, to protect orphans' land rights and to use land certificates as collateral in case of mortgage.

The major factors influencing their perception are : their participation in the adjudication process during the systematic land registration, their past experience based on customary practices predominated with family conflicts, credits offered by financial institutions with land certificates as collateral and proof of ownership as prior condition to be compensated in case of expropriation and to get a construction permit. This research revealed that the citizens have increased awareness and positive understanding of the benefits of land registration compared to the results of Singirankabo (2011).

6.1.3. Sub objective three

Sub objective	Research questions
To understand the perception of the community regarding the accessibility to land services	<ol style="list-style-type: none"> 1. What are the community views on the accessibility of land services? 2. What are the views of the community on the affordability of the requirements for land registration? 3. How satisfied are the community with land service delivery?

The procedures for updating the cadastre system have to be clear, simple and customer oriented. This implies that the cadastre system should provide accurate and reliable service in a short time and the customers should not travel long distance to get services. This may hold back the relationship between the customers of the cadastre system and the trust of the citizens in the land office.

The research revealed that the citizens are not satisfied by the service delivery due to the long waiting time spent in queue waiting to be served, especially to notarize sell agreement as only one Land Notary ability to notarize the sale agreement in the District who is available once a week to serve the citizens in a Sector. Besides the waiting time the citizens don't understand why they have to bring two witnesses for signing the agreement as it causes more expenses. Moreover, the citizens claimed that the travelling distance to the District office is exhaustive and costly while they have to get there more than two times before getting new land certificates in case of subdivision. The researcher found that the number of staff serving in the District Land Office not sufficient to satisfy customers' demands.

6.2. Recommendations

This research covered only five Cells of Runda Sector with, this sample is a small proportion of the community perception towards land registration compared to the whole country, a further research using representative samples all over the country in different Districts and Province to extend the assessment of the community awareness and perception of updating the cadastre system at national level is recommended.

The study revealed that the major sources of communication of land information did not provide updated information and some are not reliable, It is proposed to establish a communication policy suitable to provide easy access to a reliable and update land information. The support of Information Communication Technology is highly recommended.

The decentralization of public land notary and surveyor services is recommended to reduce waiting time spent at the land office, travelling distance and travel costs.

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APPENDICES

Appendix 1: Certificate of Registration of Emphyteutic Lease



OFFICE OF THE REGISTRAR OF LAND TITLES

Certificate of Registration of Emphyteutic Lease

Order No: 12/2011 Concerning the Law and Regulations of Land in Rwanda; Ministry Order No. 402/2014 (G) of 2014 Concerning the Regulation of Land Registration, Article 17.8.14

UPI: _____

A. LAND PARCEL SECTION

Province: Western Province	Sector: KARAHU	Cell: RUSHYAKARA	Village: _____
Registration No:	Description/Land Use: Agriculture		Index Map No:
First Registration Date:			Index Map Parcel No:
			Approximate Area:

Entry No	Date	Instrument No.	Nature of real rights benefiting the property	Details of real rights benefiting the property	Signature and Seal of Registrar

B. PROPRIETORSHIP SECTION


Entry No	Date	Instrument No.	Name and Address of Proprietor(s)	Signature and Seal of The Deputy Registrar

C. CHARGES SECTION

Entry No	Date	Instrument No.	Nature of Charge	Details of Charge	Signature and Seal of Registrar

Appendix 2: Contract of emphyteutic lease

REPUBLIC OF RWANDA



OFFICE OF THE REGISTRAR OF LAND TITLES

UPI:

CONTRACT OF EMPHYTEUTIC LEASE N°

IN ACCORDANCE WITH Law n° 43/2013 of 16/06/2013 Governing land in Rwanda and the Ministerial Order N°001/2008 of 01/04/2008 Determining the Requirements and Procedures for the Land Lease;

BETWEEN The Republic of Rwanda, here represented by the Registrar of Land Titles (hereinafter referred to as "the Landowner") of one part,

AND the following person/s (hereinafter together referred to as "the Lessee") of the other part:

Lessee(s) Name(s)	Identity Number(s)	Share %
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Placed Address:

Representative: _____ Sector: _____
 Country: _____ Cell: _____
 Province: **Umutanga**
 District: _____
 Village: _____

Article 1: Right of Emphyteutic Lease. The Landowner grants to the Lessee, who accepts, the right of Emphyteutic Lease for a term of ... years on the parcel of land described as follows:

Province: _____ Parcel N° : _____
 District: _____ Area : _____
 Sector: _____ Town status : _____
 Cell: _____ Town category : _____
 Village: _____ Land Use: _____

Article 2: Purpose of the Lease.

The Lessee shall use the parcel of land for the purpose of _____.

Article 3: Duration of the Lease.

The Lease shall be for a term of _____ years, commencing from the date of registration of the Lease in the Land Register.

Article 4: Renewal of the Lease.

At the expiration of the term of the Lease, the Lessee has the right to renew the Lease for an equal period, subject to the approval of the Landowner and the Registrar of Land Titles.

Article 5: Rent.

The Lessee shall pay an annual rent of _____ to the Landowner, payable in advance on the _____ day of each year.

Article 6: Maintenance and Repairs.

The Lessee shall be responsible for the maintenance and repairs of the buildings and structures on the parcel of land, as well as the payment of taxes and levies.

Article 7: Transfer of the Lease.

The Lessee shall have the right to transfer the Lease to a third party, subject to the approval of the Landowner and the Registrar of Land Titles.

Article 8: Termination of the Lease.

The Lease may be terminated by the Landowner in the following cases:

- The Lessee fails to pay the rent for a period of _____ months.
- The Lessee uses the parcel of land for a purpose other than that specified in the Lease.
- The Lessee fails to maintain the buildings and structures on the parcel of land.

Article 9: Dispute Resolution.

Any dispute arising from this Lease shall be referred to the Registrar of Land Titles for resolution.

Article 10: Final Provisions.

This Lease shall be registered in the Land Register, and the Registrar of Land Titles shall issue a Certificate of Lease to the Lessee.

Signature

Signature

Appendix 3: Extract of Cadastral Plan

Extract of Cadastral Plan

ANNEX to Certificate of Registration of Emphyteutic Lease Title Page 3 of 3

EXTRACT CADASTRAL PLAN UPI 4/04/11/03/10


PROVINCE NORTHERN	DISTRICT BURERA	SECTOR KIVUYE	CELL MURWA
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MAP of parcel

NOTE
Parcel Map prepared based on General Boundaries Principle


Date	25-Feb-2011	Registrar/Deputy Registrar	MUNYANGAJU Damascene	Signature		Stamp
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Appendix 4: Certificate of Freehold Title



REPUBLIC OF RWANDA

OFFICE OF THE REGISTRAR OF LAND TITLES



CERTIFICATE OF FREEHOLD

TITLE

LAND PLEDGE SECTION

LPT: _____ Land ID: _____

Priority: _____

Reference: _____

Area: _____

PROFITSHARING SECTION

Date	Amount	Name	Address (or Municipality of Province)	Name of Recipient

CHARGES SECTION

Date	Instrument	Name of Debtor	Name of Creditor

EXTRACT CADASTRAL PLAN: LPT _____

Number/Corner	Area	Surface

Date	Name/Design/ Register	Signature	Stamp

Appendix 5: Diagram activity of the process of land subdivision

