

# IMPACT EVALUATION OF RURAL LAND TENURE PLANS ON LOCAL COMMUNITIES OF OUESSE DISTRICT IN THE CENTRAL BENIN

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## Abstract:

To investigate the effects of Rural Land Tenure Plans (RLTP) on rural communities of Ouesse District, in the central part of Benin, an impact evaluation study was carried out. The methodological approach was based on the Double Difference (DD) method. Data was collected from 329 people distributed in 17 villages of Ouesse according to an appropriate territorial sampling based on specific criteria. A comparative analysis of these villages highlighted the impacts of RLTP on local communities. It results from this study that the implementation of the RLTP has partially met most of the local communities expectations. In fact, the RLTP contributed to reduce drastically the land conflicts in all the beneficiary localities. In addition, land regularization in some villages such as Koko, Agboro-Koko, Agboro-Mogba, Boko, Hégbo has increased. The RLTP implementation has contributed also to facilitate the land management, access to agricultural credit in Gboko, Hégbo, Mogba, Tossa, Toui-Center, Botti-Hougbo and Koko. However, the RLTP implementation has led to a profound discordance between allochthones and autochthones.

**Key words:** Ouesse District, Rural Land Tenure Plans, land conflicts, impacts, local communities.

## 1. Introduction

Most of Africans live in rural areas and most depend on agriculture, including livestock, for their livelihoods. Secure and equal access to land is considered key to reducing rural poverty and stimulating rural development (Petraacco and Pender, 2009). Land also secures the production of food for people not directly involved in agriculture, and is needed for a myriad of other purposes, including infrastructure or human settlements. Consequently, there are frequent struggles over access to land and conflicts over the best uses to which land should be put. Fertile agricultural land is becoming scarcer as a result of environmental degradation, impacts of climate change, urbanization, to mention the most prominent (Moalic, 2014; Antwi-Agyei *et al.*, 2015).

Politicians have become aware of the need to draw up an inventory of land tenure rights (Gastaldi, 2006). In their attempt to achieve this, one can discern the influence of a modernist tendency which, adopting the hypotheses of orthodox economics, insists that traditional land tenure rights are an obstacle to agricultural development, inhibit investment, and make access to formal credit facilities more difficult – the latter being an indispensable condition for the introduction of modern, profitable production methods.

More particularly, the state of land management in Benin has been legally characterized by inflation of different taxes and at the institutional level, by a variety of structures whose interventions were based on different approaches. On the technical side, this management was characterized by a lack of appropriate tools for land management and, more particularly, by a dualism of land rights. Modern and traditional laws coexist. While the modern law preaches the pre-eminence of the state, the customary and tenure systems prioritize traditional authorities (Idrissi *et al.*, 2014). Chassagnon-Dominé (2012) documenting the consequences of this situation concluded that inappropriate state and tenure rights could lead to bottlenecks that can hinder the economic and social development of the country.

To overcome this situation and to bring to an end the legal land tenure dualism, new political and administrative land reforms have been adopted and promulgated in Benin in 2007. These aim at achieving formal property rights to land in rural and urban areas and to improve land administration and management. In addition, new tools such as Rural Land tenure Plans (RLTP) have been experimented during the last two decades.

From the implementation of RLTP in Ouesse District, it was expected that farmers and other development local actors, will invest in making their property more productive (without fear of not recouping investment because of losing access to the land). On the other hand, enhanced land tenure security will facilitate land transactions from less efficient producers to more efficient producers, raising productivity. In addition, capital constrained owners can use land as collateral to finance investments on parcel (Moalic, 2014; Pedersen, 2015).

Despite the widespread promotion of RLTP by governments and donor agencies in Benin these last two decades, there remains a purported lack of understanding of the expected benefits, and the contextual factors that may shape these benefits, demonstrated by practitioners. On the other hand, monitoring and examining the effects of these interventions were not carried out accurately to document the effects of these tools at local and regional levels, and their role in the development of the country. So the need to better understand the environmental, economic and social effects of these plans is felt more than ever. Hence, this research aims to answer the fundamental question: what have been the consequences of implementing RLTP throughout the country and more particularly in the Ouesse District?

Therefore, the present study attempts to investigate the effects of the RLTP on the rural communities of Ouesse District, in the central part of Benin.

The major contribution of this study is to support policy makers in implementing economic policies for sustainable rural land tenure system. Furthermore, the emphasis is to improve natural resource management and identifying factors for structural improvements. The main focus is to attain long-term development in land tenure management, which will bring growth in rural areas as well as in national economy.

## 2. Presentation of the study area

The District of Ouesse is located in the center of Benin ( Department of the Collines) between latitude 8 ° 06 'and latitude 8 ° 46' and longitude 2 ° 09 'to longitude 2 ° 52' (Figure 1). This study area is geographically surrounded in the South by the Commune of Savè, in the North by the Commune of Tchaourou, in the West by the Communes of Glazoué and Bassila, in the East by the Federal Republic of Nigeria.

The District of Ouesse relies on an old crystalline basement dating from the Precambrian. The geological formations of granito-gneissic elements have been eroded to generate a pleneplain with granite inselbergs, which is generally inclined from north to south with an average altitude of between 200 and 520 m (Adam *et al.* Boko, 1993). In total, two types of rocks, namely metamorphic rocks and eroded granite, characterize the study area. The presence of these rocks explained the dominance of the hills. The highest point culminated at 520 m. The entire Commune is dominated by ferruginous soil and hydromorphic soil good for agricultural production.

With an average annual growth rate of 3,40 %, the population increase has grown between 1985 and 2000 from 852 to 142,000 inhabitants in 2000. Within this study area, several ethnic groups coexist, Shari and Moba are the most important. The economic activities which occur in the localities in the area are agriculture, trade, fisheries, river transport and livestock. Agriculture is the main population. It is also noted the importance of natural formations. These availability and good quality of soils have attracted many agricultural migrants in the study area. Conflicts generated by the cohabitation between autochthonous and autochthonous populations have led to the implementation of the Rural Land Tenure Plans (RLTP). The 12 Villages of the study area that benefited from the RLTP are as follows: Botti Houégbo, Ogoutèdo, Toui center, Akpéro, Kombon, Agboro Idouya, Kokoro, Gbanlin, Vossa, Tosso and Idadjjo.

## 3. Methodological Approach

To fulfill the study objective, a three-stage methodological approach was framed as followed: In the first stage, an analytical study of specialized texts was performed in order to extract the theoretical principles and framework. Then, field studies were carried out utilizing a survey method with regard to the research topic and extensive examples. In the third stage of the research, the findings of the field studies were analyzed and concluding remarks came out.

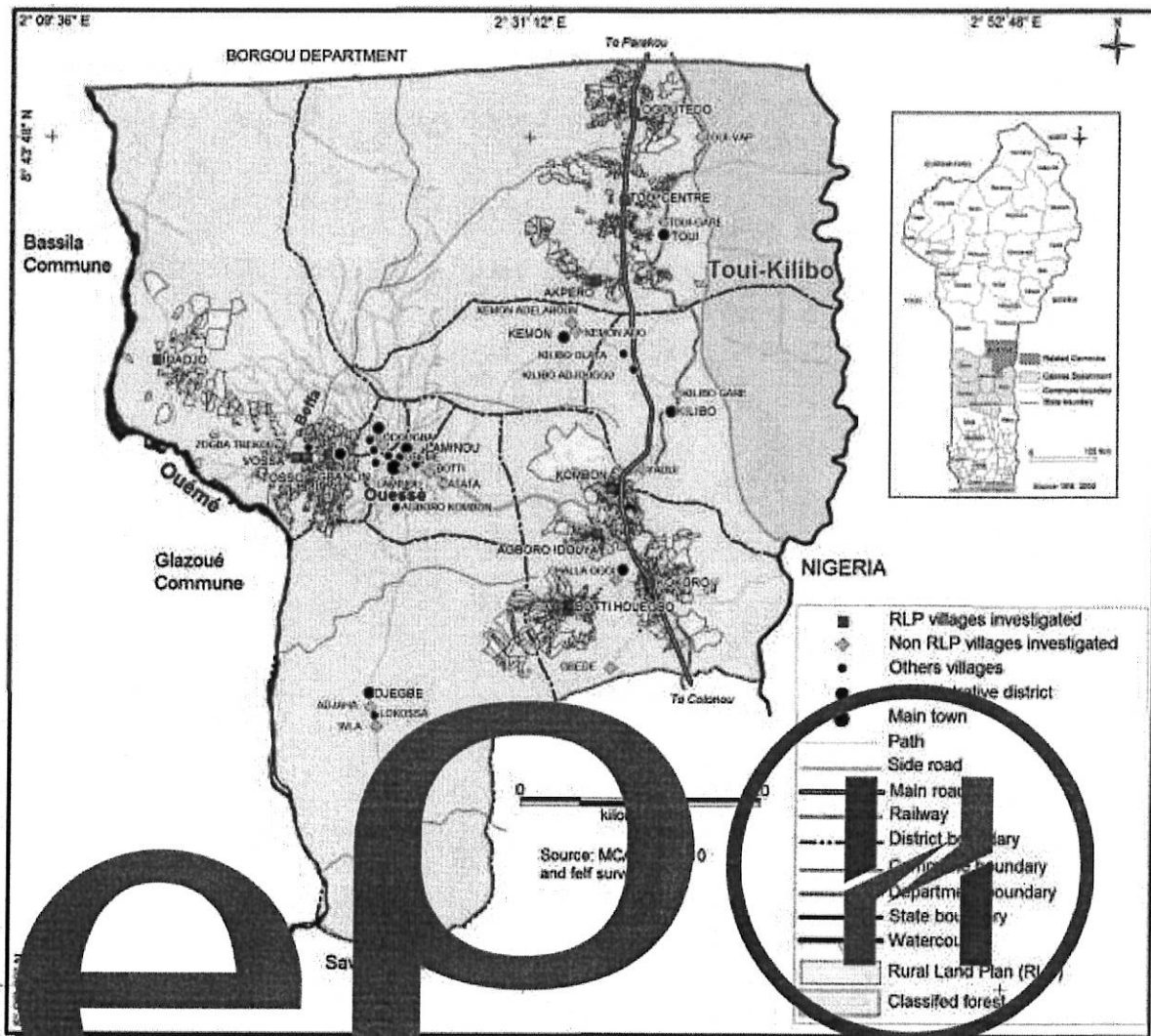


Figure 1: Location of the Municipality of Ouessè and villages that benefited from RLTP

The Evaluation uses a combination of qualitative and quantitative data, mainly obtained by reviewing the various reports available but also through stakeholder’s consultation. This ensured triangulation and verification of the results, which in turn improved the robustness of the findings. The two methods complemented each other in cases where quantitative data was inadequate. A combination of data sources, including literature review/desk research and the four-year panel data collected from a sample of households, were used.

A literature review was carried out. In this vein, public and private research institutions whose fields of activity are linked to land, RLTP, local development and decentralization have been visited. The virtual bibliography available on the specialized websites was also consulted, through the documents relating to the impacts of rural land plans on local authorities. Special attention were paid to studies and works carried out by international institutions such as the World Bank, the Netherlands Development Organization (SNV) and the Millennium Challenge Account (MCA), German Technical Cooperation (GIZ). In addition to above, the digital cartographic database on the PFR of the District of Ouessè developed by MCA-GIZ in 2010 was also used.



The sample of the population interviewed is determined by the reasoned choice method. It is made up of the various actors involved in this research and the resource persons from the different structures of the town halls whose activities relate to local planning, territorial animation, national and patrimonial management.

Field surveys were carried out throughout the District of Ouesse. Eligible Villages were selected by random assignment methods. First, villages were classified based on specific criteria for homogenous clusters: (i) Natural location and orientation; (ii) population; (iii) presence of land conflicts between allophones and autochthones populations. Then, the total population sample to be interviewed was determined. The selection criteria used in this research include: (i) being at least forty (40) years old, (ii) having lived in the locality at least for the last ten years before the survey, (iii) being a land owner. These criteria have been chosen because of the complexity of the land phenomenon which requires a certain degree of seniority for its understanding..

The size of the sample was determined according to the formula of Schwartz (1995) which is represented by Equation 1:

$$X = (Z\alpha)^2 \times p(1 - p) / i^2$$

With:

X = the size of the sample;

Zα = reduced deviation corresponding to a sampling rate of 95% (Zα = 1.96);

p = n / N; with n = proportion of the households of the twenty-seven (27) villages retained (n) in relation to the number of households in all villages of the commune of Ouesse.

The 5103/2186 = 69 or 31% p = 31%; desired accuracy equal to 5%.

The (1.96)² × (1-0.31) × 0.31 = 0.68 or 329 households distributed according to the selected villages. Table I presents the characteristics of the sample.

A total of 329 households were selected, ie 2.18% of the total number of households in the commune of Ouesse. In each household, the head of the household was interviewed, bringing the number of persons surveyed to 329. This number was proportionally distributed in the twenty-seven (27) villages according to the size of the households per village. The sampling rate of the villages is 71% of which 44% have benefited from the Rural Land Plans (Table II).

The interviewees were identified as follows: in the target village, the interviewee is selected from the first household located next to the village head / city headquarters. The following household is identified by adding a number of steps (Appendix 3) to the previously interviewed household. The number of steps is obtained by making the ratio of the total number of households in the municipality to the number of households in the borough concerned.

When examining Table 2, it shows that 16 villages that did not benefit from the RLTP, was also surveyed in the District of Ouessè in order to make a comparative analysis with the 11 villages that benefited from the tool.

Table 1: Distribution of sample by selected village

Districts	The selected villages	Number of households	Number of households interviewed
Ouessè	Attata	158	3
	Lakoko	330	7
Challa Ogoi	Agboro-Idouya*	313	7
	Agboro- Kombon*	477	10
	Kokoro*	732	16
	Botti-Houégbo*	274	6
	Challa Ogoi	321	7
	Gbédé	243	5
Djégbé	Adjaha	626	14
	Wla	475	10
Gbanlin	Idadjo*	552	12
	Gbanlin*	915	20
	Tosso*	152	3
	Vossa*	646	14
Kèmon	Akpéro*	386	8
	Kèmon	652	14
	Kèmon A	26	11
Kilibo	Ya		13
	Kilibo re	2	5
I	L	1	25
	I		13
Ogoi	Ogoi		21
	Tou	117	37
Tou	Tou e	634	14
	Tou p	315	7
	O	541	12
gba	N'gb	617	13
Total	27		

\*Villages that benefited from RLTP

Data source: field work (2016)

To establish a causal link in the comparative analysis of the impacts of RLTP in the villages of the Ouessè District additional data were needed, namely what would have happened on the beneficiaries (villages) of the RLTP in the absence of the latter. This hypothetical situation is called the counterfactual, which is a virtual situation, which would have occurred if the phenomenon whose causal impact we sought to measure had not occurred (Vermeersch, 2008). Double Difference (DD) method, which requires both baseline analysis and post-intervention analysis of the project and comparison group, was used (White, 2006).

The advantage of using the double difference method is that it nets out the effects of additive factors that have fixed (time-invariant) impacts on income indicator, or that reflect common trends affecting participants and non-participants equally such as changes in prices (Ravallion, 2005). The main strategy is to use data on a group of non-beneficiaries and to compare the results with those of the beneficiaries (Table 3).

Table 2: Category of households surveyed

District	Ouesse	Challa Ogoi	Djégbé	Gbanlin	Kemon	Kilibo	Laminou	Toui	Odougba
RLTP Villages		Agboro-Idouya, Agboro-Kombon, Kokoro, Botti-Houégbo		Idadjo, Gbanlin, Tosso, Vossa,	Akéro			Ogoutèdo, Toui,	
Villages not benefited RLTP	Attata*, Lakoko	Challa Ogoi, Gbébé	Djégbé, Adjaha		Kèmon*, Kèmon Ado	Yaoui, Kilibo gare	Laminou, Botti	Touigare, Touiwap	Odougba*, N'gbèhouèdo
Chief of the village	02	06	02	04	03	02	02	04	02
Native	10(4 farmers, 2 artisan, 2 Women, 2 exploiting)	30 (12 farmers, 6 artisan, 6 Women, 6 exploiting)	10 (4 farmers, 2 artisan, 2 Women, 2 exploiting)	20 (8 farmers, 4 artisan, 4 Women, 4 exploiting)	15 (6 farmers, 3 artisans, 3 Women, 3 exploiting)	10 (4 farmers, 2 artisan, 2 Women, 2 exploiting)	10 (4 farmers, 2 artisan, 2 Women, 2 exploiting)	20 (8 farmers, 4 artisan, 4 Women, 4 exploiting)	10 (4 farmers, 2 artisan, 2 Women, 2 exploiting)
Allochthonous	8 (2 farmers, 2 artisan, 2 Women, 2 exploiting)	24 (6 farmers, 6 artisan, 6 Women, 6 exploiting)	8 (2 farmers, 2 artisan, 2 Women, 2 exploiting)	16 (4 farmers, 4 artisan, 4 Women, 4 exploiting)	12 (3 farmers, 3 artisan, 3 Women, 3 exploiting)	8 (2 farmers, 2 artisan, 2 Women, 2 exploiting)	8 (2 farmers, 2 artisan, 2 Women, 2 exploiting)	16 (4 farmers, 4 artisan, 4 Women, 4 exploiting)	8 (2 farmers, 2 artisan, 2 Women, 2 exploiting)
Peul				8	6	4	4	8	4
Number investigated	24	72		48	36	24		48	24
COGEF	02 (CSAD, RDR)								
Mayor	01								

That Double Difference method compares the performance between both groups [D1] [D2]) also before and after the elaboration of the RLTP (figure 3).

Table 3: Double Difference Method

	Temps t = 0 (avant l'action)	Temps t = 1 (après l'action)	Différence
Participants (i =1)	Investissement = $Y_{1,0}$	Investissement = $Y_{1,1}$	$\Delta Y_1 = Y_{1,1} - Y_{1,0}$
Groupe contrôle (i =0)	Investissement = $Y_{0,0}$	Investissement = $Y_{0,1}$	$\Delta Y_0 = Y_{0,1} - Y_{0,0}$
			$\Delta Y_1 - \Delta Y_0$

DD = Income difference between the respondents

The development of the RLTP was treated as a treatment that affects only one municipality benefiting from the RLTP (this common group is called "under treatment"), the villages that

did not benefit from the RLTP constitute the control groups known as "under control". The experimentation of RLTP in these villages has impacts on all rural communities.

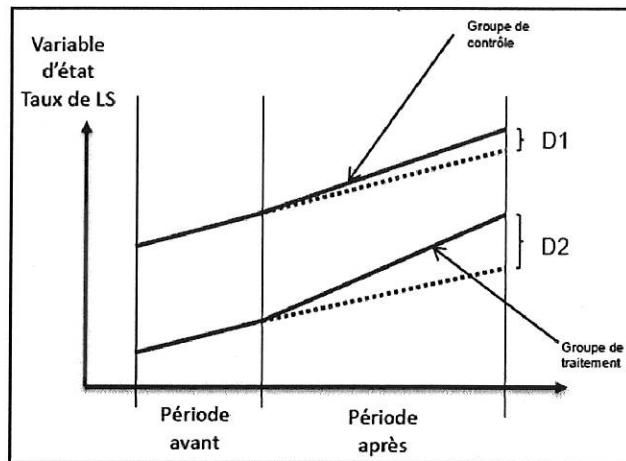


Figure 3: Comparison of the double difference performances

Source : Bilek *et al.*, 2009

In total, the impact evaluation was based on baseline data and subsequent three years annual household surveys using the average treatment effects framework. Data of the fourth year were also used to conduct this impact evaluation analysis that was based on Key Performance Indicators (KPI) such as household land holding size, agricultural productivity, food security and household income (Sarma *et al.*, 2010).

### 3. Results

#### 3.1. Implementation of RLTP in the Ouesse District

##### 3.1.1. Advantages of establishing RLTP in the municipality

Implementation of the RLTP is an opportunity for local land management. The RLTP have helped to reduce land conflicts, to manage land disputes, to clarify rights held on rural lands and secure rural land and land transactions. The kings, prior to the RLTP, were considered to be custodians of land throughout the customary territory, and they were the only ones who could sell the land in consensus with their committees. With the RLTP, the harvested lands were registered on behalf of their owners. Today, the King no longer has any rights over land registered in the name of their owners and no longer intervenes in case of sale. Owners have the right to dispose of land registered in the villages that have benefited from the LICs in the District of Ouesse; which is not the case in villages where the operation has not been implemented. The implementation of VMS is an opportunity for the village community to be involved in local land management. Figure 3 shows the benefits of RLTP in the village of Ouessè.



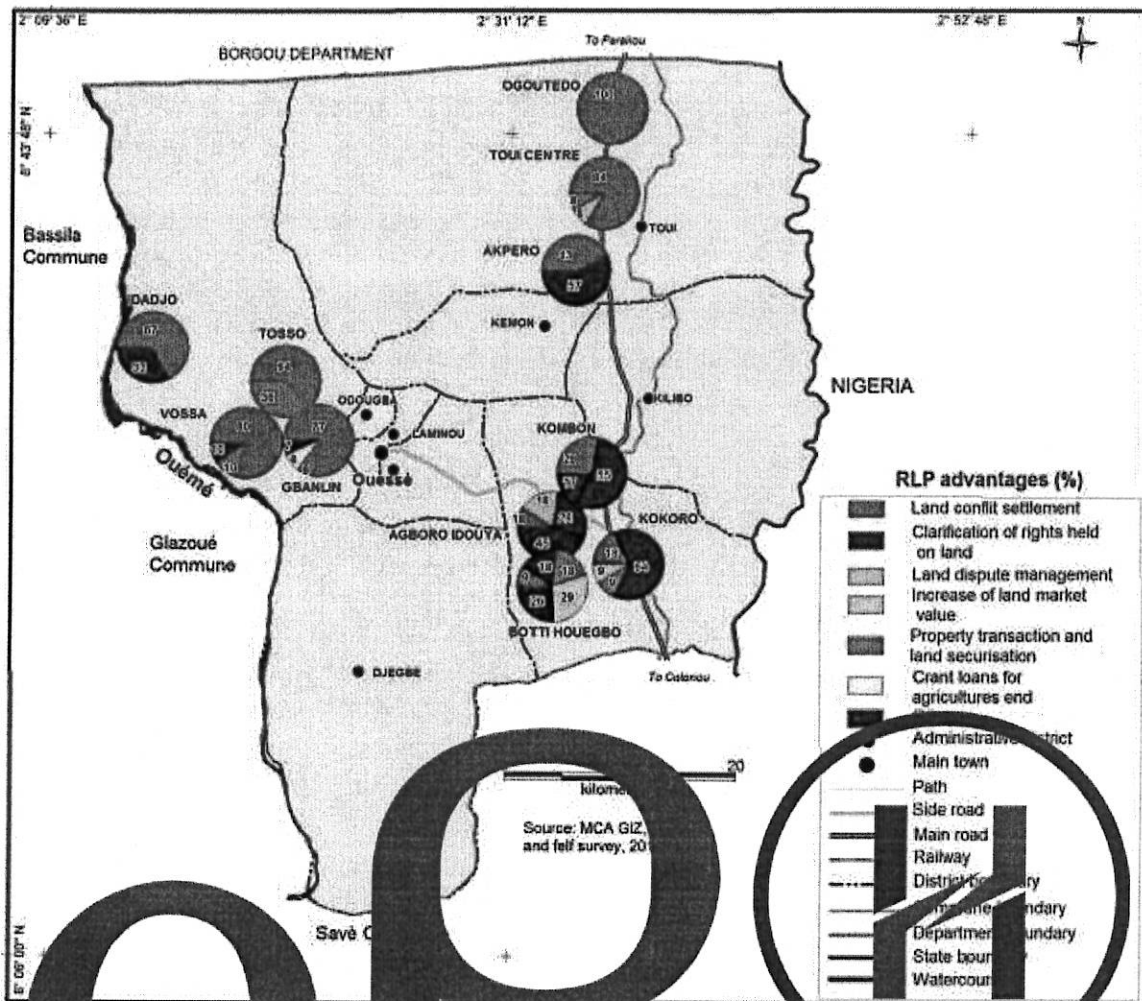


Figure 4. Perception of population according to the advantages of RLTP in the Commune of Ouessè

From the analysis of Figure 4, it appears that the benefits of RLTP are numerous. They contribute to the reduction of the number of land disputes in all the beneficiary localities and to the clarification of the rights of prisoners on rural land in the villages of Kokoro, Agboro-Kombon, Agboro-Idouya and Botti-Hougbo. Other benefits related to land conflict management, facilitating access to agricultural credit in Gbanlin village, facilitating access to agricultural land and increasing the market value of land in villages such as Tosso, Gbanlin, Vossa, Toui-Center, Botti-Hougbo and Kokoro.

A comparative analysis at the level of the RLTP villages and the non-RLTP villages of the manifestations of land conflicts makes it possible to understand that RLTP have not always contributed to the reduction of manifestations of land conflicts (Figure 4).

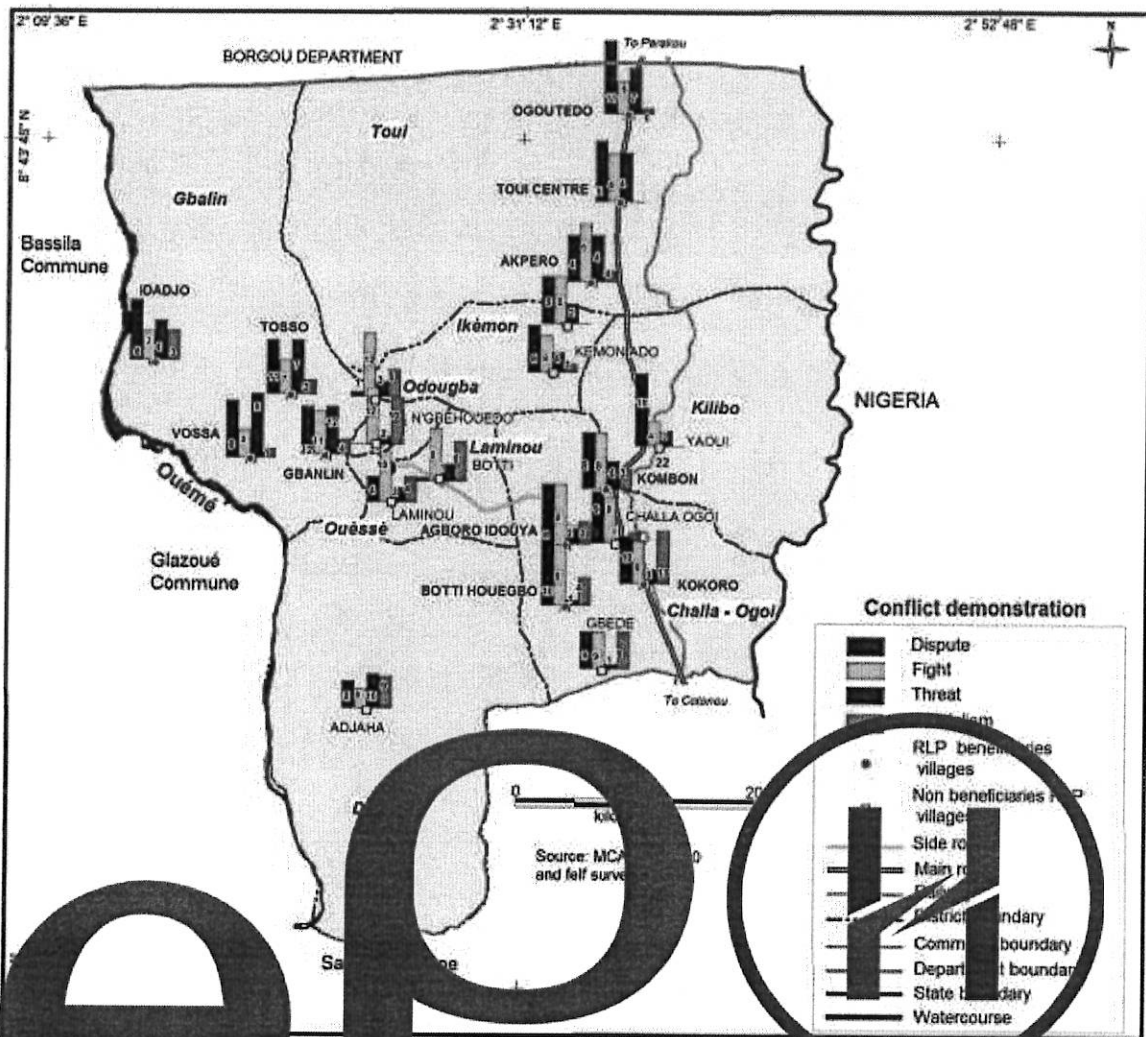
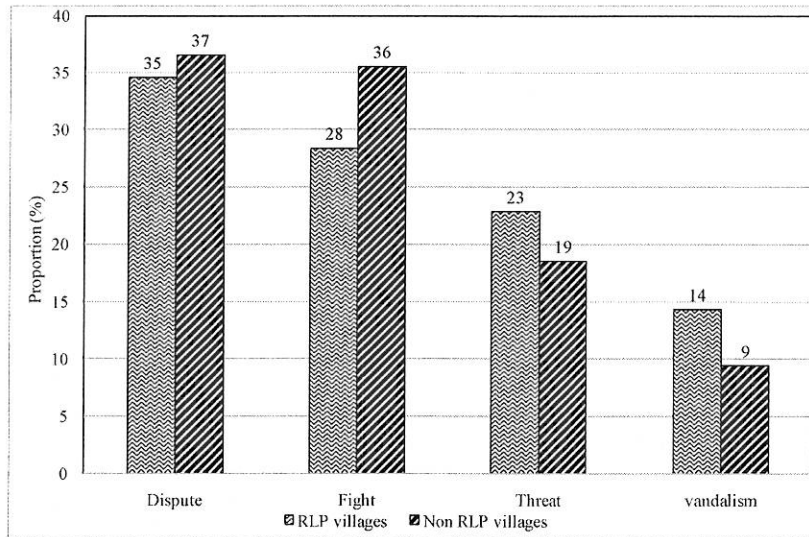


Figure 5: Manifestations and resolution of land conflicts in the villages of Ouessè Commune

From the analysis of Figure 5, it is difficult to conclude that manifestations of land conflicts are more pronounced in RLP villages than in non-RLTP villages. Nevertheless, it is observed that some RLTP villages such as Ogoutèdo and Botti-Houègbo recorded more quarrels and fights, while non-RLTP villages such as N'Gbèhouédo, Laminou and Odougba were marked by more vandalism.

To better understand the weight of each event according to the two categories of villages considered the synthesis of the manifestations of land conflicts in the villages of the Ouesse have been integrated in figure 6.

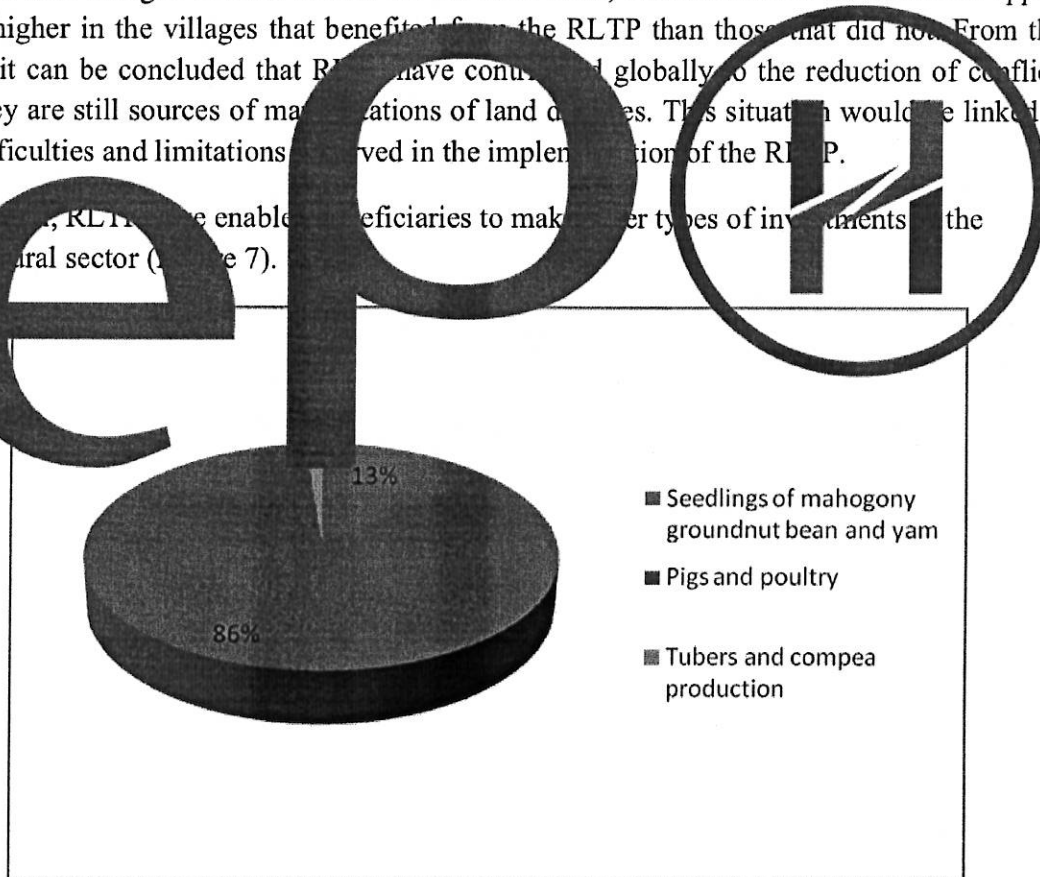


**Required parameters are missing or incorrect.**

**Figure 6:** Synthesis of the manifestations of land conflicts in the villages of Ouessè

From the analysis in Figure 6, it appears that disputes and fights are more prominent in RLTP villages than villages without RLTP. On the other hand, threats and acts of vandalism appear to be higher in the villages that benefited from the RLTP than those that did not. From this point, it can be concluded that RLTP have contributed globally to the reduction of conflicts but they are still sources of manifestations of land conflicts. This situation would be linked to the difficulties and limitations observed in the implementation of the RLTP.

In addition, RLTP have enabled beneficiaries to make other types of investments in the agricultural sector (see Figure 7).



**Figure 7:** Types of investments made by RLTP

From the analysis in Figure 7, it appears that RLTP have enabled beneficiaries to realize and increase investments in poultry and pig farming according to 86% of respondents; And also in the production of legumes, tubers and cashew nuts.

**3.1.2. Problems generated through setting up the RLTP in the District of Ouessè**

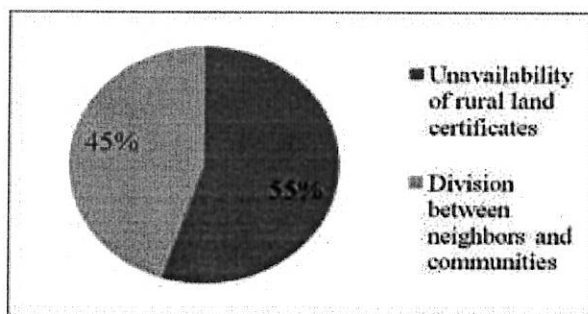
Although the RLTP have given rise to several advantages, they have nevertheless had social disadvantages.

The RLTP has been at the roots of social division between indigenous and non-native peoples within the village community, between neighboring villages and between members of the same lineage or community. They have contributed to weakening the traditional chieftainship by the individualization of agricultural land and their commodification. In addition, the emergence of a new class of "landless" in their own villages of origin and increased hoarding of agricultural land acquired from village communities was observed. In addition, outbreaks of latent conflicts of field or village boundaries were also recorded as a result of the implementation of RLTP.

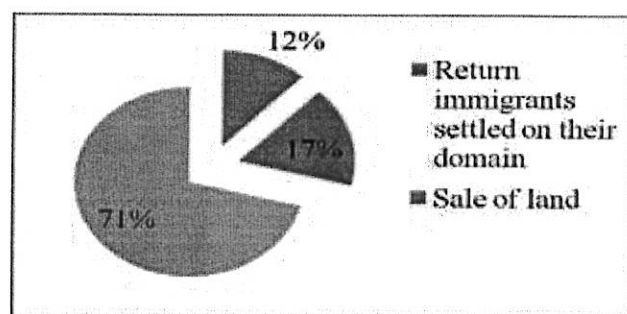
According to interviewees, with the RLTP implementation, they have to ask permission from the landowner before cutting abandoned trees in their land. They were obfuscated because before the RLTP implementation, wood tree was a public good which everyone could have free access. Thus, the right to harvest wood has changed land status: it has gone from a public good to a private good that the holder can delegate with or without consideration. In this vein, as cutting wood for charcoal is an increasingly profitable activity and charcoal producers are foreigners or women, the customary owner shows that he registered his plot at the RLTP.

Disputes arising from survey operations include but are not limited to disputes over boundaries, disputes over property rights, etc. These conflicts used to be resolved between main actors of different lineages: between family dependents, between neighboring farms, between several lineages, between indigenous farmers and herders, between villages, between migrants and...

Analysis of these disputes shows that the problems arising from the implementation of the RLTP are diverse. Land disputes have arisen between different strata of the community, indigenous and non-indigenous farmers and ranchers, landowners and non-owners, etc. Figures 7 and 8 show the difficulties and disadvantages caused by the RLTP. These difficulties are almost similar in all municipalities where the RLTP have been implemented. However, the conflicts that have arisen have been resolved amicably in most cases.



**Figure 8:** Difficulties caused by RLTP



**Figure 8:** Disadvantages caused by RLTP

The results obtained are similar to those of Idrissou *et al.* (2014), who emphasized that the installation of RLTP has resurrected and exacerbated conflicts in which the communities did not attach much importance and which the populations supported without great harm (limits of village and communal terroirs, limits of neighboring fields) because of the interests at stake in the appropriation of land. Law 2007-03 of October 16<sup>th</sup> 2007, which carried its own instances and procedures of management of the conflicts, left the old and evident ways of achievement because of the fear of the mysterious gods and the ancestral practices that perceived.

The traditional instances and modes of managing conflicts over customary land were core conflicts of our times that remain of the problems in the RLTP villages. While there are many obstacles to the application of new and diversified approaches, they are obviously of interest and have a real impact on the evolution of the capacity of rural societies to manage land resources (Merlet, 2002). Moalic (2014) finds that there are confrontations between representatives of the RLTP (particularly in terms of areas of application of the scheme, the value of rural registration and the value of the CPF) in national debates.

Moreover, RLTP have been at the origin of a social divide between natives and non-natives within the village community, between neighboring villages and between neighboring communes, between members of the same lineage or community. Socio-land-based configurations have undergone many changes with an increase in the monetarization of land rights and thus increasingly difficult access to land.

## Discussion

The Rural Land Tenure Plan (RLTP) has been designed to facilitate the securing of local level of land that have been accustomed or are held according to local custom and practices. However, RLTP activities have been implemented for improved land conservation and land registration (Merlet, 2002). Therefore, RLTP has to be developed according to a procedure, led by a technical team, to produce two (02) complementary documents: (i) the plot plan which is a graphic document of each land unit mapped and identified in a village terroir, and (ii) the register that is a copy of the mapped units, the modes and characteristics of the rights held and the holders of these rights (Charles-Dominé, 2012). In practice, the development Process of a RLTP (Table 1) is in accordance with the process used in Côte d'Ivoire to set up the national land use tenure plan (Goldstein *et al.*, 2013; Moalic, 2014).

Idrissou *et al.*, (2014) described the RLTP as an inventory of rural lands and the registration of related rights and their holders in order to meet individual and collective needs for security of tenure, planning and investment. This information constitutes the bank for the land information system by which land certificates can be generated and delivered by the town hall to the rightful owners. In this vein, research on a titling intervention in China (Chen and Innes, 2013) noted that title holders experienced an increased sense of responsibility to utilize their land more sustainably, whilst from a study in Ghana (Antwi-Agyei *et al.*, 2015) it was found that those renting land reported how they had little incentive to invest in the long-term conservation of the land they were using.



Table I: Process of development of a Rural Land Tenure Plan (RLTP)

Steps	Responsibles
1. Conduct of a micro-regional diagnosis to understand the economic and socio-land dynamics in the study area	Technical team RLTP
2. Organization of public awareness and awareness campaigns on the RLTP tool (usefulness and development procedure)	Technical team RLTP
3. Request for the development of a PFR addressed to the mayor by the village	Village
4. Taking of the decree of opening of the RLTP and the setting up of the Village Management Section (VMS)	Mayor
5. Elaboration of a lexicon of land-related terms to avoid biases or errors during the procedure	Technical team RLTP
6. Conducting a village-level land diagnosis to assess the feasibility of developing a RLTP	Technical team RLTP
7. Conducting topo land surveys of plots benefiting from the RLTP	Technical team RLTP
8. Publication of the provisional RLTP (plot plan, list of beneficiaries) for consultation by populations	VMS (Collects observations) + technical team RLTP
9. Development of the final RLTP on the basis of observations and oppositions expressed during advertising	CoGeF (Mediations) + technical team PFR
10. Issuance of land certificates to owners of parcels in accordance with the developed RLTP	Mayor

Source: Idrissou *et al.* (2014) and field investigation, September 2016

In the first steps (2005), the generalization that secure property rights is essential for investment and growth ignores the disturbing fact that the manner in which recognition of asset possession and ownership is created, transferred, altered, challenged and gradually consolidated is poorly understood". Therefore, from what was presented, it appears necessary that the implementation process has to be well followed so that to yield accurate results.

From the RLTP implementation, effects from outputs could be summarized as follows: (i) facilitate access to land for more secure and productive land tenure, (ii) provide access to financial services by enhancing credit facilities and grants given to micro, small, and medium enterprises; (iii) access to justice by bringing courts closer to rural populations and improve court functioning will be also facilitated; (iv) access to markets by eliminating physical and procedural constraints to the flow of goods including low investment in land, thin rural credit markets, many and diverse conflicts over and unequal access to land and tenure insecurity; (v) secure rural land rights and to facilitate access to credit so as to promote effective land development and investment and to reduce land conflicts in rural areas. These are in line with the statements raised by Ouédraogo *et al.* (2005), Petracco and Pender (2009). Pedersen (2015) added social benefits expected such as increased female empowerment, through providing women with private or joint access to secured land.

Links between RLTP activities and outputs with their expected outcomes have results into the change such as: a greater sense of security over land, increased access to land among beneficiaries. However, as preventing Fenske (2011), the expected effects are far from linear

with synergies existing at each stage, such as the link between the increased credit access and increased investment outcomes, which can jointly contribute to the expected impacts of increased productivity, income and food security.

Table II: Changes induced by RLTP Implementation

Output	Immediate outcome		Intermediate output	Long-term Outcome
Access to Financial Services			Access to credit	More jobs
Documentation of land right in rural areas	Land ownership formally recognized	Land used as collateral	Enterprise formation & expansion	Higher incomes
Access to Justice	Improved ability to enforce contracts	Improved perception of land security	Increased investment in land	Better living conditions
Enhanced land tenure security		Fewer disputes	Increased transaction to more productive owners	Stimulate rural development

In total, the productivity, income and food security impacts produced by increased credit and investment will contribute to a reduction in land degradation through long-term conservation investment. In addition, if properly managed, land-related conflict is also expected to decrease, creating increased community cohesion and cooperation, being stimulated by secured titling and demarcation activities reducing the propensity for conflict, and institutions strengthening improving the resolution mechanisms when conflicts do occur. Reduced conflict will also improve productivity and income generation and stimulate rural development (Wahneema 2006).

#### 4. Conclusion

Implementation of the RLTP certainly encountered difficulties, but beneficiaries have generally accepted it. The RLTP contributed to the reduction and management of land conflicts in the villages where it was operationalized. Rural land is better secured through rural land certificates and land ownership certificates, and land transactions have become easier to do. With the RLTP implementation, farmers got easier access to credit for agricultural purposes. However, new problems were generated by the installation of RLTP. These problems include among others: (i) the social division between indigenous and non-indigenous people; (ii) the weakening of traditional chieftdom by the individualization of agricultural land and their commodification; (iii) the emergence of a new class of "landless" in their own villages of origin and the increased hoarding of agricultural land and the resurgence of latent conflicts of boundaries of fields or villages / districts.

In total, with the RLTP implementation, all transactions and land transfers in rural area have to be formalized. In the District of Ouesse, after three years of implementation, although the process of the RLTP has not come to a total end so as to permit all the landowners to possess a Certificate of Ownership Property (COP), RLTP has permitted many changes to occur in the land security.

## References

- Adam K. S. et Boko M. (1993): The Benin. Manual of Geography, EDICEF / Flamboyant, 2nd edition, 95 p
- Ali, D. A., Deininger, K. and Goldstein, M. (2014): Environmental and gender impacts of land tenure regularization in Africa: Pilot evidence from Rwanda, *Land and Property Rights*, Vol 110, pp. 262-275
- Ameha, A., Nielsen, O. J. and Larsen, H. O. (2014): Impact of access and benefit sharing on livelihoods and forest: Case of participatory forest management in Ethiopia, *Ecological Economics*, Vol 97, pp. 162-171.
- Antwi-Agyei, P., Dougill, A. J. and Stringer, L. C. (2015): Impacts of land tenure arrangements on the adaptive capacity of marginalised groups: The case of Ghana's Ejura Sekyedumase and Bongo districts. *Land Use Policy*, Vol 49, pp. 203-212
- Baker, J. (2000): Evaluating the impact of development projects on poverty: A handbook for practitioners. *Directions in Development*, World Bank, Washington, D.C. 20 pp.
- Charles-Dominé J. (2012): Challenges and dynamics of geographic information in the governance of the urban territories of Benin. The urban land registry: a new tool and its practices in the context of decentralization. Doctoral Thesis in Geography. University of Provence - Aix-Marseille I, HA 136 p.
- Fenske, (2015) "Land tenure and investment in West Africa: Evidence from West Africa." *Journal of Development Economics* 95.2 (2015) 137-156.
- Goldstein M., Hounkbedji K., Kondylis F., O'Sullivan M., Selod H. (2013) "Formalizing rural land rights in West Africa: Evidence from a randomized impact evaluation in Benin." *CSAE Conference 2013: Economic Development in Africa 17th - 19th March 2013*, St Catherine's College, Oxford
- Idrissou A. H., Wennink B., Baltissen G. and Obura F. (2014): Rural land governance in Benin. Civil society is committed. SNV Benin, Cotonou, 68 p.
- Koumassou T. (2010): Actor strategy and management of land ownership by local authorities: case of the Klouékanmè commune. Master thesis, CNAM, 110 p.
- Kumari, R. and Nakano, Y., 2015. Does land lease tenure insecurity cause decreased productivity and investment in the sugar industry? Evidence from Fiji. *Tsukuba Economics Working Papers No. 2015-001*.
- Kuusaana, E. D. and Bukari, K. N., 2015. Land conflicts between smallholders and Fulani pastoralists in Ghana: Evidence from the Asante Akim North District (AAND). *Journal of Rural Studies*, Vol 42, pp. 52-62.

Merlet M. (2002): Book of proposals for land policies and agrarian reforms. IRAM (France) and APM Networks, 134 p

Moalic A.-C. (2014): The local challenges of formalizing land rights in rural Africa: Analysis of the diversity of appropriations and reinterpretations of the PFR system: Case of the municipalities of Dassa and Savalou, Department of Hills in Benin. Final dissertation, IRD, ISTOM, 106 p.

Mozaffar F., Hoseini SB., Soleimani M., Tarkashvand A., Sarmadi AK. (2008): Impact evaluation of implementation of rural development plans on environment of rural areas. *Environ Sci* 5:11–32.

Norouzian Maleki S., Karimi Azari AR. (2010): Evaluation of rural development plans, Markazi Province. In: 1st International conference on rural settlements, 18–19 May, Tehran, Iran, pp 319–328

Ouédraogo H. M. G., Edja H., Koné M. and Thiéba D. (2005): Comparative study of the implementation of rural land plans in West Africa: Benin, Burkina Faso and Côte d'Ivoire. Legal study, FAO, Rome, Italy, 41 p.

Pedersen, R. H. (2015): A less gender-equal world? The impact of Tanzania's new wave of land reform, *Development Policy Review* 33(4), p. 415–432.

Petracco, C. K. and Pender, J. (2009): Evaluating the impact of land tenure and titling on agricultural credit in Uganda. *IFPRI Discussion Paper* 00353.

Sarker, K., Raha S., Jorgensen M. and Mia M. (2015): Impact analysis of beef cattle agribusiness income on rural livelihoods: a case approach. *J. Bangladesh Agril. Univ.* ISSN 1875-3030

SNYDER (2013): Diagnostic study of the challenges and effects of the installation of rural development plans and the issuance of rural land certificates on the experiences of the beneficiary populations. Cotonou, 128 p.

Vermeersch C. (2008): Estimation in Different Differences (Diff-in-diff) and Panel Data. World Bank, 13 p.

White H. (2006): Impact Evaluation: The Experience of the Independent Evaluation Group of the World Bank. Washington D.C., World Bank, 58 p.