MARC DESCÔTEAUX

THE ROLE OF LAND POLICIES IN MANAGUA

SUPERVISED RESEARCH REPORT

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Abstract

Most of the third-world countries have experienced a proliferation of urban slums; resolving this multifaceted issue represents one of the major challenges of the 21st century. This paper illustrates the processes underlying the formation of these precarious neighbourhoods in the case of Managua, the capital of Nicaragua. A focus on land policies is used both to explain the problem and to propose solutions to this pressing issue. Initially, this research involved an extensive review of the literature, data, laws and policies concerning the informal neighbourhoods of this metropolis. This information was complemented with visits to various precarious settlements, a survey of their inhabitants, and interviews with key actors in order to draw a comprehensive portrait of the situation. Secondly, papers written by land-policies experts and a few precedents are reviewed with the goal of develop and recommend a strategy for resolving the *problématique* of Managua. The recommended policy involves a series of tools and an approach that foster the participation of the different stakeholders and communities touched by this phenomenon. From the many lessons that can be drawn from this report, an important one is that it is more advantageous to ensure a sufficient provision of affordable housing rather than regularizing the spontaneous human settlements originating from such a shortage.

Résumé

La plupart des villes du tiers-monde connaissent une prolifération de bidonvilles; résoudre ce problème complexe représente sans doute l'un des grands défis du 21^e siècle. Le présent rapport illustre les processus sous-jacents à la formation de ces quartiers précaires à l'aide du cas de Managua, capitale du Nicaragua. L'angle des politiques foncières a été adopté aux niveaux de l'analyse et de l'apport de solutions. Dans un premier temps, cette recherche a nécessité une revue de littérature, de données, des lois et des politiques concernant le développement informel de cette métropole. Ces informations ont été complétées par des visites dans plusieurs quartiers précaires, une enquête auprès de leurs habitants ainsi que des interviews avec des acteurs-clé, le tout dans le but de dresser un portrait complet de la situation. Dans un second temps, j'ai fait appel à des documents émanant d'experts en matière de politiques foncières ainsi qu'à quelques exemples dans le but de recommander une stratégie pour résoudre le cas de Managua. La politique que je suggère implique non seulement une série d'outils, mais également une approche axée sur la participation des différents acteurs et communautés touchés par ce phénomène. Plusieurs leçons peuvent être tirées du présent rapport et l'une des principales est qu'il vaut mieux assurer la disponibilité de logements abordables au lieu de régulariser les établissements humains issus d'une telle pénurie.

Resumen

La mayoría de las ciudades del tercer mundo enfrentan una proliferación de *favelas*; resolver este problema complejo representa uno de los retos principales del siglo 21. Este informe muestra los procesos subyacentes a la formación de estos repartos ilegales, usando el caso de Managua, la capital de Nicaragua. Un enfoque sobre las políticas de suelo es elegido para explicar el problema y para brindar soluciones. En un primer tiempo, esta investigación necesitó una revista de literatura, datos, leyes y políticas sobre la urbanización informal de esta metrópolis. Esta información fue complementada con giras en asentamientos humanos, una encuesta y entrevistas con diferentes personas clave, con la meta de producir un análisis completo de la situación. En un segundo tiempo, utilicé documentos escritos por expertos en materia de políticas de suelo y unos ejemplos para recomendar una estrategia para Managua. La política que sugiero no solo involucra una serie de herramientas, sino también un proceso participativo incluyendo las diferentes personas y comunidades tocadas por este fenómeno. El presente informe brinda varias lecciones, de las cuales una muy importante es que es mejor asegurar la disponibilidad de vivienda para familias de bajos ingresos que de tratar de regularizar los asentamientos espontáneos formados por esa escasez.

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Acronyms

ALMA: Alcaldía de Managua (City of Managua)

CCRN: Código civil de la República de Nicaragua (Civil Code of the Republic of Nicaragua)

CTU: Comisión de Titulación Urbana (Urban Titling Commission)

EDCU: Estrategia de Desarrollo de los Centros Urbanos (Strategy for the Development of Urban Centers)

FSLN: Frente Sandinista de Liberación Nacional (Sandinista Front for National Liberation)

GIM: Groupe Interuniversitaire de Montréal (Interuniversitary Group of Montreal)

IDB: Inter-American Development Bank

INETER: Instituto Nicaragüense de Estudios Territoriales (Nicaraguan Institute for Territorial Studies)

INIFOM: Instituto Nicaragüense de Fomento Municipal (Nicaraguan Institute for Municipal Development)

INVUR: Instituto de Vivienda Urbana y Rural (Urban and Rural Housing Institute)

MCN: Movimiento Comunal Nicaragüense (Nicaraguan Communal Movement)

MINVAH: Ministerio de Vivienda y Asentamientos Humanos (Ministry of Housing and Human Settlements)

NGO: Non-Governmental Organisation

OCI: *Oficina de Cuantificación de Indemnizaciones y Sistemas de Compensaciones* (Office for Quantification of Indemnities and Systems of Compensations)

OTU: Oficina de Titulación Urbana (Urban Titling Office)

OOT: Oficina de Ordenamiento Territorial (Territorial Planning Office)

UN: United Nations

PAAEM: Programa de Atención a los Asentamientos Espontáneos de Managua (Program for the Enhancement of Spontaneous Settlements of Managua)

PRU: Programa de Renovación Urbana (Urban Renovation Program)

PUE: Plan Urbanístico Especial (Special Urban Plan)

Notes to the Reader

In this text, the masculine is used to lighten the sentences.

All the interviews, all the official documents from Nicaragua and a part of the literature are originally in Spanish. Translations from this language to English are of my own.

The Research Ethics Board I of McGill University granted a Certificate of Ethical Acceptability of Research Involving Humans (REB File #: 58-0709) for the field survey and the interviews performed during the summer of 2009 in Nicaragua.

The Role of Land Policies in Managua

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The Role of Land Policies in Managua

I believe the discussion of informal urban land development is of interest to all concerned about matters of social justice and human rights, as well as the conditions for market expansion in the context of economic globalization.

- Edésio Fernandes (2002b)

(...) the unequal ownership of land necessitates the unequal distribution of wealth.

There is on earth no power which can rightfully make a grant of exclusive ownership in land (...) For what are we but tenants of a day? Have we made the earth, that we should determine the rights of those who after us shall tenant it in their turn?

- Henry George (1879: 329, 339)

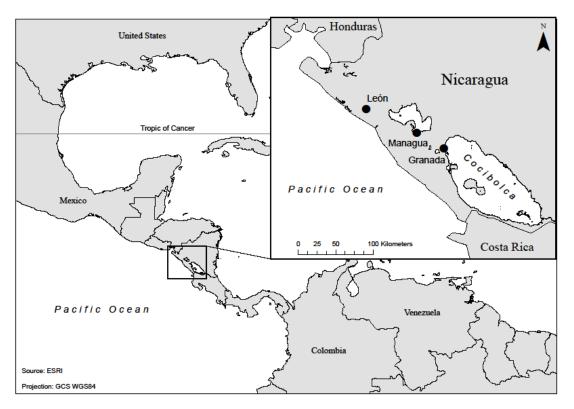
1. Introduction

1.1 Definition of the Problem

During the last decades, urban populations have increased tremendously throughout thirdworld countries. However, such a growth has not been planned properly and informal settlements have proliferated in many places. These neighbourhoods are, unfortunately, characterised by a lack of public services, dwellings built in hazardous locations with substandard construction, sanitation and services, lack of land tenure¹ security and extreme poverty (UN-HABITAT, 2005). The target 11 of the Millennium Development Goals is indeed "to improve substantially the lives of at least 100 million slum dwellers by 2020, while providing adequate alternatives to new slum formation" (ibid, 2006: 24).

In Latin America, only 60 percent of the dwellings are considered adequate for housing (ibid, 2005); in Nicaragua (Central America), this number is as low as 22 percent (*Encuesta Nacional de Medición del Nivel de Vida*, 2001 cited in UN-HABITAT, 2005). The capital, Managua, has 300 informal settlements, encompassing around 44 000 dwelling units (Parés, 2006). Figure 1 shows the location of this city on the South Shore of Lake Managua (also called *Xolotlán* by the locals). The proliferation of these precarious neighbourhoods is seen as one of the most pressing problems by the city of Managua (ALMA, 2002). The causes of this phenomenon are various: the devastating earthquake of 1972, the escape of farmers from a countryside ravaged by the Contra War in the 1980s, hurricane Mitch in 1998, the natural increase of population and political factors (Obando, 2006).

¹ According to the Merriem-Webster dictionary, tenure is "the act, right, manner, or term of holding something (as a landed property, a position, or an office)".





In order to improve the situation, regularization of informal settlements has been and continues to be implemented with little success and with high costs. This solution, which consists in upgrading slums and granting individual freehold land titles to the inhabitants of these precarious neighbourhoods, might not be the recipe to alleviating poverty. Policies related with land management² and administration³, such as access to land, land taxation and flexible land use regulations, altogether with community participation, could help in improving the housing conditions of the urban poor. The UN-HABITAT (2005: 7) recognizes that "security of tenure is one of the most important land rights issues and is perhaps the central question in the analysis of the right to housing and land". However, questions of land and tenure security are among the "more contentious and complex problems in the world" (ibid, 2006: 3). In addition, the influence of land tenure on urban land has received little attention in comparison with its rural counterpart (Field, 2005).

As a matter of fact, this issue is quite difficult to deal with, but it necessitates an urgent remedial, since "insecure land tenure affects predominantly the poor" (Deininger, 2003: 1392). However, Berner (2000) and Busso (2002) claim that poverty should be looked at from a

² The UN-HABITAT (2006: 16) defines land management as "the issue of putting land resources into efficient use, meaning producing food, shelter and other products or preserving valuable resources for environmental or cultural reasons."

³ Still according to the UN-HABITAT (ibid.), "land administration is the governmental responsibility to provide security of tenure and information about tenure issues for property markets and governmental and private business activities."

vulnerability perspective. According to the latter, vulnerability means a situation in which one faces risks of different natures, and this, without being able to respond to this threat. This vocabulary shift – vulnerability instead of poverty – supposes a policy approach focusing on giving the proper tools to help the poor to overcome the risk on their own, instead of "infantilizing" them by fulfilling their needs at their place (ibid.: 9).

In his report on vulnerability in Nicaragua, Busso highlights that poor housing conditions, land tenure and environmental hazards are among the main risks faced by the population. The author argues that proceeding with land titling and improving urban planning mechanisms would help to diminish social vulnerability and, I believe, this will foster municipal autonomy. These are exactly the impacts the VSGU project of the Montreal Interuniversity Group (GIM) seeks to have on Nicaragua. The choice of this topic for this report is then highly justified, since it will serve the GIM and help to alleviate a critical problem.

1.2 Objectives of the research

Two main questions and objectives are set for this research. The first part of the investigation aims at understanding the past and present vulnerabilities of the population of Managua. This will be regarded mostly from a land-policies perspective. Therefore, an analysis of the effects such policies have had on the population, from a social point of view, will be considered. In brief, the first objective is to understand the effects of land policies. Hence, the first research question is:

a) What role have land policies, and especially those related to land titling, played (or not) on vulnerability in Managua?

Responding to the first question leads to a second question. If the first question aims at drawing a portrait, the second one is more prospective in nature. The objective of the second part of the investigation is therefore to propose a strategy fostering vulnerability alleviation through a betterment of housing conditions. Hence, the second research question is:

b) What land policies could be put forward to address the vulnerability issue faced by many people in Managua?

The global research question aims at assessing the role land policies have played in Managua, and proposing a new one that would tackle down the problem of vulnerability. Hopefully, this report will contribute to understanding the housing problem that Managua faces and introduce innovative solutions.

1.3 Methodology

In order to respond to the first question (What role land policies, and especially those related to land titling, have played (or not) on vulnerability in Managua?), I initially reviewed literature, programs, policies and a series of Nicaraguan laws. I have also gathered data to complement the existing information, and this, using two methods.

In the first method, I designed a survey questionnaire⁴ with the assistance of Ninette Morales, a specialist on housing issues in Nicaragua⁵. The initial purpose of the investigation was to collect quantitative data about the relationship between land tenure and housing conditions in Managua. A set of legalized neighbourhoods was to be compared to another set populated by illegal tenants. Then, a regression analysis was to be done between both groups to assess to what extent land titling can improve housing. Unfortunately, for a reason of personal safety, I was not able to go to the precarious neighbourhoods I planned to visit. The census was finally administered in 10 neighbourhoods selected for reasons of safety and logistics. A total of 300 forms were filled out and entered into SPSS. For this reason, only a few conclusions can be drawn from this survey.

The second method consists in interviews: nine key actors were interviewed during July 2009. The discussions concerned the history of these precarious neighbourhoods, land tenure, provision of public services, community planning, land policies and titling. Seven community leaders and two civil servants participated in the interviews. All the conversations were recorded and then transcribed into text format. The qualitative information gathered this way is used throughout this report by way of quotations and citations.

The second research question (What land policies could be put forward to address the vulnerability issue faced by many people in Managua?) is exclusively fed by the literature I have reviewed and the conclusions I have made in the precedent chapters.

1.4 Structure of the Report

The answer to the first question is presented in three chapters: the vulnerabilities of precarious dwellers (Chapter Two), the history of Managua (Chapter Three) and the analysis of the current laws, policies and programs bearing on land issues (Chapter Four). Finally, a series of goals concerning the role that land policies should have in reducing vulnerability is synthesised at the end of the Chapter Four.

A theoretical framework of land policies combating poverty is presented at the beginning of Chapter Five. I also present the state of the art in the fields of physical and legal regularization,

⁴ Two samples (the original in Spanish and a translation in English) of the survey questionnaire are appended to this report.

⁵ Ninette Morales, Ph.D., is the director of an NGO based in Nicaragua called *Centro de Estudio y Promoción para el Habitar*, and also teaches urban planning at *Universidad Centroamericana* in Managua.

housing and land taxation in this part of the paper. I have also selected four precedents about land policies "best practices", which are inserted in this chapter. Finally, I summarize my findings and relate them with the objectives set previously. I also consider a few implementation issues before summarizing the main research findings.

2. Vulnerability in Managua

2.1 Introduction

By same measures, Managua appears to be one of richest parts of Nicaragua. In 2005, only 16% of the inhabitants were living in extreme poverty, compared to 36 % at the national level (INIDE, 2008). However, Managua still has the largest number of very poor people due to its large population. Moreover, Managua also has the highest difference in consumption of goods among its population at the national scale, thus highlighting the issue of inequity between different social classes (Morales, 2005).

Spatial segregation and social exclusion are accentuated by an unequal distribution of wealth, and a disparate provision of services and infrastructure among different groups in the city. This is typical of third-world metropolises, where some neighbourhoods are well equipped and other not at all (UN-HABITAT, 2008).

One can define in many ways and find many synonyms for these impoverished places: shanty towns, slums or squatter⁶ settlements. Some people might have seen these places and their habitants as an "urban cancer" in the past, but the recognition of their human rights has somehow changed this perception (Obando, 2006). As numerous observers have shown, these settlements have permitted the survival of a large portion of the population through informal housing and employment (Morales, 1998; de Soto, 2000; Bredenoord and van Lindert, 2010).

In Nicaragua, these places were often called *repartos ilegales* in the 1980s; nowadays, they are mostly called *asentamientos humanos espontáneos* (spontaneous human settlements). The City of Managua defines its human or illegal settlements as:

Settlements realized with an illegal appropriation of vacant lots, inside the urban fabric, which have these principal characteristics: reduced parcel dimensions (...) reduced dwelling dimensions (...) in poor physical condition, precariousness of the construction materials used (scrap, zinc, plastic, cardboard), in the majority having basic services in an illegal and temporary manner. (ALMA, 2004: 68)

In this report, I use all the terms listed above to represent the same reality, but sometimes from different points of view.

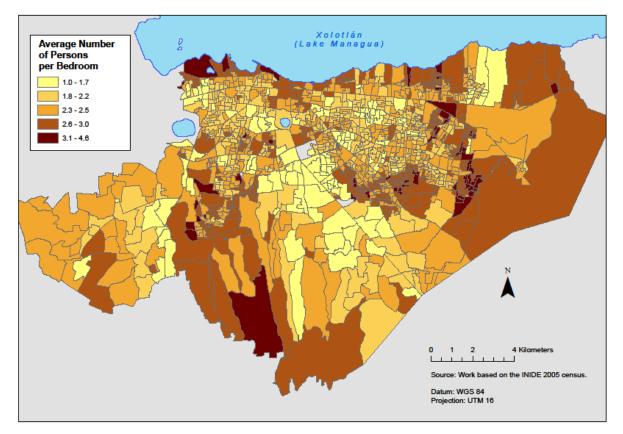
However, these neighbourhoods are not all similar; for instance, they have different levels of consolidation depending upon their age. Parés (2004) distinguishes different types of spontaneous settlements. First, she mentions the Progressive Settlements of the 1980s, which received help from the government at a certain point for infrastructure and land titling, but are now in a state of decay. Most of them are legalized by now; however, they need to be

⁶ I have avoided the term "squatter" as much as possible in this paper, since it has had a connotation historically associated with forced evictions (Porio, 2003). I have rather used vocabulary such as "landholder", "illegal tenant", "informal occupant" or "precarious settler".

renovated. Second, she points out the settlements located in zones of environmental risks, which will have to be relocated. Third, she generally refers to crowded neighbourhoods suffering from poor physical conditions. Finally, she specifically mentions the settlements occupied before December 31, 1998, and therefore subject to the Law 309, which will be further discussed in the Chapter Four. In the next sections, I present the many types of vulnerability affecting the informal settlers.

2.2 Vulnerabilities Related with Housing

No matter how we look at the problem, there is a serious shortage of adequate housing in Managua, which correlates with the appearance of precarious settlements (ALMA, 2004; Athens, 2004). In fact, there is a shortage of about 40 000 dwelling units resulting in the overcrowding of 60 % of the houses (INIFOM, 2009). The average number of persons per dwelling is 5.2 (INIDE, 2006a), which is high, given that most of the housing stock in informal settlements has one, two or three bedrooms. As shown on Figure 2, crowded houses are located at the periphery of the city, along the Lake Managua and in the old centre. In opposition, a north-south axis stands out for its low average of persons per bedroom: the developments along the *Carretera a Masaya* are indeed composed of large homes for the middle and high-classes.





Not only are the houses too small to accommodate so many people, but they are often poorly built. About two thirds of the informal settlements are auto-constructed (Parés, 2004; ibid, 2006): "The high costs of the urban land, of the construction materials and of the construction *per se* make adequate housing inaccessible for this population" (ibid, 2004: 3). A correlation can be drawn between the overcrowding, the use of improper construction materials, and housing comfort, as shown in figures 3 and 4. Altogether, these maps illustrate where housing is more problematic: at the outskirts of the urban area, along the shore of Lake Managua and downtown. There is approximately 39 000 households (almost 20% of the city) living in census tracts having extremely poor housing conditions on average (areas coloured in red in Figure 3).

According to the census data (INIDE, 2005), 99.3% of the households are connected (legally or not) to the electricity distribution network. Only 621 households responded that they did not have electricity, which means almost everyone has access to it in Managua (ibid). In terms of water, 95.6% of the dwellings are reached by the aqueduct (ibid). The remainder of the population has several ways to access fresh water, including by way of a neighbor, which is a common practice. However, connections to sewage system are less extensive, with only 62% of the households having it in Managua (ibid). An important number of those not serviced by sewage have latrines, but almost 5000 families do not have any hygienic means to defecate and urinate (ibid). The other 19% burn, bury or simply throw away garbage; only a scarce 252 households use a compost technique (ibid).

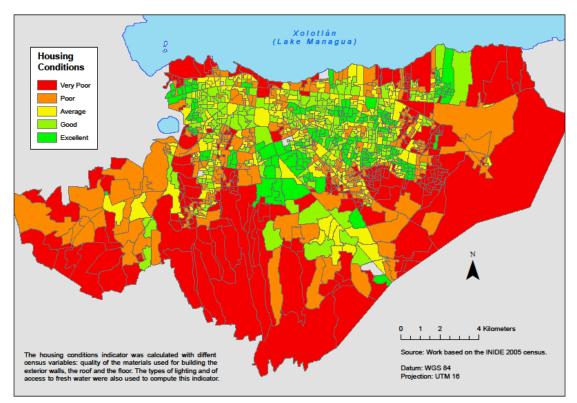
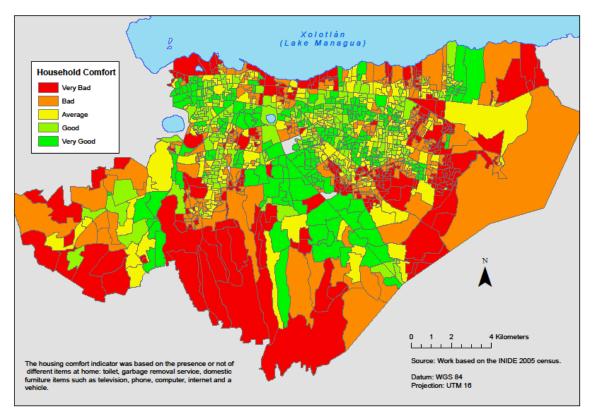


Figure 3: Housing Conditions in Managua

Figure 4: Comfort at Home in Managua



Inadequate housing implies severe consequences for a population. Athens (2004: 3) details the impact that "substandard housing has on the health — physical, mental, and social — of its population" According to her:

The type of housing prevalent among Nicaragua's poor makes residents more vulnerable to communicable diseases, chronic illnesses, poisoning, accidents and injuries. It also presents a range of psychosocial risks such as stress, anxiety, and deterioration of socials networks, and a general worsening of physical health. Athens (2004: 7)

At least, informal dwellers tend to improve their lodging conditions over the long run. When they have a financial opportunity, they often enlarge their dwellings or consolidate some parts of it. Morales (1998) observes that older settlements appear to be in better shape than newer ones, located at the outskirts of the city. I also noted this tendency during my visits into Managua's settlements.

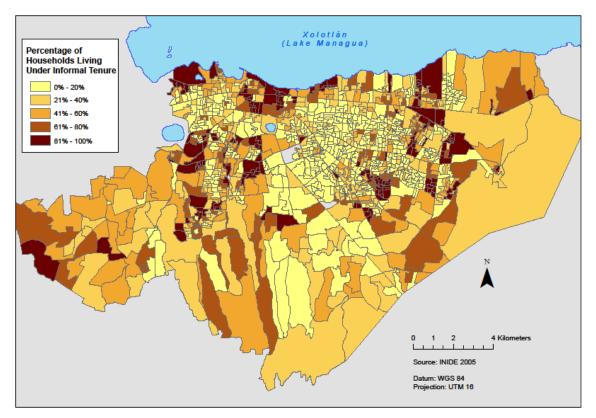
Public services are also problematic in informal settlements. Even if most of the neighbourhoods count on many or all basic services, connections to these services are often done illegally. However, illegal connections cannot be considered as sustainable solutions (INIFOM, 2009), since the aqueduct system cannot handle the high number of irregular connections to water

pipes in Managua (CORHE, 2003). This problem is currently experienced in the Hilario Sánchez neighbourhood, as mention by a resident: "If you want to take a shower at 4 AM, the pressure is high, but at 7:30 AM, it is already impossible to get it." Sometimes, the excessive demand on infrastructures leads to other problems. For instance, informal connections to the electricity distribution network are a major concern in Managua; the quality of the connections is often dubious, which endangers the connected houses and their inhabitants (CORHE, 2003).

2.3 Vulnerabilities Related with Land Tenure

According to Luis Zúñiga, General Director of the Planning Office at INETER, land tenure is "one of the most important and most conflictive problems Nicaragua faces in its development". The next chapter will present the history of land tenure in this country, thus explaining why the current situation is so problematic. As of 2005, 84 % of the people said they live in their own home in Nicaragua (INIDE, 2006b); this is one of the highest homeownership rates in the world. In Managua, this percentage is similar with 85 % homeownership, and only 7 % of households renting (ibid, 2005).

Still, the absence of legal security of land tenure is one of the major issues in Nicaragua (CORHE, 2003). In the case of irregular settlements, the problem with land tenure is often noncompliance with legal requirements regarding property transfers (Morales, 1998). In the case of squatting, almost no legal protection exists at all, and settlers are dependent on authorities and political will for help. Land tenure problems appear to be located approximately where poor housing conditions prevail, as shown on Figure 5. The information on land tenure presented in this map is derived from official census data. Figure 5: Land tenure Problems in Managua



However, the way people perceive their tenure differs from their actual legal status. The discrepancy between legal and perceived security⁷ can be explained by "social networks, local norms and duration of possession (...) regardless of the possession of formal land titles" (Coles-Coghi, 1993 and Roquas, 2002 quoted in Broegaard, 2005: 848). Surprisingly, formal and informal settlers' opinions concerning their tenure security are similar. The survey I administered in the human settlements of Managua reveals optimism. To the question "Taking into account that tenure security is the trust that you will not being evicted from your home, how would you rate the tenure security related to your dwelling?", the average response of informal landholders was 82 %, and the answer of formal landholders was 95 %.

Even if the informal settlers are confident, their irregular situation is nonetheless precarious, at least for many of them. The lack of legal rights on a parcel of land might prevent the occupants "from accessing resources to improve their living conditions" (UN-HABITAT, 2005: 36). For instance, banks often require guarantees (also called collateral by economists), such as immovable properties, in order to lend money. In Nicaragua, the absence of legal titles in establishing property rights prevents many people from accessing credit (CORHE, 2003). Even when one has a deed of property, this person needs to register it properly into a public registry;

⁷ Broegaard (2005: 861) claims that "future research should approach the concept of tenure security in a way that also addresses perceived tenure security (...) it is the perceived tenure security that forms the basis for people's decisions and actions."

either way, banks might not accept the property as collateral for loans (UN-HABITAT, 2005). Smolka (2003) highlights that even people with fairly good incomes often see their credit demands rejected because of the informality of their job or their land occupation.

Nonetheless, informal dwellers have alternatives when seeking credit. My survey shows that informal dwellers (those without registered deed of property) still obtain loans from formal institutions (banks and government) but in a lower proportion than those with a title (Figure 6). They also manage to get credit through their social networks, including their families, friends and employers. One might think that the situation of informal dwellers is not so bad; however, the combination of unemployment and illegal landownership status can lead to a very precarious financial situation. Actually, most of the extremely poor people do not even access microcredit⁸ (CORHE, 2003).

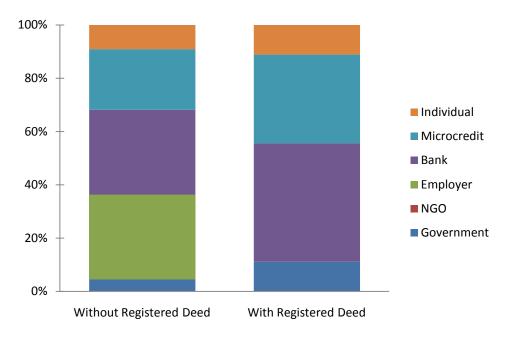
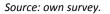


Figure 6: Sources of Credit Used for Improvements to the Dwellings



Another problem associated with unlawful settlements is uncertainty regarding investments in land, buildings and other types of immovable properties (ECERP, 2002; Obando, 2006). From international investors down to small Nicaraguan landowners, no one wants to invest money in buying or constructing anything if the tenure insecurity is such that they fear of being dispossessed of their plot. This eviction can occur if a third party shows up and claims to be the legitimate landowner; it can also occur when hundreds of people invade a tract of land in one

⁸ According to the Microcredit Summit Campaign, "Microcredit is programs extending small loans, and other financial services such as savings, to very poor people for self-employment projects that generate income, allowing them to care for themselves and their families". Retrieved January 30, 2010 from http://www.microcreditsummit.org/about/what_is_microcredit/

night, as it has occurred several times in Managua. The difference of investment before and after a land titling campaign in some neighbourhoods of Managua is notable. During an interview, Parés told me that:

In the 18 de Mayo as in the Barricada [neighbourhoods], the inhabitants, having in hands their [land] titles, were much more motivated in investing in the improvement of their houses.

This tendency was observed by Galiani (2009) in Argentina and also confirmed by the survey I administered. Figure 7 shows that, except for building a house "from scratch", title holders improved their dwelling units in greater proportions than precarious holders. However, these numbers are to be considered cautiously, since the former have generally been occupying their lots for longer periods of time than the latter. Moreover, Ward (1998) estimates that the houses in informal settlements get improved based on the "availability of the resources" and not on whether or not dwellers have title. Fernandes (2009) argues that the mere perception of security in the tenure suffices and that, anyway, the poor prefer microcredit, in which they do not risk their dwelling for small amounts of credit. My own conclusion is that titles help, but they represent merely one factor among others for house consolidation.

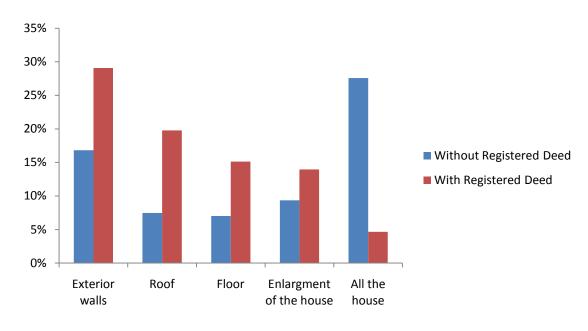


Figure 7: Improvements to Dwellings by their Occupants from 2005 to 2009

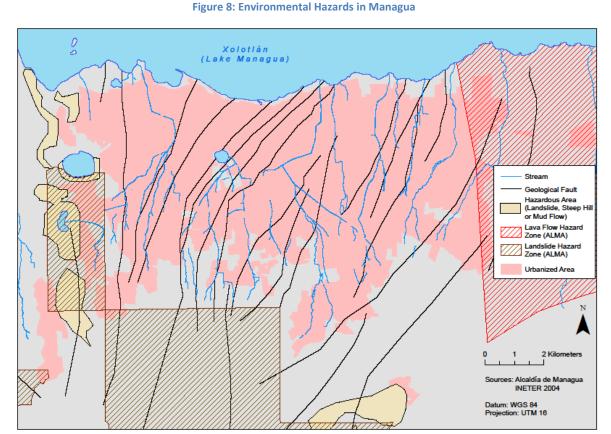
Source: own survey.

Finally, a major impact is also associated with the legal status of landownership. Land titles provide families with a mental security, a relief. As many interviewees mentioned, beneficiaries of land titling programs enjoy a feeling of serenity when their status is legalized. Moreover, the possession of a land title ensures that the children will receive the property in the case of death of the parents. The survey also highlights this preoccupation of stability. Both formal and

informal dwellers answered that the importance of not being evicted was the number one benefit of having a land title. This confirms the CORHE report (2003), which stressed the importance of the land tenure security issue in Nicaragua.

2.4 Vulnerability to Environmental Hazards

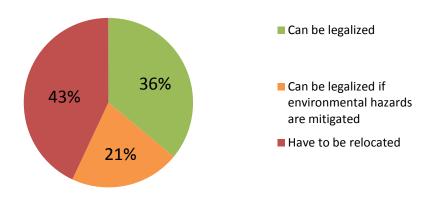
Managua is considered the "most vulnerable city of the country" according to the Nicaraguan Institute of Municipal Development (INIFOM, 2009: 22). Managua has the highest index of risk of all the municipalities of the country, because it is exposed to earthquakes, floods and hurricanes (ALMA, 2004). Moreover, the Nicaraguan capital has one of the highest seismic indexes in the world (INIFOM, 2009). Some of these threats are represented on Figure 8. The reader should note that the areas along the shore of Lake Managua are threatened by flooding, especially during the rainy season. Since the coast of the *Xolotlán* is generally flat, the water level does not need to raise much in order to submerge large tracts of land, mostly occupied by shanty towns (ibid).



Given that the natural setting of the metropolis is already subject to risks, urbanization has made it worse. Urban development has reduced the permeability of the soils by the adding artificial surfaces. This phenomenon, combined with the cutting of trees, has considerably increased the runoff of surface water, and the risk of landslide or mudflow. Most of the city is affected by this problem; however, areas along the streams – comprising many informal

settlements – are the most endangered (INIFOM, 2009). It is now recognized that, generally speaking, the informal markets for land, unsupported by adequate planning, have permitted the urban poor to live in inadequate and hazardous areas (Abramo et al., 2005). Unfortunately, most of the self-constructed shelters in the informal settlements do not protect their occupants adequately, particularly during rain storms.

Parés (2004) notes, moreover, that the majority of the spontaneous settlements were not planned properly; and their inhabitants are now exposed to natural and entropic hazards. She estimated that a few years ago about 44 000 dwelling units (approximately 29 % of the capital's housing stock) had to be relocated as their location was potentially dangerous (ibid, 2004; ibid, 2006). Figure 9 presents Parés' statistics concerning the situation faced by many inhabitants in informal settlements of Managua.





Many attempts were made to relocate slum dwellers exposed to flooding in the 1980s (Chavez, 1987). However, populations are sometimes deeply rooted in their communities and the place where they live. According to Everett (1999: 126), forced relocations have to be avoided as much as possible because:

When families are forced to move, they lose not only their land and houses, but neighborhoods, communities and social networks. The psychological stress caused by months of uncertainty and the health effects alone can be devastating. Children often lose months of school and their parents often travel long distances to get to work. Anthropologists have demonstrated that relationships of mutual aid and social networks are dismantled as populations disperse. These social networks are a critical survival tool for the urban poor who must constantly weather economic fluctuations and uncertainty. Even when families receive compensation for lost homes, these social relations are virtually irreplaceable. Finally, displacement

Adapted from Parés, 2004

carries a very high risk of impoverishment. This is especially true for those who lack legal title to their land because they generally do not receive compensation.

Obando (2006) describes such an attempt to move the inhabitants of a settlement to a safer place. These people ended up selling their new plots, demolishing infrastructure, and returning to their original settlement (ibid).

However, Obando also mentions that the City of Managua's layer does not offer relocation options (Figure 8 is illustrative for this purpose). As the population of Managua grows, suitable sites for relocation or for new developments are becoming scarce given constraints set by the environmental hazards mentioned earlier. Parés, architect, encountered this problem during the execution of the PRU. The program implied reconfiguration of urban fabric and enlargement of streets; thus meaning a reduced number of lots and families. The architect told me that there were no vacant lots in the vicinity for people who had to be relocated. As these people did not want to move out of their neighbourhood; instead, they were financially compensated for their loss by the municipality of Managua. By contrast, ensuring that nobody is evicted would be an error, says Parés. For instance, titling hazardous or public areas as it has been done in Managua by authorities campaigning to please voters should not be encouraged.

2.5 Social Vulnerabilities

Social inequities are highly visible in the pattern of urban development of Managua, qualified as "highly disintegrated spatially, socially and administratively" by Brown and Bornstein (2006: 4). Rodgers (2004: 3) refers to it as "the city of chaos", which is also quite illustrative. Managua is so chaotic that it distinguishes itself from most of Latin-American cities: the poor neighbourhoods are not located only at the outskirts, but are also scattered throughout the metropolis (Parés, 2004).

Because of this incoherent sprawl, rich and poor people both need to travel long distances to reach their daily destinations. However, the wealthy have been advantaged so far by the municipal policies. On one hand, the City of Managua has invested much money in boulevards, highways and roundabouts in order to ease motor-vehicles traffic and to eliminate stoplights, where holdups were common (Brown and Bornstein, 2006: 8). Rodgers (2004) complains that these arteries are becoming more dangerous than ever for the pedestrians – most of them from lower social classes – because of the speed of the traffic.

On the other hand, the road network inside the informal neighbourhoods has been poorly planned. An interviewee mentioned that streets are missing at some places, making some lots inaccessible. Thus, the lack of mobility of the population, its exposure to road accidents and a deficient road infrastructure inside the precarious neighbourhoods increase vulnerabilities for the urban poor.

If public expenditures on transportation infrastructure have the side effect of excluding the poor, so do private investments. During the 1990s, the expatriated Nicaraguan *bourgeoisie* came back from the US and brought the American culture to Managua. Many malls, hotels, bars and other semi-public places opened to fulfill their luxury taste (Brown and Bornstein, 2006).

Meanwhile, almost nothing has been done to provide the poor with adequate community gathering spaces. Places such as parks, schools and plazas have never been planned in the informal neighbourhoods. Hence, the construction of semi-public spaces, together with the lack of truly accessible places, reinforced the spatial exclusion in this disintegrated and chaotic city. The urban poor are therefore vulnerable, since they do not have access to Managua's new public realm.

2.6 Conclusion

In this chapter, a thorough analysis of the population living in precarious neighbourhoods has been presented. Huge difference between social classes is evidenced by visible contrast between the formal and informal neighbourhoods. Inhabitants of the latter have many types of vulnerability, which are caused by a series of factors ranging from metropolitan issues down to conditions of dwelling units. For instance, population is overcrowded in small and poorly built shelters in new spontaneous settlements. This is less the case in older neighbourhoods, because landholders tend to improve and enlarge their dwellings on the long run, depending upon their financial means. A large number of them have had to wait until they have the money before improving their houses, mostly due to poor credit access. Most of the banking institutions will not lend money to people not having a formal employment or a registered title of property. This precarious legal situation is frequently observed in Managua, where many families illegally occupy parcels of land. For a given household, uncertainty concerning legal tenure also affects confidence of not being evicted, and impedes investment on dwelling.

These types of vulnerabilities can be encountered in many other cities encompassing slums. However, the precarious settlements of Managua constitute a case apart. Their inhabitants are highly vulnerable to environmental hazards, such as earthquakes, floods and hurricanes. The foremost consequence of this situation is that a large proportion of the slum dwellers will have to be relocated to safer areas sooner or later.

The poor in Managua are also disadvantaged because of the urban setting. Most of the lowincome group does not own a vehicle, yet the city is car-oriented and dangerous for pedestrians. This issue is evidenced by urban sprawl and construction of boulevards and roundabouts. Moreover, the poor have been excluded from the public realm, since most of the new public spaces built during the last two decades are privately controlled. In conclusion, the present analysis has demonstrated that a large number of people in Managua are physically, economically and socially vulnerable. Solutions providing the poor with tools to overcome these conditions will be presented in Chapter Five. The Role of Land Policies in Managua

3. The History of Land Tenure in Managua

In this section, the history of Managua is presented to understand the origins of the vulnerability faced by many inhabitants, from a land policy perspective. More specifically, the history is divided into different periods: the colonial period and its land tenure system, the Somocista dictatorship period, the Sandinista Revolution era in the 1980s, the neoliberal governments in the 1990s, the land titling programs in the 2000s and the return of the FSLN to power.

3.1 The Early Development of Managua

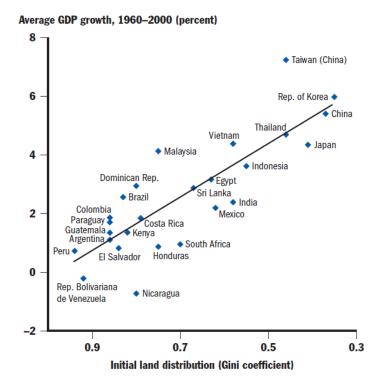
Nicaragua was already inhabited by different Indian groups when the Spanish Conquistadores claimed this land. It is the language of these natives, called "*Mexicano Conupto*" or also *Managua*, which gave the name to what was then a small Indian town (INIFOM, 2009: 2). In 1852, *Leal Villa de Santiago de Managua* was chosen as the capital of Nicaragua as a middle ground between Granada and León (see Figure 1 for location), two rival cities with their elites fighting for power (INIFOM, 2009; Brown and Bornstein, 2006).

During the colonial period, the *Leyes de India* (Laws of India) not only dictated to the Conquistadores how to colonize the Americas, but also set the land ownership mode in Nicaragua (UN-HABITAT, 2005). In fact, it created the concept of the *ejidos*, these lands collectively owned, "which included fields, pastures, forests, rivers and lakes, held in the name of the community, and administered by its leader" (Dore, 1997: 594).

However, the coffee revolution in the second half of the nineteenth century modified this land tenure system. Dore relates how some of the best parts of these commons were rapidly privatized by rich peasants and the elite in a small town of Southwestern Nicaragua. Managua as well saw its development closely associated with the cultivation and exportation of coffee, and with cotton one century after (Parés, 2006).

While accumulation of good parcels of land was becoming lucrative for agriculture, a real estate market for new housing development was also developing. The dictator Anastasio Somoza and his sons, referred to as the Somocista dictatorship, understood how to make money not only with rural properties, but also with real estate in Managua (Brown and Bornstein, 2006). For Higgins (1990), the Somocistas enriched themselves with every aspect of the housing industry. The Figure 10 shows how the land concentration among the Somocistas was to affect negatively the economy of Nicaragua for the next decades. In the 1960s, Nicaragua had one of the most unequal concentrations of land (high Gini coefficient) among its population compared to many countries. This situation has possibly had an important and negative impact on the economic growth of this nation.





Source: Deininger's calculations based on Deininger and Squire (1997); World Bank data (for 2002 from the Statistical Information Management and Analysis database).

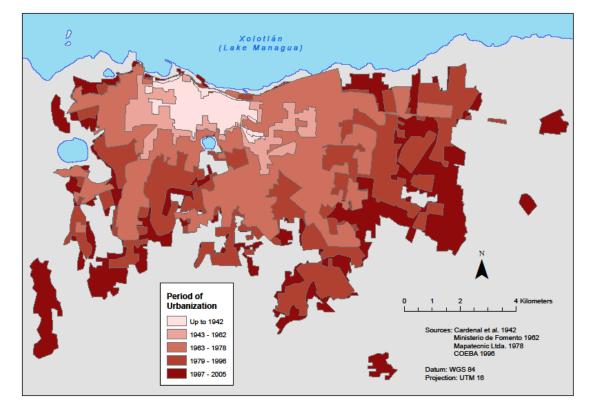
3.2 The Aftermath of the 1972 Earthquake

On December 23, 1972, a mighty earthquake injured approximately 20 000 persons and destroyed most of downtown Managua, a city of about 400 000 people at that time (Parés, 2004). The first consequence of this catastrophe was the abandonment of the old city, and the second was an incomparable urban sprawl, as shown on Figure 11. In fact, the urbanization after the earthquake has followed a fairly low density pattern. The multi-storey buildings almost disappeared (INIFOM, 2009), and leapfrog developments mushroomed in the entire metropolitan region.

Not surprisingly, the Somoza family made a lot of money with the cleaning job in the aftermath of the earthquake (Higgins, 1990). Other techniques were also used by the Somocista clique to ensure their profit during the reconstruction of the city. For instance, Higgins states that "advantageous social connections made it possible for some to purchase land targeted for government use at bargain rates and then sell it to the government for a vastly inflated price"

⁹ According to Deininger (2003), "The Gini coefficient measures the degree of concentration (inequality) of a variable in a distribution of its elements. It compares the Lorenz curve of a ranked empirical distribution with the line of perfect equality. This line assumes that each element has the same contribution to the total summation of the values of a variable. The Gini coefficient ranges between 0, where there is no concentration (perfect equality) and 1, where there is total concentration (perfect inequality)."

(ibid: 6). Moreover, the author mentions that Somoza made sure that the new developments would be located on land he owned, as is the case with Ciudad Sandino, which will be referred to further.





The abandonment of the old city and the subsequent "leapfrog" development were not only lucrative for the Somoza family, but they were also detrimental to lower social classes. The sprawl made it much more difficult for residents to move around without cars (Brown and Bornstein, 2006), and increased their vulnerability, as mentioned in the precedent chapter.

However, the worst consequence for these people was probably their poor housing conditions. Those who were not fortunate enough to buy land had to choose between two options: to squat on plots of lands, or to buy them on the informal market.

On one hand, squatting land was the worse solution. Squatters used to settle on unclaimed areas far from downtown or in unsafe areas such as flood zones, road shoulders or power lines right-of-ways (Parés, 2004). Even if the squatting phenomenon already existed since the 1950s in Managua, it only boomed after the catastrophe (Parés, 2006). On the other hand, buying parcels of land on the informal market was better but still not ideal: lots were not serviced with basic infrastructure and did not have access to public services (Morales, 1998). Furthermore, these illegal settlements, known as *repartos ilegales*, did not comply with urban regulation and did not provide any legal security to their inhabitants (ibid).

In 1979, the situation of housing in Managua was terrible: 50 % of the population was living in *repartos ilegales* and 25 % were squatting in the flooding zone along the *Xolotlán* (Chavez, 1987). Brown and Bornstein (2006) highlight the absence of planning mechanisms and of an authority overseeing the development of the city during the 1970s, which could have prevented this chaos to happen. As a political consequence, the public opinion got polarized against the Regime, and the reign of the Somoza family was coming to an end.

3.3 The Sandinista Regime

In 1979, the *Frente Sandinista de Liberación Nacional* (FSLN) led a revolution that overthrew the Somoza dictatorship. As if the earthquake was not enough, the guerilla war also affected Managua. Some low-income neighbourhoods of the Capital were bombed by the National Guards of Somoza just before the latter left the country (Chavez, 1987).

The Sandinista Revolution made a complete shift from the precedent administration. The FSLN program put housing and land issues at the heart of its strategy. The rights to land and to decent housing were a priority. In fact, three decrees confiscating both the urban and the rural properties of the Somoza clique were proclaimed during the first year of government (UN-HABITAT, 2005). A fourth proclamation, in 1981, expropriated all the vacant parcels and the buildings in ruins of the centre of Managua; the intention stated in the Decree 1981-903 was the assignation of public uses suitable for this zone of high seismicity. However, these confiscations (and later the redistribution of some parcels) represented the beginning of a long controversy about land ownership in Nicaragua (CORHE, 2003).

The land policy of the Sandinista Government went beyond simple vengeance against the Somocistas as it was entrusted to boast the development of the country. The Sandinistas saw the land as a non-reproducible good – and not a merchandise –, which should serve the whole society (Parés, 2004; Morales, 1991). Therefore, a socialist-oriented land policy, called *Reforma Urbana* (Urban Reform), was implemented and composed of two goals:

1) Prioritize the regulation of housing rents to avoid speculation;

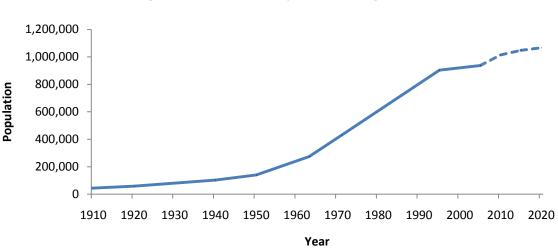
2) Distribute the benefits of urbanization to all the sectors of society, taking the economic reactivation of the poor population as an asset. (Parés, 2004: 12)

A first strategy in implementing these two goals was to physically consolidate and take control of the illegal subdivisions. According to Parés (2004), this was done through the *Ley de Repartos Intervenidos Ilegales* (Intervened Illegal Subdivisions Act), which allowed the Government to manage the rents and occupy tracts of land that had been illegally subdivided. Moreover, the State was also able to cancel all the deeds of the former landowners and sign new ones in their place with the occupants (Morales, 1998).

A second strategy was the *Programa de Urbanizaciones Progresivas* (Progressive Settlements Program). Under this program, free and empty lots with basic services (electricity, sewers and water) in new subdivisions properly planned by the State were provided to settlers (Parés, 2004; Morales and Lungo, 1991).

The beneficiaries of both programs had to contribute to the provision of public infrastructure through monthly payments to the Ministry of Housing and Human Settlements (Morales, 1998). However, only a few of the Progressive Settlements were ever realized in the territory of Managua during the Sandinista period because of budget constraints imposed by the Contra War (Parés, 2004). In fact, a large part of the national budget had to be redirected to food production and military defense (Rodgers, 2008), and the Ministry of Housing and Human Settlements (MINVAH) focused on building dwellings in the rural zones located near the armed conflicts (Parés, 2004).

During the Contra War, many peasants escaped the devastated and dangerous countryside and settled down in the capital (Obando, 2006), already short of adequate housing. As a consequence, illegal subdivisions reappeared in the late 1980s (Morales, 1998), thus showing the incapacity of the State to respond to the pressing demand for housing. Chavez (1987) claims the number of informal settlements increased from 12 in 1985 up to 50 in 1986. Meanwhile, Nicaragua became mostly urban with 54% of its population living in cities (Parés, 2004). The Figure 12 shows the explosion of the population of Managua during the second half of the 20th century.





Source: INEC in ALMA 2007 and INIDE 2008 for the projection of the population from 2010 to 2020.

¹⁰ A straight line was drawn between 1971 and 1995, since no population census was done during this 24year period. However, a drop in population after the 1972 earthquake, followed by a sharp increase due to massive immigration in the 1980s would be more plausible than constant growth.

Parés (2004) notes the housing situation worsened in 1988, when the MINVAH disappeared as part of a "State Compression" initiative. Under this policy, the power of planning and housing were decentralized to the municipal level by way of the *Ley de Municipios* (Municipalities Act).

Even if the results of the 1980s administrative reorganization were negative, Parés claims that the Revolution brought urban and economic planning to the country. The regulation of new developments, civic participation and reinvestment of rents into public infrastructure represent the birth of modern land policies in Nicaragua. Furthermore, the strategies adopted benefited the low-income class and fostered their integration into the city (Morales, 1998).

However, the socialist conception of the land tenure had its weaknesses. The management of all the confiscated lands was centralized and municipal governments were ignored by the National state (Parés, 2004). As a consequence, only a few planning projects were implemented and only weak social participation materialized, which was "in contradiction with the revolutionary project" (ibid: 9).

Moreover, the Sandinistas appear not to have completely understood the logic of land markets. By the end of the 1980s, the Government canceled all pending debt contracted by the settlers of the illegal subdivisions, "without taking into account the price of the land in the value of the dwelling units produced by the State" (ibid: 11). This debt cancelation had repercussions, since it sent a message to the population that land was free, and later encouraged squatting.

Doing business with land was almost seen as a crime under the FLSN Government. A former Sandinista coordinator of the Hilario Sánchez neighbourhood in Managua applied a zero-tolerance policy with regard to this commerce. He told me a very illustrative anecdote about him and a house builder in the 1980s:

"He sold seven houses. He built them and sold them. It was a business. (...) I told him that was the last house you sell; if not, you get out of the neighbourhood . . . and he sold another house and I banned him from the neighbourhood."

At that time even the work and business of a simple house builder, who added value to the land by constructing houses was discouraged.

One last weakness of the Sandinista Government is that it focused too much on the physical improvements and not enough on the legalization of the developments (Parés, 2004). The Revolutionary government, which was "radical, bold, triumphalism and messianic", did not invest much effort in legalizing land transfers (Ortega, 2000: 10; CORHE, 2003), perhaps because the Sandinistas believed that the Revolution would be eternal (UN-HABITAT, 2005), and also because the Government was more preoccupied by the Contra War than by land titling issues.

In the end, the exhausting Contra War led the Sandinista Government to negotiate a peace agreement and free elections with the other political forces of the time. However, the FSLN had to do something to ensure its survival after the elections (CORHE, 2003). Therefore, the

Sandinistas adopted three laws with regard to land adjudication¹¹ (85, 86 and 88) during the last moments of their Government.

Morales (1998) explains well the mechanism of these laws. Law 85 granted property rights – for free – to households living in dwellings of less than 100 square meters if they did not possess any other dwelling recognized by the State. This concession of property was only possible for dwellings occupied before or on February 25, 1990. Law 86 foresaw the compensation of landowners who had seen their properties confiscated during the Revolution; payments were to be made on the basis of recognized evaluation methods (cadastral value), and to be compensated through a special fund created by the State. Finally, Law 88 transformed temporary land titles, called *Solvencias de Ordenamiento Territorial*, into permanent ones (CORHE, 2003).

According to CORHE, the tactic of the Sandinista Government was to grant titles of property to third parties, who were to transfer these rights back to the FSLN. This strategy did not work well: third parties kept most of the plots that were supposed to go back to the FSLN; some civil servants pertaining to the party seized some parcels in what is now called the *piñata*¹². Despite these abuses, these laws were much needed to ensure the stability of the country.

3.4 The 1990s and the Neoliberal Governments

After her election, the President Violeta Chamorro had to deal with the administration of the laws 85, 86 and 88. In order to apply them, a heavy bureaucratic apparatus composed of three agencies was created by her government. The first agency, the *Oficina de Cuantificación de Indemnizaciones y Sistemas de Compensaciones* (OCI) was in charge of defining the methods for evaluating the properties claimed by confiscated landowners. The second and the third ones, the *Oficina de Ordenamiento Territorial* (OOT) and the *Oficina de Titulación Urbana* (OTU) dealt with the provisional and the definitive adjudications of properties (ibid; Parés, 2004). In 1998, these three institutions were put under the umbrella of the *Intendencia de la Propiedad* (IP), an organization created by the Decree 56-98. The IP presents the advantage of offering a front office to the public and the other institutions.

However, the Chamorro government was criticized for its administration of the adjudication program:

Yet far from clarifying and legitimizing the rights to these lands, these efforts [of the Sandinista Government] proved to be the opening salvo in a deluge of

¹¹ The UN-HABITAT (2006: 8) defines adjudication "as the process whereby existing rights in a particular parcel of land are finally and authoritatively ascertained."

¹² According to Zamora (1996), many important figures of the FSLN gained wealth illicitly during the *piñata*. Many different tactics were used, such as keeping official vehicles and selling national properties of all sorts, says the author. The effect of the *piñata* was undoubtedly the creation of a "socialist" bourgeoisie.

contradictory legislative statutes, presidential vetos and juridical rulings which emerged early in the Chamorro government. (Jonakin, 1996: 1185)

This quote synthesizes well the land policies of that decade. This point of view is also shared by different authors. For instance, the Nicaraguan Centre of Human Rights contends that *Comisión Nacional de Revisión de Confiscaciones* (CNRC), a court created by the Chamorro Government, was corrupted (CNDH, 2003). This administrative tribunal adjudicated tracts of land at low prices to politicians and civil servants, who sold them at inflated prices, just as the Somocista did twenty years before. Moreover, the institutions put into place by the Chamorro government proved to be inefficient in granting property rights to the low class (UN-HABITAT, 2005). The judges of the OOT were slow to proceed when it was time to entitle the legitimate beneficiaries of the Urban Reform (CORHE, 2003). Some of the occupants even saw their rights to the land contested in spite of what the laws dictate (UN-HABITAT, 2005). Broegaard (2005: 857) relates some cases of legal disputes over land where the weaker party was threatened by "wealthy and more powerful" counterparts. Everingham (2001: 82) asserts that many children of the former Somocista elite succeeded in their attempt to recover their real estate portfolio by means of "relentless legal onslaught".

Not only were some of the former landowners (those who had seen their properties confiscated) powerful, some were also backed by the US Government. Many officers of the Somocista National Guards came back in the 1990s to reclaim their properties after their exile to the US. Since they return to Nicaragua as American citizens, the Republican Staff of the US Senate supported their claim by providing legal assistance in their proceedings (CORHE, 2003). As a noteworthy aside, the US had the power to suspend its help to any country nationalizing, expropriating or taking the properties of their citizens (ibid). Of course, poor urban landholders had more limited means for legal fights and "the message driven home was that a property title itself was no assurance of a right to the land" (Jonakin, 1996: 1185). As a result, "land titles appear to provide a feeling of tenure security mainly to the wealthy landholders" (Broegaard, 2005: 848).

This issue of inequity was also in the mind of a community leader in the *Héroes y Mártires de Ayapal* neighbourhood in Managua. He told me that the Somoza family came back in the 1990s to reclaim its properties on which hundreds of families had settled. Still, according to him, three governments have reimbursed the Somoza family for its loss, for a total of three times. The same kind of problem appeared in the neighbourhood of *Los Martinez*, where the former landowner requested expensive compensation for the loss of her land during the Revolution (CNDH, 2003). Notwithstanding legislation giving tenure, the settlers still live in the uncertainty of being evicted from one day to another.

Overall, the cost of the indemnities paid by the Government of Nicaragua in the 1990s to the confiscated landowners is tremendous; it increased the Nicaraguan debt by 122 % (CORHE, 2003). At the same time, the unemployment rate in Nicaragua reached about 60% (Jonakin,

1996), partly due to the structural adjustments¹³ fostered by the neoliberal governments (Morales, 1998).

Meanwhile, the housing problem, already existing in the 1980s, was going out of control in the 1990s. The right-wing governments of the 1990s did not alleviate the housing crisis of the lowincome sector; rather, they invested public funds in wealthy segments of the society. It is estimated that 40% of the State subsidies for construction were directed to middle and highincome classes (CORHE, 2003). In other words, the majority of the citizens did not have the means to buy a house and the government did not alleviate this with its policy. Given the difficulty of legally possessing a house, thousands of people opted for the only visible solution: to squat on tracts of urban land and build their own houses (ibid). By 1995, about 73 % of the dwelling units in Managua were located in these informal settlements (Morales, 1998).

Another problem emerged from this situation: the existing laws (85, 86 and 88) only contemplated the legalization of dwellings occupied by 1990. According to Morales (1998), this legal gap meant that 105 000 people (12% of the population of Managua) did not benefit of any legal protection for their shelter. Morales (1998) and Parés (2004) both conclude that land management and urban planning were weak and uncoordinated during that period. At least, some NGOs such as *Habitar*, founded in 1994, took in charge the production of housing for the low-income class, producing even more units than the government (CORHE, 2003).

Complementary to *Habitar*, the *Movimiento Comunal Nicaragüense* (MCN) also played an important role in helping the population with the housing problems. The MCN, formerly under the banner of the Sandinista Defence Committee, is an NGO that has fought for the regularisation of the parcels attributed by the Revolutionary Government (Morales, 1998). This organisation distributed thousands of location certificates to squatters during the legalisation process of the informal settlements, and also forced the Alemán Government to extend the legalisation period from 1990 to 1998. This objective was theoretically attained by way of Law 309, which will be presented in detail in Chapter Four.

3.5 **Regularization Program in the 2000s**

In 1999, the City of Managua initiated the *Programa de Atención a los Asentamientos Espontáneos de Managua* (PAAEM) to comply with the requirements of the Law 309 (Parés, 2004). This program aimed at analysing the situation of the settlements of the Capital and proposing long-term solutions to improve these neighbourhoods and the city in general. Parés (2004) claims it was the first real coordinated attempt to tackle down this issue.

Following the study phase of the PAAEM, the City of Managua started the *Programa de Renovación Urbana* (PRU) (Parés, 2004). Under this program, the City designed and

¹³ During this period of adjustment to the rules of capitalism, many State assets were privatized. Rodgers (2008) found out that of the 370 states enterprises that were present in 1990, only 8 subsisted in 1998!

implemented comprehensive plans in four neighbourhoods. Each plan encompassed the provision of public infrastructure and basic services, economic empowerment, social participation, environmental sanitation and regularisation of land occupation. The PRU, moreover, involved three distinct ways of intervening into the neighbourhoods: "urban consolidation in traditional neighbourhoods, and urban renovation and relocation in precarious neighbourhoods" (Parés, 2004: 25-26). Nevertheless, several objectives were present throughout all the interventions of the program, most notably: "fostering a dynamic and constant participation of the settlers", especially women's participation, equity, appropriate technologies, sustainability and transparency in the dialogue between institutions and settlers (ibid: 25-27). Actually, trust and community participation should really be improved, since Managua presented the lowest levels for these two values in Latin America in 2006 (UN-HABITAT, 2008).

In 2000, Herty Lewites was elected as the new mayor of Managua, and his election was partly due to the promise he had made to deliver 11 000 land titles to informal settlers by 2002 (Obando, 2006). When he took over, the PRU was already designed by the precedent administration and funding for the program had been secured from the Inter-American Development Bank (IDB); however, Lewites only achieved delivery of 10% of the promised titles by 2002 (CNDH, 2003). The delay was political in nature: only 20% of the lands under informal development were *ejidos* (owned by the municipality), 20% were located on private properties, but the bulk, 60%, were owned by the National Government and its agencies (Parés, 2004). Of course, slums located on *ejidos* were titled first, since the Alcaldía was able to transfer these parcels right away.

According to Parés, the solution for the plots owned by the Government of Nicaragua arrived when Bolaños, a childhood friend of the mayor, became president of the Republic in 2002. The new president agreed to transfer all the plots of land Lewites needed to reach his target. A presidential decree ordered the transfer of national public properties to the City of Managua in 2003. Then, the *Comisión de Titulación Urbana* (CTU) was created by the City of Managua to gather the data needed to proceed with land titling, and, two years later, 12 245 parcels had been titled in four neighbourhoods, benefiting 60 000 people (Parés, 2004).

Even if this pilot project can be seen as a success, it was not sufficient to stop new settlers from squatting on more tracts of land. Between 1995 and 2005, there were still many illegal settlements emerging in Managua, as shown in red in Figure 13.

The Role of Land Policies in Managua

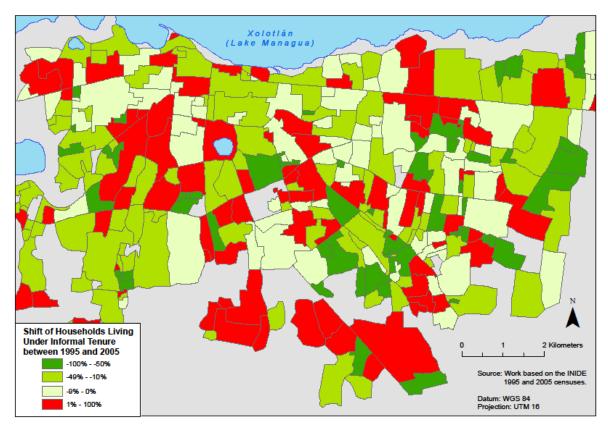


Figure 13: Emergence of New Illegal Settlements in Managua

In 2006, the FSLN was re-elected and promised to regularize all the human settlements in Managua by 2011. They have already granted 40 000 titles and, according to a community leader of the San Judas neighbourhood, they might be able to accomplish it. Nonetheless, this goal will be hard to attain despite the willingness of the new FSLN Government, since new informal settlements are being created each year (Pérez, 2009).

3.6 Conclusion

In conclusion, we can affirm that the history of land tenure in Managua has reflected the socioeconomical and political contexts of the different periods explored throughout this chapter. During the Somocista dictatorship, land was used by the powerful to accumulate wealth and power. The 1972 earthquake could have represented an opportunity to set a new base for the development of the Nicaraguan capital. Instead of this scenario, authorities let anarchic sprawl happens, denied the right to housing of the population, and took advantage of the situation to make outrageous profits.

In the 1980s, the Revolutionary Government adopted a pro-poor approach that fostered the provision of public infrastructure and impeded speculation on land. However, scarce governmental resources and overwhelming immigration to the city hampered the realization of

this scheme. When Chamorro got elected in 1990, the housing situation in Managua was worse than ever: political battles over land and a disastrous economy had to be tackled. In order to reimburse confiscated landowners, she had to sell many state assets to comply with the laws of the urban and rural land reforms.

A chaotic legal situation and a corrupted judicial apparatus have been detrimental to the precarious landholders. As a consequence, civic organisations put pressure on the government, and two laws were adopted to regularize the situation of precarious neighbourhoods. However, few projects attacking the issue have been realized so far, mostly because these regularization programs are expensive. More recently, the FSLN government has been attempting to regularize an impressive number of lots. However, we can have doubts about the sustainability of this scheme, which seems to be highly political above all.

4. Legal Framework and Policies

A portrait of Managua and its precarious neighbourhoods was presented in the two preceding chapters. Now that the reader is familiar with the history and the geographical context of the issue at study, the current Nicaraguan policies and laws bearing on this topic will be described and analysed. This chapter is therefore subdivided in sections focusing on specific aspects of the *problematique*: land tenure regularization, housing programs, municipal taxation, and urban and regional planning. The analysis of these policies is a necessary step in order to tackle the problems of precarious neighbourhoods in Managua. The last section of this chapter summarizes the problems associated with current land policies, and enumerates the objectives that should be pursued in developing a new strategy.

4.1 Land Tenure Regularization

Granting property rights to informal settlers is not a new idea. The Civil Code of the Republic of Nicaragua (CCRN), a variance of the Napoleonic Civil Code, has integrated the notion of adverse possession. This concept originates from the Roman private law (UN-HABITAT, 2005) and, it is "a way to acquire a right on land (...) after a period of time and under the conditions specified in the law" (CCRN, art. 868). In Nicaragua, the possession needs to last at least ten years with a registered deed, or thirty years without, in order to acquire a parcel (CCRN, art. 897). However, this mechanism does not seem to be frequently used there, and this, probably because other requirements of the law grant more rights to the registered title holder¹⁴. Morales already asserted that the traditional procedures of the Civil Code were outdated and do not serve society well anymore (Morales, 1998). In other words, the traditional legal framework does not help settlers to regularise their tenure situation.

Moreover, the traditional institutions dedicated to collecting, processing and registering transactions are not suited for massive land titling operations. Morales (1998) mentioned that in the 1990s, the Public Registry of Immovable Properties¹⁵ in Managua was underequipped and very slow to proceed. Morales states that it was barely able to handle 25 land titles per day, an extremely slow pace when facing massive land titling operations. This situation "contributes to problems rather than solutions" since it spurs informal transactions (UN-HABITAT, 2005: 14). The system has even led to cases where the same property was sold twice by a unique landowner (Morales, 1998).

¹⁴ For instance, the article 897 specifies that behaviour of "simple tolerance" of the landowner towards a squatter does not allow for adverse possession or prescription. Moreover, the article 898 of the CCRN forces possessors to register their deeds when they claim the possession of a plot of land. This registration procedure can be long, complicated and costly.

¹⁵ Deininger (2003: 71) writes that "in a deed registration system, legally recognized and protected rights to land arise upon conclusion of an agreement between the holder of the right and its acquirer. The entry of the agreement's existence and key content into the public registry is to provide public notice of the existence of a right, and challenges to property rights will be handled through civil litigation."

Furthermore, the cadastral operations (including the topographic work) are also a long and costly process (Morales, 1998). These procedures represent quite a challenge for the *Instituto Nicaragüense de Estudios Territoriales* (INETER), which has to manage the cadastre¹⁶. In Nicaragua, "it is estimated that at least 40 % of the cadastral information is outdated" (UN-HABITAT, 2005: 45). Managua is no exception, since many neighbourhoods, even old ones have not yet been surveyed. It is therefore not surprising that international organisations have pressured the Government to speed up land titling programs (CORHE, 2003).

As mentioned in Chapter Three, property conflicts have often emerged from the actions of corrupt judges (CNDH, 2003). Therefore, improving the judicial apparatus is also another key element to consider. Performance of the courts is targeted in the Reinforced Strategy for Economic Growth and Poverty Reduction:

The judicial institutions and the quasi-judicial ones, even if they are improving, will necessitate an additional strengthening. Resolution of the claims about property and land titling will accelerate as cadastral and registry operations proceed. Public attorneys will broaden access to the legal system for poor people. Judges require more training, more assistants, faster procedures and also more time in developing a culture of integrity and judicial prestige. (Nicaragua, 2002: 39).

However, the problem of illegal settlements is sufficiently vast and complicated that it requires specific legislation: two laws (278 and 309) were adopted in the late 1990s to ease and extend titling operations.

4.1.1 Law 278

Law 278, or *Ley sobre Propiedad Reformada Urbana y Agraria* (Reformed Urban and Agrarian Property Act), provides an instrument for the beneficiaries of the laws 85 and 86, who received their *Solvencias de Ordenamiento Territorial* (provisional titles). This law is technical in nature, since it was enacted to improve the legal mechanisms used to adjudicate land rights. The eligibility criteria remain the same: settlers had to be Nicaraguan citizens by February 25, 1990, and had to have only one domicile at this date. On top of that, those living in informal settlements by 1995 may remain in possession of their home, "unless it is necessary to relocate the occupants for an urban planning reason" (Law 278, art. 93).

Obando (2006) affirms that this law was supposed to regularize precarious neighbourhoods; however, Law 278 just gave the occupants a respite *vis-à-vis* the former landowners. In reality, the authorities have been really slow to proceed with the land titling operations. The economic

¹⁶ Still according to Deininger (2003: 70), a cadastre "contains the boundaries of parcels as defined by surveys and recorded on maps and any additional information about these parcels. The cadastre provides the basis for a number of other functions, such as land use planning, management and disposal of public lands, land valuation and taxation, provision of other public services, and generation of maps."

cost of titling informal settlement is prohibitive. Social movements (such as the MCN) pressured the Alemán government in 1997 not to charge any fee from beneficiaries in these operations, and they partially succeeded, since Law 278 does not contemplate any fees to its beneficiaries: article 16 forces INETER to provide the settlers with gratis cadastral certificates¹⁷ and article 17 compels the public officers to register for free the settlers' land titles into the Public Registry of Immovable Properties. Hence, the financing of the legal regularization program appears to be an important limitation of the law.

A second problem is related with registration, for those who have received their land titles. The registration step is important, since full legal protection to a landowner only takes place afterwards (CCRN, art. 898). Many people, having in hand their titles, have yet to register them, says a coordinator of the MCN. Similarly, Parés told me that many beneficiaries of the Urban Renovation Program have not registered their deed of property. The required amount of money does not seem to represent the main obstacle for these people in going through the bureaucracy. Apparently, the main problem is that many people still carry the mentality prevailing in the 1980s: they believe that the State has to do everything for them. According to Parés, this attitude of the population towards "actions given by the institutions" needs to be changed and the population should feel more responsible for improving their lives. However, many people do not fit this generalization. A community leader told me that the diligent settlers, those who go upfront and have documentation, will be prioritized by the institutions when titling operations arrive into their neighbourhoods.

4.1.2 Law 309

Law 309, or *Ley de Regulación, Ordenamiento y Titulación de Asentamientos Humanos Espontáneos* (Regularization, Planning and Titling of Human Spontaneous Settlements Act), represents a considerable improvement over Law 278. Adopted in 1999, it can be considered a major step forward.

First of all, Law 309 builds on decentralization of the State, started in 1988 with the Municipalities Act (Obando, 2006). The latter did not include land titling as a municipal competency, but already brought urban planning into the municipal realm. Many services are better administered at the local level (Ballivián, 2004); decentralization can be regarded as a good governance practice, as explained further in this report. With Law 309, titling is now part of the bundle of municipal prerogatives. The City of Managua has therefore listed the strengthening of "the management process of titling and legalizing human spontaneous settlements" as a goal in its Master Plan (ALMA, 2002: 31).

¹⁷However, money was apparently charged to beneficiaries when they were soliciting their cadastral certificates. According a coordinator of the MCN, 50 Córdobas (about 2,50 CDN \$) were charged by lawyers for receiving a sworn declaration at INETER.

Secondly, the Law 309 is comprehensive, since it refers to land tenure, and also to many aspects of urban planning. Article 3 forces municipalities to adopt special plans (PUE) concerning the human settlements within their territories. The plans must include an analysis concerning the sustainability of these neighbourhoods. For each settlement, an assessment will be made whether it can be legalized or not, whether it has to be moved (totally or partially) or not, and whether it should be redesigned or not (art. 6). A procedure is included in the law for populations that have to be relocated (art. 20). Furthermore, Law 309 obliges the public services companies to plan investments in the spontaneous settlements, in order to regularize and restructure the infrastructure in place (art. 19).

The scope of the PUE is also large because it foresees the construction of dwelling units and the improvement of the socio-economic conditions of the populations through many programs and projects focusing on employment, environment, health care, education and recreation (art. 32). This is what the law requires; however, the PRU was short of funds and did not implement any program aimed at creating employment, which was a weakness says Parés. However, this critique is still minor given the enormous scope of the program.

Thirdly, Law 309 is innovative, since it fosters the participation of the communities (Obando, 2006). The settlers are invited to group themselves in associations (art. 9) and solicit municipal government for legalization of their neighbourhood (art. 10). Parés believes that this strategy fosters a bottom-up approach involving citizens from the design phase, but unfortunately not through implementation as we will see.

Finally, one of the foremost accomplishments of this legislation concerns gender equity (Obando, 2006). In Nicaragua, "property rights were [traditionally] male rights, membership in the *comunidad indígena* [(Indian community)] was restricted to adult males and *mejoras*¹⁸ were owned by men" (Dore, 1997: 594). With Law 309, land titles have to be granted to both the mother and the father if they are married, or to the parent who is in charge of the children (art. 23).

In practice, the priority was given to women in the granting of land titles in the Urban Renovation Program (PRU). Parés explained:

The title was granted to the woman, head of the family. Even where there was a man, it was given to the women . . . only to the woman, as head of the family. Because part of the socio-economic diagnostic determined that, in these neighbourhoods, there was a lot of violence within the families and a lot of drug and alcohol problems. Hence, it was considered that the woman was the one who was the most present in the neighbourhood and the most stable in terms of

¹⁸ Dore defines the *mejoras* as "improvements to the land, such as hedgerows, fruit trees, crops and cattle" (Dore, 1997: 594); nonetheless, buildings and other man-made constructions can also be included in this list.

support for the family. She was the one always there, participating . . . women participated more than men in community organisations.

A strict interpretation of the article 23 might not have allowed that land titles be given only to women. Nevertheless, the spirit of the Law 309 is very progressive, since it forces municipalities to promote the participation of women and community organizations (art. 34).

However, this law has many drawbacks. First of all, according to the Law 309, civic participation has to be promoted during all the decision processes of the projects; however, the law does not mention that this participation should also take place during the execution phase. As Parés explained:

One of the critiques of the program is that it did not include community participation during the execution. And people wanted to participate. Thus, people destroyed the sidewalk and street improvements, as a way to criticizing the fact of not having been employed in manual jobs during the execution phase.

This example shows the importance of including the population not only in the decision process, but also in implementation in the context of Nicaragua.

Secondly, the Law 309 only applies to settlements constituted between February 25, 1990 and December 31, 1998 (art. 16 and 27). This means that people who have settled informally on lots after this date are left out; they do not benefit of any legal disposition to ensure their stability and facilitate the legalization of their occupancy.

Thirdly, the funding of land titling programs is not mentioned in the law. As in Law 278, beneficiaries of Law 309 do not have to pay fees to INETER for cadastral operations or to the Public Registry of Immovable Properties (art. 26). However, they have to pay for the land where they have settled if the former landowner is not a public institution or the government. This differs fundamentally from the Law 278; in the latter, all financial compensations to former landowners are paid through a special fund created via the Law 86. The assumption underlying this divergence is that the land taken after 1990 was not part of the Revolutionary Project. Plots of lands falling under 309 were not State confiscations, and rather arose out of privately orchestrated land grabs. Therefore, the government does not pay for the land taken after 1990. Under 309, land is bought by municipalities and then sold to settlers at a maximum price of 12 Cordóbas per square *vara*¹⁹ (art. 30). An exception is made for extremely poor families and war veterans, who are exempted from paying (art. 29).

However, land titling is very expensive and this is probably what has deterred municipalities from implementing such regularization projects in the country (Obando, 2006). Parés explained that for the PRU the land titling program plus the provision of public infrastructure (including

¹⁹ A vara is an old Spanish measurement unit, still in use in Nicaragua, corresponding to approximately 0.84 meter. This means that land value is caped to about 0.85 CDN dollars per square meter. Source: http://www.unitconversion.org/unit_converter/length.html

the design phase) cost about US \$ 3200 to 3500 per lot. She believes that if no international funding were provided, it would be almost impossible to think about improving precarious neighbourhoods. Nonetheless, Law 309 forces the municipalities to design these programs. Obando (2006) asserts that the authorities in Nicaragua make laws without insuring their application. In order to allow municipalities to jump into these projects, Parés recommends that methods be put in place to ensure their funding. This aspect will be further discussed in the section about land taxation.

Land titling is not only expensive in terms of money, but also in terms of political capital. Obando (2006) highlights that the support of elected officials is a determining factor in the success of land titling operations. Under Law 309, when an illegal settlement is on privately owned land, the municipal authorities have to negotiate the acquisition of the plot with the landowner. If municipality and the landowner do not agree upon the price, the municipality is allowed to expropriate the land at its cadastral value (art. 28). However, both landowners and politicians dislike the use of expropriation tools (Obando, 2006). It is not surprising if a landowner attacks the validity of the Law 309 in court. However, a ruling of the Supreme Court of Nicaragua stated in 2001 that this law does not violate the Constitution (Obando, 2006).

Nonetheless, one of the main issues related with land titling is, as mentioned by many analysts, the lack of coordination between different governmental institutions (Morales, 1998; Obando, 2006; Parés, 2004). In fact, the City of Managua and the National Government (through the OTU) both title in the territory of Managua. The municipality works under the Law 309, concerning neighbourhoods created between 1990 and 1998, and the OTU deals with settlements created by February 25, 1990. However, Parés confirmed that the distinction is not so clear in practice, and many cases of double titling have been seen (Morales, 1998). Obviously, duplication of efforts is a poor use of scarce resources.

Generally speaking in Nicaragua, political conflicts between different groups have often led to decisions contrary to the public interest. For instance, neoliberal governments have apparently asked communities to remove Sandinista heroes²⁰ from the name of their neighbourhoods in exchange for urban projects in their communities. The FSLN Government probably deserves critique as well, for having blocked a by-law to Law 309 that was designed under the Bolaños Government and financed by the UN in 2005 and would have broadened application to cover neighbourhoods formed between 1998 and 2008. However, the FSLN came back to power in 2006 and decided not to adopt the by-law.

4.2 Housing Programs

The right to housing appeared for the first time in the UN Declaration on Human Rights, adopted in 1948 (Everett, 1999). This provision of the UN document was later introduced in many

²⁰ A community leader told me that the government in place required a change of the name of the neighbourhood from Camilo Fonseca (a Sandinista hero) to Arnoldo Alemán (a neoliberal president).

national constitutions. In the 1980s, the Sandinistas included the right to adequate housing for all Nicaraguans in the new constitution. However, this basic right is still far from being materialized, since a large portion of the housing stock does not satisfy the minimum standards of housing (CORHE, 2003). Seventy-five percent of the families in this country cannot afford to buy an adequate house (MCN, 2009).

In order to calm down housing activists, the Alemán Government created the *Instituto de Vivienda Urbana y Rural* (INVUR) in 1998. This organization only existed on paper until 2002; before that year it was not given any resources or functions (CORHE, 2003). Even when the Institute took off, the social housing program excluded the largest part of the population in need of adequate shelter due to contradictory requirements to access this program: low family income, a property title but no family dwelling (CNDH, 2003). The UN-HABITAT (2005) blamed the Government for not broadening access to this program. Providing housing for the low class was certainly not a priority under neoliberal governments (CORHE, 2003).

However, current FSLN Government has manoeuvred a 180-degree shift. In three years (half of its mandate), over 11 400 new dwellings have been built nationally scale, which represents a considerable increase compared to the previous governments²¹ (Tortilla, 2009). Furthermore, this government has adopted Law 677 in order to have a proper tool to face the situation of housing deficit, currently experienced by the population.

The Sandinista socialist ideology is boldly affirmed in Law 677. For instance, priority is given to low-income families in the housing program (art. 1). The anti-speculative approach fostered by the FSLN is also apparent. The period during which beneficiaries cannot sell their homes is extremely long at 25 years (art. 7 and 24). Moreover, the beneficiaries must personally occupy their house (art. 114). These requirements are clearly intended to impede transfer of subsidies to wealthier households. If a beneficiary contravenes these rules, the deed can be cancelled (art. 7). Article 115 allows anyone to denunciate a transgression of the law to the authorities, which mechanism makes abuses highly possible. However, it is recognized in the literature that such market restrictions often lead to reduced access to credit and to informal transactions by the grantees, which rapidly makes the legal registries outdated (Deininger, 2003; Fernandes and Smolka, 2004). Moreover, De Souza, (2003: 238) affirms that "the right to social housing should not entail the lack of freedom, and individuals should be allowed to choose when and where to move." The same comment can also be directed towards Law 309, which also restricts sales for a period of five years (art. 23).

Nonetheless, an improvement vis-à-vis the Sandinista governance of the 1980s can be noted in this law. A collaborative approach among all the authorities working on the housing and land issues seems to be sought. A policy of decentralization towards municipalities emanates from the spirit of the law, and especially from article 42:

²¹ According to the Tortilla, the governments of Violeta Barrios, Arnoldo Alemán and Enrique Bolaños respectively built 5397, 8179 and 8600 units.

Local governments of the municipalities of more than 20 000 inhabitants shall create and implement the Unique Front Office, whose function will be exclusively to process and deliver the permits for the realization of housing programs and projects, and whose fundamental objective will be the production and construction of urban and rural dwellings, infrastructure and subdivisions, be they for personal or commercial uses.

This time, the FSLN has learned from its mistakes of the past and Law 677 stresses the obligation for all housing promoters to legalize the properties for their projects. Last year, the MCN asked the Government to go further by creating land banks, consisting of publicly owned land suitable for development.

4.3 Land Taxation

Programs to title and enhance precarious neighbourhoods are very expensive and one might wonder how they should be financed. In the case of the PRU, the IDB financed a large part of the project. However, such important programs should not depend on the assistance of international institutions and the National Government. Ideally, these projects should be auto-financed, which means that the increase in land values²² created by initial projects should be poured into a fund assuring the realization of new titling projects. Parés told me that authorities currently do not take advantage of such increases. In other words, the collection of property taxes is weak in Nicaragua, even if this practice is made mandatory by decree (*Decreto 3-95*). According to Morales (2003), little effort is made by municipal authorities to capture these potential economic resources.

Baldizón (1999) enumerates the many factors causing this passive attitude, such as poverty, the inexistence of a culture of tax collection and payment, the quasi-absence of punitive measures against contravening people, the deficiency of cadastral information, and the political cost of implementing the land taxation law.

First, it is true that the low economic level of the population poses a real challenge to policymakers in Nicaragua. During my encounters with inhabitants of precarious neighbourhoods, I was told by many people that they do have sufficient means to pay land taxes. Therefore, any policy aiming to enlarging the tax base should be complemented by a strategy to improve the economic conditions of the population (Baldizón, 1999).

Secondly, the attitude towards taxation has to be changed. Article 3 of the Decree requires both formal and informal landowners to pay taxes²³. A coordinator of the MCN told me that: "settlers

²² By increase in land value, I refer to the real estate appreciation which is assumed to occur with the titling and implementation of public infrastructure and services. The increase in cadastral value of the property is meant to generate more land taxes to the government.

²³ To be more specific, the article 3 ranks the contributors in order of preference for the tax collection: proprietors come first and possessors come after.

are used to thinking like peasants (...) However, in this aspect, the majority of the people here do not pay taxes (...) It is not in their nature to pay taxes." It is not surprising if these people think like farmers, since many of them have kept a countryside lifestyle (for instance, raising chicken is a common practice in many human settlements) (Hidalgo, 2009).

Thirdly, Baldizón (1999) declares that the punitive measures are weak. At best, they are not applied. The situation has been slightly improved with Law 452, proclaimed in 2003. It is now impossible to transfer a property if land taxes are not paid beforehand. Public notaries and civil servants at the Public Registries of Immovable Properties must now request the *Solvencia Municipal* from real estate vendors. This document testifies that the land tax has all been paid (art. 18). However, this measure does not impede anyone from selling his property on the informal market. Thus, legal means to enforce tax payments are still weak in Nicaragua.

Fourthly, the cadastral database problem is one of a vicious circle. The less a municipality has taxation information in hand, the less it can collect; the less it receives contributions, the less money it has to improve cadastral operations. Thus, the cadastre is at the very centre of the land taxation problem. The use of the cadastre as a tool to collect land taxes is relatively recent in Nicaragua; it dates back to 1995, when the Decree 3-95 was proclaimed. Its function is "to transform and improve the methods of property valuing, and to control the real estate registry" (INIFOM, 2009: 64). At least, the central government provides some technical assistance for the implementation of municipal cadastres through INETER (art. 33). Improvement to the cadastre system is a key element of any effort to enlarge the tax base in Nicaragua (Ballivián, 2004).

Land taxation has the potential to develop the financial capacity of the municipalities. Augmenting municipal incomes also means being able to sustain programs directed to improve the conditions of more precarious neighbourhoods.

4.4 Urban and Regional Planning

A glimpse at Managua is sufficient to conclude that planning is absent or that development does not comply any explicit plans. Pérez (2010) reports that even the National Government does not comply with the existing regulation in Managua:

(...) in the housing projects realized by the Government, in the past, no municipal permit was solicited for the constructions. Likewise, the municipal Government of the Sandinista Dionisio Marenco [mayor of Managua from 2004 to 2008] did not even give any permission for the constructions that are now finalized.

Parés (2004) also criticizes the absence of a coherent vision and of appropriate planning tools for the development of the capital during the last decades. Given the increase in population and the hazardous location of the city, Morales (2003) asserts that it is time to create appropriate planning mechanisms.

In 1997, Law 40 was revised to grant the general powers of planning and control of land uses to municipalities (art. 7, par. 5). In 2002, the Government specified criteria and guidelines for the planning of the municipalities through Decree 78. For instance, article 5 mentions that "planning shall contribute to reducing the vulnerability and to sustaining economic activities decreasing the risks associated with natural phenomena and human threats to the productive systems and the human settlements." The bottom line of this decree is indeed to reduce direct contact of humans to hazards and provide public infrastructure where it is needed by way of a *Plan de Ordenamiento Territorial Municipal* (Master Plan). These plans have to be drafted by the municipalities and approved by a national committee (art. 69).

In Managua, the Master Plan was adopted in 2002 along with planning by-laws (Parés, 2006). However, the existing documents are too much geared towards conventional neighbourhoods, and are not sufficient to cope with the numerous informal settlements the city encompasses (Parés, 2004). Nonetheless, Parés argues that the *Plan Urbanístico Especial* is still the proper tool to properly plan these precarious neighbourhoods and the City of Managua should comply with this requirement of Law 309.

Still, the existing body of laws related with urban planning is not sufficiently elaborated. A proposition for an urbanism act was elaborated in 2004 by deputies Torres and González, but was later put on hold. Such a law would have detailed the obligations of the municipalities in enacting by-laws, granting permits, and implementing national policies and other functions of that nature. This law would have affected the problem of human settlements as well. For instance, the municipalities would have been allowed to acquire land to relocate populations presently living in inappropriate areas.

4.4.1 Decongestion of the Population of Managua

Since it is known that Managua is located at a hazardous spot, planners have advocated the redistribution of the population of Managua towards other regions (Chavez, 1987, p. 228). According to the director of the Planning Department at INETER, "it is necessary to start the decentralization" of Managua, and "this subject should be a policy of the State".

The first attempt to decentralize Managua was done after major floods in 1968. At that time, the dictator Somoza owned large expanses of unused cotton fields a dozen kilometers north of the city. He subdivided the land and sold the plots to the victims of the floods who lived on the shores the Xolotlán (CDCA, 2009). Four years later, thousands of victims of the earthquake found refuge in the same cotton fields, which were sold to these people (ibid). The same kind of events happened in 1998, when Hurricane Mitch forced thousands to move to this same place (ibid). In 2001, this sort of "refugee camp" became independent of Managua and formed the municipality of Ciudad Sandino (ibid). Because most of its inhabitants were initially extremely poor refugees, the population of "Sandino City" has experienced socio-economic difficulties (ibid). Therefore, a serious attempt to decentralize Managua should target various socio-

economic groups and include projects generating employment in order not to create new ghettos for the poor.

The first official decentralization policy in Nicaragua, the Regionalization Act, was adopted by the Sandinistas in 1982 but never implemented. Twenty years later, INETER (2002) has proposed the *Estrategia de Desarrollo de los Centros Urbanos* (EDCU), fostering the growth of exurbs of Managua²⁴. The present government is currently working at stopping immigration from these locations to Managua. The strategy aims at providing the conditions to keep these populations outside Managua by way of social housing projects located in these exurbs (INIFOM, 2009). This preventive strategy is truly needed; however, a too aggressive decongestion approach would not be desirable, as people always desire "proximity to markets, schools, transportation, employment, and so on" (Glenn and Wolfe, 1993: 17). As long as basic services are present in these smaller communities, there are fewer chances that they will ever settle in Managua.

4.5 Conclusion

In the previous chapters, I illustrated the problems faced by the informal settlers in Managua and presented the obstacles in improving their situation with current tools. During an interview, Zuñiga summarized what he considers to be the main difficulties posed by the precarious neighbourhoods of Managua:

- the economic, in terms of how the State can satisfy the needs;
- the (...) speculative behaviour from people who want to get rich, using the land they own;
- the people who settle in areas unsuitable for urban development, such as flood, mudflow and seismic zones. Often they do it by necessity, but sometimes they also do it because they ignore the risk (...);
- the private developers do not comply with the law;
- the lack of coordination;
- the corruption;
- the lack of a planning culture . . . upheld by a strong legal framework . . . with public participation . . . with true levels of decision.

In regards with the first element, I would not point out the financial constraints of the State, but rather its incapacity in using land values to fund programs of regularization of neighbourhoods, as explained by Smolka and Iracheta (1999). Altogether with the corruption, the political strategies of many politicians also represent a problem, when land titles are granted without any planning or policy considerations.

²⁴ Exurbs are secondary cities located in the area of influence of the capital, such as Jinotepe, Nandaime, Masaya and Granada.

The policy presented in the next chapter builds on the aforementioned issues; thus, related objectives are stated before considering different policy options. In the Declaration of Buenos Aires, Abramo et al. (2005) affirm that any land policy in this context should be "promoting sustainable and fair use of land resources; reducing land prices; producing serviced land; recognizing the rights to land by the urban poor; and sharing the costs and benefits of urban investment more evenly." Considering the bundle of problems and generic objectives previously listed, here are the objectives I pursue for my policy proposal

- promote sustainable urban development;
- reduce land prices and speculation;
- ensure the availability of serviced land for the urban poor;
- provide tenure security for a maximum number of households;
- encourage fiscal responsibility; and
- reinforce local democracy.

But above all, the new policy should have as an ultimate objective "the socio-spatial integration of the informal areas and communities" into the city, as advocated by Fernandes (2002b) and Brown and Bornstein (2006).

5. Proposing land policies for Managua

The archaic legal framework concerning urban lands has long contributed to the socio-spatial segregation of certain social classes and the formation of precarious neighbourhoods (Fernandes, 1999). For this reason, a series of agents such as social movements, NGOs and international agencies have advocated for the adoption of progressive policies in order to tackle this worldwide issue (ibid). On the one hand, many activists and academics have promoted land titling programs to respond to the "social function"²⁵ of the land. For instance, Galiani (2009) demonstrates that land titles positively affect household size²⁶, investment in dwelling and educational achievements. On the other hand, multilateral banks have encouraged the same programs as a way to liberalize land markets, and this was done strictly from an economic standpoint (Fernandes, 2001). As a matter of fact, a sizable empirical literature is dedicated to economic relationships between land tenure and investments (Field, 2005).

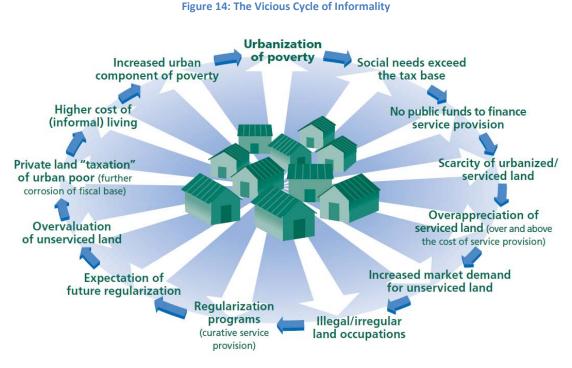
The most influential of these writings was the bestseller *The Mystery of Capital: Why Captitalism Triumphs in the West and Fails Everywhere Else*, published in 2000 and written by Hernando de Soto, a Peruvian economist. According to de Soto, the occidental economies have succeeded because their legal systems are quite accessible to the population, and have fostered the creation of open exchange markets. The author claims that in third-world countries, all the assets (small businesses and immovable properties) informally owned by the poor represent "dead capital". Since these economic goods are not yet recognized by the legal system, they cannot be used as collateral. This impedes landowners from borrowing money from banks and thus deters them from investing in their houses and businesses. De Soto advocates that the legalization of these properties would eradicate the poverty in these countries.

The solution proposed by de Soto was quickly adopted by many policy makers throughout the world since it appeared as simple and efficient as a magical recipe. However, Edésio Fernandes (2002a), a Brazilian lawyer and urban planner, regrets that these titling programs have narrowly focused on the legal aspect of poverty, and have not provided the poor with the proper socio-economic development tools that could have fostered the reintegration of these populations into the formal city. Moreover, these programs have barely tried to mitigate the consequences of living in precarious neighbourhoods and have not acted to prevent the formation of new slums.

²⁵ According to Ortega (2000), the social function of the land would be to ensure the socio-economic development of the society and decent housing conditions to its inhabitant. Ortega also claims that "legal status on land tenure is not the most important; size of property, or access to technical services, to credit and to other economic and social assets emanating from a development project or from any other source are far more important" (ibid.: 18).

²⁶ The average size of titled households is lower than untitled ones for many reasons, as explained by Galiani (2009).

Fernandes (2009) clearly demonstrates that, unfortunately, there is no simple solution for an issue as complex as informal settlements. Consequently, de Soto's theory has lost its influence during the 2000s. Fernandes (2009) believes that policy makers should go beyond simply asking "how to formalize the informal?", and question the causes of informality, and then, work on stemming these causes. This means that any policy aiming at improving precarious neighbourhoods should seek to eliminate the causes of informality and break the vicious circle of formation of these settlements. This vicious circle is illustrated in Figure 14:



Source: Smolka and Iracheta (1999: 219)

Breaking this circle necessitates broadening the scope of a policy to be implemented. Deininger (2003: 185) argues that:

(...) a narrow focus on only one or two policy instruments may not be appropriate. Evaluation of the wide variety of innovative approaches that have been implemented in different places and at different times can be utilised in a more systematic fashion to stimulate the policy dialogue, build capacity, and inform policymakers.

Therefore, I present different planning tools (regularization and housing programs, community participation mechanisms and land taxation methods) along with some examples in the next sections. At the end, a combination of these instruments is proposed as a way to break the informality circle and respond to the objectives stated previously.

5.1 Regularization programs

It is indeed widely recognized that the implementation – or the simple announcement – of regularization programs create expectations for future regularization in other areas of the city, thus increasing the value of informal land (Glenn, Labossiere and Wolfe, 1993; Smolka and Iracheta, 1999; Smolka and Damasio, 2005). In other words, titling programs, in their current format, may be part of the problem rather than the solution. De Souza (2001) even argues that legalizing land decreases the availability of illegal parcels, thus increasing their value and making them less affordable for the poor.

Moreover, renovating slums costs more money than planning for new settlements (Smolka, 2003). On the one hand, regularizing precarious neighbourhoods in a context of limited State resources often means compressing budgets for other public programs (Fernandes and Smolka, 2004). On the other hand, not acting at all to improve these existing neighbourhoods would be impossible from planning, political and ethical perspectives (Smolka, 2003). Thus, it is essential to both regularize existing settlements in a restoring way and provide new housing opportunities for the poor in a preventive way (Fernandes, 2009; Glenn, Labossiere and Wolfe, 1993). Literature about regularization is presented in this section, and preventive programs of housing development are discussed in the following section.

The UN-HABITAT (2005: 22) distinguishes three types of regularization: "regularization of the land titles, physical regularization (urbanization and infrastructure provision), and both together." However, Fernandes and Smolka (2004) insist that adjudication initiatives should always be accompanied by physical upgrading. Glenn, Labossiere and Wolfe (1993) and Parés all mention how important it is to regularize the physical situation before stepping into the legalization process: once settlers have their land title in hand, they do not want to see their parcel boundaries moved, says the latter. Yet, the configuration of lots often has to be changed during physical regularization in order to accommodate more common spaces, to enlarge the streets or simply to relocate populations.

5.1.1 Physical regularization

Parés (2006) enumerates some of the guidelines for slum upgrading she followed when working on the PRU. It is important to respect as much as possible the existing urban fabric and infrastructures. Nonetheless, the technical quality of the infrastructure put in place has to meet legal requirements and has to be sustainable. Parés differentiates slum renovation and rehabilitation. Renovating a neighbourhood involves laying out a new street grid; by contrast, rehabilitating means conserving the existing lots as much as possible. Of course, rehabilitation is better, but it is not always possible. For instance, Parés (2004) explains that planners need to consider design criteria, such as the permeability of the street grid and minimum setbacks from seismic faults and streams. Moreover, Fernandes and Smolka (2004) warn decision makers about the temptation of using cheap materials or infrastructure to upgrade precarious neighbourhoods. These "second-class solutions" for "second-class citizens" end up being costly to maintain and age quickly, write the authors (ibid: 146).

5.1.2 Legal Regularization

Land titling should not be seen as an objective, but rather as a mean to achieve something else. For instance, land titles are a prerequisite for land management and administration in Mexico (Ward, 1998). Once parcel owners are registered, they can receive public services, but are also compelled to contribute to the public finances by way of land taxes. Nonetheless, tenure security should always be the priority of the legalization of precarious neighbourhoods. In fact, most of the human settlements are already accepted *de facto* by the governments. However, it is important that they be supported by the legislation as well; this would ensure the tenure security after a change of government.

The tools I propose should achieve the objectives set in Chapter Four while reflecting the context of Nicaragua. Fernandes and Smolka (2004) complain about the lack of creativity of policymakers when designing regularization programs. Deininger (2003: 71) summarizes well one problem faced by traditional land titling projects:

On the one hand, bureaucrats have in the past often been overambitious in the design stage but subsequently failed to deliver, or covered only very small areas. As a result, the land administration system has often failed to ensure even the basic goals of providing affordable ways to maintain tenure security and facilitate the emergence of a market. On the other hand, political imperatives of awarding a large number of titles within a short period of time should not undermine the quality and long-term sustainability of the titles awarded.

Therefore, the absolute ownership of the land delivered through individual titles might not be the only solution. Hence, let us look at other instruments used to regularize the legal situation of informal occupancy.

A first strategy is the "piece-meal" titling approach used in Trinidad and Tobago, which was analysed by Glenn, Labossiere and Wolfe (1993). Under this model, an administrative tribunal decides upon the adjudication of land to individuals requesting a title for the plot they occupy. However, this solution had many weaknesses, such as: the costs supported by the applicants, the burden put on the government and the impossibility to develop a community plan. This "case by case" approach is from far the most expensive solution and the least desirable from an urban planning perspective (Abramo et al., 2005: 9).

The UN-HABITAT (2006) advocates for a citywide approach, which is already embedded in the philosophy of Law 309 in Nicaragua. Systematic titling allows for economies of scale, but also enhances equity "if all claims in an area are registered at the same time", argues Deininger

(2003: 56). However, he recognizes that massive land titling campaigns are still expensive, and he believes in alternatives to this problem, be they temporary or more permanent, such as:

- a streamlined and simplified title registration system as introduced in Peru (de Soto 2000)
- long-term and transferable leases²⁷ as implemented in many Indian cities; or
- *legal measures that guarantee occupancy rights and recognition of such rights, including record keeping, at the local level.*

Concerning the first item, Fernandes and Smolka (2004) recommend that not only the titling and registering processes should be simplified, but landholders and municipal authorities should also be educated about these mechanisms and their institutions. The UN-HABITAT (2005: 14) suggests that the "rapid developments in information and communication technologies present important new opportunities to modernize land administration systems", which should be purposefully used to simplify the processes for the landholders.

Fernandes and Smolka (2004) propose that land administration powers be taken from the institutions currently in charge of them. This radical suggestion is relevant, since these institutions have failed in assisting the informal land markets. This is why a hybrid administrative strategy, partially taking away the registration prerogative from the government, is proposed in the third bullet point shown above. In fact, this type of solution is also promoted by the UN-HABITAT (2006). Hendriks (2008) details this strategy, which is supposedly easier to implement. The strategy contains three major steps:

- 1 adjudicate a collective title to a community in the short term;
- 2 empower the community to administer informal transactions at the local level in the medium term²⁸;
- 3 grant individual freehold titles in the long term.

Porio (2003: 16) praises this type of "intermediate instruments of tenure". She believes that they can improve tenure security while being practical, cheap and strategic. Moreover, Porio argues that they can "slow down the gentrification process observed in regularized settlements". Nevertheless, the pressure to grant individual titles will probably come sooner or later with the development of land markets (Deininger, 2003).

²⁷ Deininger (2003) and Fernandes (2009) consider that it is preferable to lease the public land to informal tenants. According to them, adjudicating land titles on public land would constitute an unjustified privatization of the public domain. By contrast, they advocate a wider use of adverse possession tools for transferring the private properties to informal occupants.

²⁸ This can be done using simplified record techniques and / or with the help of professionals (comanagement) by way of NGOs or governmental agencies (UN-HABITAT, 2006).

Box 1: An Innovative Approach to Informality

Recife, a large Brazilian city, has experienced problems of informal settlements similar to those of Managua since the second half the 20th century. In the 1980s, activists advocated for the rights of the poor to live in the city. Under popular pressure, the municipal government created Special Zones of Social Interest (ZEIS in Portuguese) in 1983. These zones aim at protecting low-income families from eviction – without automatically adjudicating property rights – in a first time, and, in a second time, providing and improving public infrastructure and services through Regularization Plans (PREZEIS). This instrument also includes a community participation scheme and subsidies through the municipal budget.

Ward (1998) believes that flexibility is the key ingredient of this planning tool. This instrument has had an immediate success in securing land tenure for the poor and mitigating real estate speculation by way of the ZEIS. Moreover, this tool has changed the social activists into policymakers and boosted citizen participation. However, the results are mitigated for many ZEIS, notably concerning physical improvements (Fernandes, 2004).

Throughout years, the number of ZEIS has increased in Recife to encompass more than 60 000 families in 1999 in about 600 *favelas* (de Souza, 2001). Moreover, this tool was officially accepted by the federal government of Brazil, which enacted the PREZEIS law in 1987 and amended it in 1995 (ibid). It is now recognized as a "best practice" by international specialists on land tenure problems.

Deininger (2003) notes the idea of local administration of property transactions is not new, and has worked in many places. However, he specifies that "even if property rights to land are assigned to a group, the rights and duties of individuals within this group, and the way they can be modified or enforced, have to be clear" (ibid: xxii). Moreover, Deininger stresses that information about informal transactions should be updated in a way facilitating a future transition towards the legal system. UN-HABITAT (2006) declares that governments are reluctant to recognize group rights for this reason, and also because of the complexity of the partnerships with communities, public agencies and NGOs.

Another major drawback of the implementation of local tenure administration is the difficulty in ensuring women and other fragile groups' rights. If regularization titling programs often foster positive discrimination towards women (joint titling or adjudication of land ownership exclusively to women, such as in the PRU), it is not so easy to guarantee the same treatment under community management. In fact, in traditional societies, such as in Nicaragua, "land allocation and dispute settlement tend to be dominated by elites, usually men" (ibid: 9). Therefore, it will be necessary to mitigate this effect through some mechanism.

5.2 Housing Strategies

The previous sections focused on the regularization of existing precarious neighbourhoods. However, any land policy attacking this issue must also provide a preventive solution, which would impede the formation of new spontaneous settlements (Morales, 1998).

In the 1990s, the only Latin American country that did not experience the formation of slums was Chile. There, the construction of new dwelling units was higher than the formation of new households, and the housing shortage steadily decreased due to government policy (Smolka and Sabatini, 2000). The strategy was twofold: eliminating the urban growth boundaries (while keeping fragile natural areas protected), thus liberating cheap suburban land; and giving housing subsidies to low-income families. This approach worked well, even without a public housing program. However, land prices increased over the years and ended up absorbing 60 to 100% of the subsidies (ibid). Moreover, eliminating the urban growth boundaries led to important changes in the morphology of the Chilean cities (ibid). The urban sprawl has contributed significantly to the augmentation of air pollution, argue the authors. In other words, the low cost of suburban land does not currently include social and environmental externalities; this issue shall be addressed in the future, claim the authors. In order to mitigate the undesired effects of such anarchic development, the Government now plans to improve planning mechanisms through modifications to the existing Urbanism and Constructions Act (ibid).

A second solution, advocated by the World Bank, is the assistance to "self-help housing", under which banks of materials are available for people wishing to undertake the construction of their own houses (Berner, 2000). Other types of support to "self-help housing" include the provision of a plot of land fully serviced (water, electricity and sewer), the delivery of a construction permit and micro-finance solutions, mention Bredenoord and van Lindert (2010). In Nicaragua, about 85% of the dwelling units are currently self-made (Nicaragua, 2005); therefore, any future housing policy meant to be efficient should build on this aspect. The newly created *Central de Cooperativas de Vivienda por Autoconstrucción y Ayuda Mutua* aims at assisting and promoting "self-help housing" projects throughout the country (Espinoza Maltez, 2009). Since 2004, a few housing cooperatives in this country have started to apply self-help principles (ibid.), including the successful project *Juntando Manos* in León (CEPRODEL, 2008).

Aiding self-help construction presents many advantages, the greatest being financial economies. Self-help construction is indeed far less expensive than traditional social housing programs, where houses are delivered once finished. Moreover, people involved in such an activity can acquire precious skills, and adapt the design of their dwellings to their own needs (Bredenoord and van Lindert, 2010). The authors claim that self-help is a more flexible construction method than traditional "turn key" products, since the former allows occupants "to expand or improve their dwelling, in accordance with their needs and priorities" (ibid: 279).

Nonetheless, letting the poor auto constructing and maintaining their houses presents many cons. For instance, not everyone has the skills or the time for such an endeavour (ibid). This is especially true for buildings with two or more stories, which needs more technical expertise. Furthermore, appropriate and good-quality building materials should be made available to people undertaking self-help construction. There is also a problem in regards with planning regulation, environmental standards and construction codes. Despite their evident usefulness regarding safety and technical matters, Porio (2003) believes that these by-laws have limited the access to housing for the urban poor, and they are not adapted to the informal realm. Therefore, Brown and Jacobs (1996: 493) advocate for a more accommodating planning approach, which is "process oriented and which assess the needs and capacity of the [informal] community for change". Similarly, Glenn and Wolfe (1993) suggest that zoning regulation and engineering standards be more flexible in the context of informal settlements, and also be designed with the collaboration of the communities. This point of view is also shared by Zuñiga, who told me that planning objectives can only be achieved when the different instruments and projects are appropriated by the population.

Thus, the adoption of a policy that would allow flexible urban regulation might be unavoidable if the objective is to provide affordable housing. This would represent a future-oriented planning approach, and would ensure the integration of many poor families into the city.

Box 2: The Social Urbanizer: How to Informalize the Formal

The City of Porto Alegre, Brazil, has developed a proactive mechanism to plan for new affordable housing developments. The municipality believed that this segment of the market could be accommodated if favorable conditions were provided to private developers. Municipal officials have understood the mechanism of slum formation and the high price to pay for their regularization. Therefore, the council of Porto Alegre decided to give incentives to both formal and clandestine developers to produce low-income housing.

This public-private partnership works as follows. First, interested developers have to register themselves as "Social Urbanizers" at the City. Second, areas suitable for development are targeted by the Municipality and negotiations with the Social Urbanizers take place. In Porto Alegre, zoning by-laws and other legal requirements are generally relaxed, the permit processing is accelerated, and financial advantages are frequently offered to these "social" developers. In exchange, developers must respect some requirements and ensure the affordability of the dwelling units. As a result, the Social Urbanizers have produced fully serviced land in pilot projects for US \$ 25 to 28 per sq. meter, which contrasts with the US \$ 42 to 57 per sq. meter of the formal market.

Unfortunately, with these price brackets, the extremely poor are still unable to access the program. Nonetheless, the example of Porto Alegre shows the importance of looking at the urbanization processes and collaborating with its agents in order to attain socially desirable ends. The Social Urbanizer strategy represents a "third path", reconciling legality and legitimacy.

Reference: Smolka and Damasio, 2005

5.3 Land Taxation

Land taxation was considered as the most efficient form of taxation by Henry George. In his famous book Progress and Poverty, George (1879) asserts that land taxation is preferable to any other type of tax. Contrary to income and sale taxes, a levy on the land does not penalize labor and commerce. More specifically, he stipulates that the tax should bear only on land and not on the buildings and other improvements made by the landowners. He explains the foundation of his argument as follows:

The basis of this idea is evidently that the enjoyment of property is made possible by the state – that there is a value created and maintained by the community, which is justly called upon to meet community expenses [i.e.: the proximity to public transportation, retail stores, schools]. Now, of what values is this true? Only of the value of land. This is a value that does not arise until a community is formed, and that, unlike other values, grows, with the growth of the community. (...) With every increase of population the value of land rises; with every decrease it falls" (1879: 420-421).

If the idea is rightfully justified, it is also easy to implement. George argues that a land tax is easy to collect (no one can hide land from the authorities), prevents tax evasion, implies less bureaucracy and hampers corruption.

Finally, the main argument in favor of land taxation is more efficient use of land: the higher land tax is, the more difficult it is to retain land for speculation. George (ibid: 416) wrote: "by compelling those who hold land on speculation to sell or let for what they can get, a tax on land values tends to increase the competition between owners, and thus to reduce the price of land." Reducing the value of the land is precisely what it is needed to break the vicious circle of informality, because it gives the poor access to the city. Thus, Land Value Taxation (LVT), as it is now know, would represent a way to redistribute what landholders owe to society. UN-HABITAT (2006: 23) strongly believes that "LVT is the appropriate instrument for the urgent fight against global inequity and poverty."

Land taxation is also a necessary step in the decentralization of the State, because it fosters municipal autonomy, as opposed to a reliance on transfers from central governments. The decentralization is also good, since it is considered that local services and "social auditing mechanisms" are better administered at the municipal level (Ballivián, 2004: 12). Fuentes and Lungo (1999) mention that national and international banks always require that municipalities possess land taxation systems in order to loan them money. In fact, this is the same logic as when an individual wants to borrow money from their bank: they will be asked about their sources of income.

Deininger (2003: xlii) mentions that schemes to develop a tax collection culture exist. Incentives such as "matching local taxes collected with central funds" have the potential to spur tax collection. Nonetheless, the success of a fiscal reform depends also on other actions that should be taken simultaneously, such as the modernization of the cadastral database and plan, the improvement of valuation methods, and the participation of the public (Cohen, 1999).

The participation of the communities in the design of the land taxation program is indeed crucial, because it will affect its legitimacy. Taxation is not part of the Nicaraguan culture yet, and a top-down approach might jeopardize the collection of the charges. Many strategies can be used to make the tool more politically acceptable. Deininger (2003) cites an example that already exists in many countries, which is the exemption of small properties. However, Klink, Afonso and Bagnariolli (1998) explain their preference for a universal and stable tax collection

system. As many people as possible should contribute to the tax base, even if the levy rate is very small.

Fernandes and Smolka (2004) consider it very important to include all the parcels in the fiscal system, as soon as they are included in the cadastre and are regularized. The earnings generated by the inclusion of new communities into the tax base could even serve as a way to financing the regularization of more informal settlements, as it has been done in Brazil (Smolka and Mullahy, 2007). Another "success story" is also presented by Bustamante and Gaviria (2004), who compare the cost of regularizing all the settlements in a Mexican city with the increase in revenue generated with their inclusion into the tax base. The cost-benefit analysis appeared to be quite positive, and this supposes that the profits could even serve to implementing socio-economic development programs in the informal settlements.

Box 3: Land Value at the Service of the Community

In 1997, Colombia became one of the few countries to have implemented the concept proposed more than a hundred years ago by Henry George. Local governments are authorized to capture 30 to 50 % of the land value increases due to upzoning (i.e.: modification of the zoning designation from rural to urban), since it is accepted that the usefulness for its proprietor and its commercial value are due to this change.

The Colombian legislation is flexible, in that landowners can pay at different moments: on the solicitation of a construction or subdivision permit, on a change of the land use, on the transfer of property or on the grant of "bonus zoning" by the City. It is also flexible because it allows for different modes of payment: cash, donation of a portion of land to a public agency, land swap, participation in projects of social interest, implementation of public infrastructure, or cession of development rights. Nevertheless, municipalities must use these gains for specific purposes, such as social housing and physical regularization of impoverished areas.

The implementation of the *participación en plusvalías*, as it is called in Spanish, has challenged the local Colombian administrations. They had to develop methods to calculate these increments, and also to negotiate with the landowners. In spite of these difficulties, the policy is generally accepted among the landowners and has been internationally acclaimed.

References: Doebele, 1998; Rojas and Smolka, 1998; Barco and Smolka, 2000; Maldonado and Smolka, 2003

Nonetheless, imposing a tax burden on everyone does not necessarily mean inequity for the poor. De Cesare (2002) believes in a progressive tax²⁹, which can foster a better use of urban lands and help to level social inequities. The poor usually spend a larger share of their budget on housing than do the wealthy. The fact that the former usually hold smaller lots than the latter is an opportunity: the implementation of a progressive tax on land would certainly "promote a fairer distribution of the tax burden" (ibid: 165).

Finally, land taxation is incentive-based, which is better than a "command and control" type of regulation for purposes of urban planning (Deininger, 2003). Therefore, it will be necessary to generalize land taxes to all landholders and improve tax collection mechanisms, but that will necessitate a strong political leadership. It will also require a strong technical framework, and the acceptation and the commitment of the population (Cohen, 1999). However, this is a prerequisite for the provision of municipal services, and a tool fostering the inclusion of the poor in the city. With some creativity, it can purposefully serve to produce well-serviced urban land and level urban inequities (Abramo et al., 2005).

²⁹ A progressive tax is a levy in which the rate of imposition raises as the tax base increases. For instance, a 100 square-metre plot could be imposed at 0.10 \$ per sq. metre, and a 500 square-metres parcel could be taxed at 0.25 \$ per sq. metre.

Box 4: Legitimizing Public Decisions

Porto Alegre (Brazil), like Managua, has experienced problems of socio-economic segregation between its neighbourhoods. In the 1980s, a left-wing party won the municipal elections in this city and introduced innovative and progressive politics in order to tackle down this problem. One of them, called "participatory budgeting", allows thousands of citizens to voice their needs and expectations in regards to the use of public monies.

In Porto Alegre, half of the city budget is left for this exercise of direct democracy. During the public assemblies taking place in each of the 16 districts, residents rank their budgeting priorities for local issues (i.e.: public infrastructure, parks and schools) and for citywide matters such as public transit. In a second step, delegates from each district are mandated to express the preferences of their population at the municipal level. In order to boost the public participation, the number of delegates representing a district is set in proportion of the number of citizens present at the public assemblies.

Porto Alegre has found a way to redistribute the benefits of the urbanization in a legitimate way, which includes the poor. This instrument has fostered direct democracy in Porto Alegre and it has elevated the trust that the population has in its municipal government. This system has gained popularity throughout the years: the number of participant has increased from 1000 in 1990 to 40 000 in 1999. The share of the city funds dedicated to the participatory budgeting was consequently raised by the authorities.

Many Latin American cities need to put in place mechanisms to reinforce democracy and level socio-economic inequities, as did Porto Alegre. For that reason, the IDB strongly recommends that other countries implement such an exemplary practice in their municipalities.

Reference: Goldsmith and Vainer, 2001

5.4 A Policy Proposal for Managua

A literature review focusing on land policies alleviating poverty and a few precedents showcasing "best practices" were presented in previous sections; they inspired the policy I advocate for Managua. Along with these, the series of objectives for the land policy of Chapter Four frame the presentation of my proposal, which is summarized in Figure 15.

5.4.1 Fostering the Decentralization of Managua

First, the **promotion of sustainable urban development** should be prioritized over short-sight political campaigns promoting land titling without any other considerations. I was told by interviewees that this is currently what the FSLN does; however, experts in land policies claim that other factors, such as environmental protection and risk mitigation should hamper regularization where necessary (Parés, 2004; Deininger, 2003). Because of the high level of risks associated with natural hazards (Figure 12), it is impossible to regularize all the neighbourhoods of Managua. As shown in Figure 13, no more than 57% of the informal settlements can be titled; the other 43% necessitate the relocation of populations, unless better techniques are found to mitigate the existing natural and entropic hazards.

The authorities should avoid evicting these inhabitants from their unsafe locations; on the contrary, incentives should be given to make them leave the area by their own will. These incentives should be in the form of subsidies to projects located outside Managua. The UN-HABITAT (2008) claims people and enterprises are generally attracted where investments are made on transportation, infrastructure, housing or employment-related projects. One the one hand, that kind of initiative would be a magnet for emigration outside of Managua. On the other hand, authorities should deter the informal settlers that cannot be titled because of environmental hazards from staying where they sit. It should be made clear that their land tenure and their physical conditions are unsafe, and that they will not receive any form of public services where they currently sit. It will also be important to propose them different options for their relocation in the region of Managua. In any case, the new housing projects should be located on environmentally safe places. In the proposed *Estrategia de Desarrollo de los Centros* Urbanos (EDCU), the INETER (2002) advocates for the development of exurbs of Managua. These centers³⁰, located in the departments of Granada, Masaya and Carazo are chosen because they are safe and have the infrastructure capacity for hosting larger populations. The draft of the Urbanism Act (mentioned in Chapter Four) should be enacted in order to ensure that municipalities count on a proper planning tool to relocate these populations.

Emigration to exurbs of Managua will present many consequences. Among these, the generation of longer trips has to be taken in account, because they generate congestion and air pollution. As the population will become more spread out, people will probably have to go further to access their workplace, to shop or to visit family, to name a few. However, this effect could be mitigated if this decentralization is properly planned. In the towns and cities targeted for growth, compact and mix uses should be the preferred form of development. If good public transportation is provided, these places could resemble Transit Oriented Developments (TODs), thus mitigating the undesirable effects of traffic congestion and air pollution. These exurbs

³⁰ Cities that could absorb more population include Granada, Masaya, Nandaime, Jinotepe, Diriamba and Nindiri, all located within 60 kilometers of Managua (INETER, 2002). Immigration from the capital could also be directed towards a series of towns, called the *Pueblos blancos*, which are located on the elevated flatlands of Masaya (ibid).

should also attract the wealthy class and businesses, as a way to mix social groups, provide employment opportunities and avoid creating refugee ghettos alike Ciudad Sandino. Another undesirable externality of a massive arrival of urban migrants to these smaller municipalities is the burden on their local administrations. These authorities will have to be equipped to face this situation. If they fail in this, two scenarios might happen: informal development of the exurbs, or a return of the migrants to Managua. The next points of my proposal, if combined with this first one, will help in providing the necessary assistance to municipalities in planning for a population growth.

5.4.2 Stimulating the Construction of Housing for the Low-Income Group

Secondly, **ensuring the availability of serviced land for the urban poor** can be made through a "Social Urbanizer" type of strategy, as explored in Box 2. The City of Managua, and especially the municipalities located nearby, should open a dialogue with both formal and informal developers in order to ensure the provision of affordable land and housing. The local administrations, especially those targeted by the EDCU, should select land strategically suitable for urbanization, ease the urbanization process (i.e.: relax regulations, provide fast permit processing) for these developments in exchange for the guarantee that the plots and dwellings will be sold below a set price. These negotiations with the promoters should be done on a case by case basis, depending upon the needs and the capacities of the future dwellers. Municipalities should follow this strategy by building upon the concept of the Unique Front Office of the Law 677 (mentioned in Chapter Four).

This strategy presents many advantages: it would ensure that low-cost housing is produced for the urban poor, that minimum environmental and engineering standards are met, and that the growth of the capital region is properly planned. This can also provide the opportunity for the municipality to develop relocation programs for the people currently living in hazardous locations. But above all, the availability of serviced land for the urban poor should always be ensured to prevent the formation of new slums. It is cheaper doing so than trying to physically regularize existing informal neighbourhoods.

However, such a program has a few weaknesses. Among these, it does not address the housing condition of the extremely poor, who cannot even access the program. Therefore, subsidies should probably be directed to this class to facilitate their integration in the city. Moreover, the "Social Urbanizer" concept would need to be adapted to Nicaragua, since informal development does not currently take place by way of private enterprises. Even if illegal subdivisions and transactions of land are common entrepreneurial practices, construction of houses is mostly done by the dwellers themselves, say interviewees. Most of the formal organized housing projects for the low-income group are currently completed by local NGOs, mostly with international funding, and by the national government. The concept should therefore be adapted to the context of Managua, and the access to the program be broadened to include the government, NGOs and housing cooperatives as "Social Urbanizers". The coop housing model

might facilitate the construction of multi-storey buildings at minimal cost, thus increasing the density and decreasing the cost each member has to spend on land. Furthermore, the implementation of housing programs by any organization should involve the local population as much as possible. Habitar (2009) recommends that dwelling units be constructed by their future occupants, with "mutual help" among beneficiaries, since it is the best way to insure that "the houses are cheaper³¹ and of better quality". This requirement might simply be added by a municipality on top of the other aforementioned criteria imposed on a "Social Urbanizer". Nonetheless, the basic idea of the scheme still stands: ensuring the provision of new affordable housing units through flexible agreements between developers and the municipal authorities. The bottom line for new housing schemes should be "to strike a balance between decentralised, bottom-up community development and centralised top-down planning and service provision" (Brown and Jacobs, 1996: 501).

5.4.3 Adopting a Land Value Taxation Scheme

Thirdly, the reduction of land prices and speculation³² can be attained mainly through Land Value Taxation (LVT). This idea, which emanates from Henry George more than a century ago, is now advocated by specialists in land policies (Maldonado, 2007) and by UN-HABITAT (2006). This tool has been the object of discussion in many countries; however, its implementation is still limited to a few jurisdictions. Colombia has institutionalized the tool, as discussed in Box 3. The City of Mexicali, in Mexico, has successfully shifted from a traditional taxation system to a single tax on the value of the land (Perló, 1999). Apparently, cities in other Mexican states do not benefit of the same prerogative, mentions the author. One more application of the LVT is found in Cuba, where a portion of the increase in values originating from the restoration of historic buildings in the historic center of La Habana goes to the State (Núñez, Brown and Smolka, 2000). In order to encourage the adoption of LVT schemes throughout Nicaragua, the national government could match transfers to municipalities with the amount of land tax collected by them. Such a policy would motivate local governments not to rely only on national funds, as is unfortunately now the case with Law 466. In case of bad performance, a less fortunate municipality should be assisted in the development of land evaluation tools such as a cadastral system.

³¹ In "mutual help" projects, those in which a whole community builds together the houses of all the members of the group, an economy of scale ranging between 30 to 40% of the cost of the house is observed (Swedish Cooperative Center, 2009).

³² Here, I use the term land speculation in a very lose way: I include those whose tract of land is vacant, used for agriculture or even already occupied by illegal tenants, and who do not want to sell for an affordable price for the poor class. The mere expectation that the Government will subsidize the regularization (legal or physical) of the future development tends to increase the price asked by those landowners (Glenn, Labossiere and Wolfe, 1993; Smolka and Iracheta, 1999; Smolka and Damasio, 2005).

Increasing tax on the value of land (and not on the buildings and improvements) presents many advantages. First of all, near its rental value³³, people holding land for speculation will try to sell. Such competition in land markets should have the effect of decreasing the price of land, thus making it more affordable for a larger proportion of the population. Moreover, the application of the LVT is probably easier than that of any other tax, because no one can hide land. Even if it seems counterintuitive, a tax on land will benefit the poor in many ways. Most of them will receive small tax bills in comparison to affluent households, since the poor generally hold small parcels of low value. In the case of a progressive tax scheme, the wealthy will be asked to contribute proportionally more than the low-income group. The poor will be better off under an efficient taxation system, because they will benefit largely from the public investments made possible by a larger tax base. Of course, redistribution of the revenues generated by the LVT should be fairly spent, according to priorities. The elected officials should build on these arguments when advocating the scheme to the population.

However, such a policy also has inconveniences. First of all, the adoption of a specific law³⁴ will probably be necessary before the implementation of LVT. Several groups might object to the legislation. On the one hand, those owning large urban real estate assets have more to lose under this order of things. Also, people having small or low-priced buildings located in highly valuable neighbourhoods will also be worse off. On the other hand, those owning consolidated dwellings located in slums will appreciate paying a low tax rate. Nonetheless, the bulk of the population has nothing to lose with LVT. The legitimacy of this policy and the success of implementation will largely depend on the participation of the population and the determination of the administration, which will have to invest in technologies and personnel for the tax collection.

5.4.4 Implementing an Intermediate Tool of Tenure

Fourthly, **tenure security should be guaranteed to a maximum of households** (those that do not need to be relocated) through an intermediate instrument of tenure in the short term. Under this intermediate tool of tenure, each household will formally own an indivisible fraction of the land, and will informally occupy its plot. In other words, it will work like condos or housing co-ops. This type of hybrid strategy has been proven to work in Kenya (Porio, 2008), and similar systems also exist in Mexico, China and Ethiopia (Deininger, 2003).

As explained in this chapter, such a tool would ease the legalization of informal neighbourhoods by adjudicating collective land titles or long-term leases to whole communities that have been

³³ Only the land zoned for urban uses should be taxed at a high rate; agricultural landholders would not be penalized this way.

³⁴ At least, the Decree 3-95 would need some modifications. The article 2 currently forces municipalities to collect taxes upon immovable properties, which includes both the terrain and the constructions on it. The new law would have to permit to tax only land. Moreover, the current rate of 1% of the tax base (art. 4) would probably need to be changed as well.

occupying their terrain for a period of 5 years, for instance. Each member will have duties and benefits, the first one being the regularization of their precarious legal status. In the long term, and as land values increase, individual and freehold land titles will probably be necessary though. At that time, a complete legalization of the parcels should permit a transition to a more individual regime of property. Meanwhile, all the tenants will share a collective land title and they will have to administer the informal land transactions taking place in their communities. Therefore, the implementation of local informal registries in the communities will be very important. Local administrators should co-manage land transactions in partnership with an NGO, such as the MCN, which already has the experience of distributing certificates of land occupancy to informal settlers.

A major advantage of this "third path" is to provide the poor with an affordable mechanism to secure their plots of land. It will also ease transactions by informalizing the formal; in other words, it will unify legitimacy and legality. Dwellers will also feel safer to investing on their parcels. An intermediate tool of tenure might indeed boost investments on dwelling, similarly to what was observed in my survey and presented in Chapter Two. Moreover, the adoption of such a policy by the Government could and should extend the scope of the regularization of human settlements to those born after 1998. Advantage should be taken of the "eyes" that local communities will have on land transactions with this tool to encourage fiscal responsibility. Under the current Law 452, a Solvencia Municipal is needed in order to register property transactions. As mentioned in Chapter Four, this certificate proves that land taxes have all been paid to the municipality by the seller. Now, under a collective land title, all the small informal landholders will have to contribute to a portion of the land tax bill that the community will owe to the municipality. If someone wants to sell his property located inside the neighbourhood, he will also need to have paid his debt (if he has one) to the community (his co-landowners). Either way, the collectivity of landowners would be able to get reimbursed through the sale of the plot of land. This would encourage fiscal responsibility because each member of the community will pertain to a group of solidarity. This type of mutual support already exists in housing cooperatives in Nicaragua (Swedish Cooperative Center, 2009)³⁵.

This policy also presents drawbacks, such as possible unfair treatment of weaker groups, including women. Ideally, the co-management strategy will ensure these persons are not penalized by local administrations. The creation of an audit mechanism at the city or higher level could represent a means of achieving this. Another major inconvenient related to this scheme is the necessity to pass legislation. Currently, the legislation (e.g.: Civil Code, Laws 278 and 309) does not encompass collective titling and local management of registries. Given that most jurists and politicians are conservative about modifying the rules related to property rights and public registries (de Soto, 2000), it might be very hard to modify legislation, especially the Civil Code.

³⁵ For instance, these cooperatives of habitation usually have an internal emergency fund that anyone in need have access to pay his bill on an occasional basis (Swedish Cooperative Center, 2009).

5.4.5 **Promoting Direct Public Participation**

Fifthly, **democracy should be reinforced** by the adoption of a planning instrument alike participatory budgeting. This innovative tool appeared for the first time in Porto Alegre (read Box 4) and Santo Andre in the 1980s before being spread outside of Brazil towards Peru, for instance (Acioly, 2007). In the case of Managua, Morales (2005) already advocates for a more bottom-up approach similar to participatory budgeting. The scheme encompasses public assemblies that should be held in each human settlement in order to define the priorities of investments. Delegates should be chosen in each settlement, and larger assemblies of delegates in which these people would defend the interest of their communities should occur at the district or at the city level. The budget allocated for infrastructure, legal regularization, housing and other public programs should be decided during the assemblies. As in Porto Alegre, incentives to attract more people during these meetings should be put in place. For instance, the amount of money dedicated to a neighbourhood could depend upon the participation level attained during the local assembly.

The foremost positive consequence of participatory budgeting is the strengthening of democracy. Moreover, this tool has the capacity to open the dialogue and increase the trust towards public authorities in a city truly needing it³⁶. It can counterbalance the traditional power of certain groups of interests on many planning issues (Goldsmith and Vainer, 2001). The mechanism of participatory budgeting will permit to direct municipal subsidies where it is the most needed at the neighbourhood and the city levels (ibid). It will also relieve the administration of some pressure, since the population will share the responsibility for the choices made upon the use of public funds (ibid). This will also accomplish the goal of reintegrating the city by way of letting the poor access the public realm and increasing the share of investment in public infrastructure in their neighbourhoods. Participatory budgeting has an exceptional potential to provide a more egalitarian access to public services to all citizens (ibid).

However, participatory budgeting could potentially have drawbacks. In a context of scarce resources such as in Managua, a fight over the appropriation of municipal budget could happen frequently in public assemblies, and these ones could turn to be very counterproductive. Also, the decisions taken in direct democracy may always not be the best, as opposed to the solutions taken by neutral experts. To mitigate this, assemblies will have to be mediated and directed by a neutral person, and experts invited to inform the citizens on major issues and potential solutions.

³⁶ According to UN-HABITAT (2008), Managua has the lowest level of trust in its administration, and the lowest level of public participation of Latin America.

Policy Aspect	Current Situation	Proposed Outcomes		
Types of development	Formal vs. informal dichotomy Rich vs. poor segregation Unplanned informal growth	vs. poor segregation through a flexible framework		
Affordability of land	Expectation of regularization or public investment drives prices up	LVT and types of tenure both reduce land values and speculation		
Housing strategies for the poor	Disorganized "self-help" housing Few social housing public projects			
Physical regularization	Expensive, highly subsidized and slow	Depending upon fiscal and public participations of the communities, facilitated by the municipality		
Land titling operations	Individual freehold titles Expensive, highly subsidized and slow Possible for most settlements formed before 1991 Impossible for settlements formed after 1998	Ibsidized and Collective long-term leases on public land settlements Cheap and fast Accessible only to environmentally-		
Land administration in informal settlements	Low rate of official registration Encourage illicit transactions	No need to register formally Informal transactions overlooked by communities		
Property taxation	Building and land both taxed Very weak tax collection Individual responsibility	Land Value Taxation only Incentives to pay taxes Community responsibility		
Budgeting	Non-transparent Discrepancy between investments in low and high income neighbourhoods	Transparent and participative Depending upon fiscal and public participations of the community According to priorities		

Figure 15: Implications	of the Curren	t and Proposed Lan	d Policies Frameworks
- igure 13. implications	of the current	t und i roposed Lun	

Source: own analysis.

5.5 Conclusion

In this report, I have answered two general questions, the first being: What role have land policies, and especially those related to land titling, played (or not) in vulnerability in Managua? Many policies, and sometimes their absence, have worsened the condition of vulnerability of the poor in Managua. Moreover, few policies have really improved substantially the life of these people. In Chapter Two, I showed many aspects of the vulnerability of the urban poor in Managua: housing, land tenure, exposure to environmental hazards and social vulnerabilities. I also summarized the history of land-related policies, and described their impacts. During the Somocista era, there was no strategy at all, except for the profit-driven attitude of the decision makers. The 1972 earthquake worsened the situation for the urban poor and accentuated the gap between social classes. The Sandinistas tried to reverse the segregation tendency but without lasting success. The change of regime in the early 1990s brought confusion and frustration. Despite adopting a few progressive laws, the neoliberal governments did not fix the land issue. The legislation adopted during this period was aimed at calming citizen groups and the real achievements on the ground were small. In contrast, the new Sandinista government has produced a substantial quantity of housing units and adjudicated to an impressive number

of lots during recent years. However, the strategy may be more to please the voters than to really tackle the processes leading to the formation of new informal settlements.

Short term electoral policies need to be replaced by sustainable strategies. This is exactly what I discussed in Chapter Five, which responded to the second question: "What land policies could be put forward to address the vulnerability issue faced by many people in Managua?" In this chapter, I presented a series of tools aiming at responding to this answer, as well as to the policy objectives I set. These five tools are: fostering the decentralization of Managua, stimulating the construction of housing for the low-income group, adopting a land value taxation scheme, implementing an intermediate tool of tenure and promoting direct public participation.

I recommend that individual freehold titles should not be given to informal settlers in most cases, and this for many reasons. To begin with, there are other ways to secure land tenure than individual property, as mentioned in this report. But above all, at least 43% of the households of the precarious neighbourhoods need to be relocated because of their exposure to natural hazards. For the rest of the landholders, individual titles should not be given until registration processes are made more accessible. Rather, co-management of informal transactions at the community level should be promoted in the short and medium terms. Land should be administered at the local level when national institutions fail in accommodating the informal market, argue Fernandes and Smolka (2004). Communities should also be given the opportunity to participate to the allocation of municipal funds. Direct democracy should hopefully encourage fiscal responsibility, which is a key element in a sound land reform in Nicaragua. A tax on land values can impede speculation, decrease land values, improve the access of the poor to the city, and stop the formation of new precarious settlements. However, this will only happen if the tax is collected. The municipalities of the metropolitan region of Managua should also be more proactive in the prevention of informality. They should reach out to the formal and informal developers and give them incentives (relaxation of the municipal regulations, speeding of the permit delivery) to work for the low-income segment of the population.

The policy I propose is in fact a series of strategies that will foster the integration of the poor into the city and reduce socio-economic inequities. However, land policies alone will not reduce poverty; other programs aiming at creating employment and stimulating the economy will be necessary. My report is geared towards the housing area; a more comprehensive policy would better take into account the commercial, institutional and industrial sectors, because they are also part of the city.

Even if these strategies make sense from a theoretical point of view, strong political leadership will be needed for their implementation. Deininger (2003: 178) mentioned that:

even if addressed in a very technical fashion, land issues will always be highly political. It is therefore essential, especially in view of the wide range of stakeholders involved, to build local capacity to conduct policy dialogue and analysis.

In other words, what seems logical might not be politically popular and, therefore, might never be implemented. Only a transparent administration and open dialogue between the different social groups will best contribute to overcome the socio-spatial disintegration of the city of Managua. The way politics and bureaucratic interact should probably be changed to implement these policies and attain the goals stated above. Therefore, the analysis and proposal for more transparent governance in Nicaragua could be the object of further research.

In conclusion, this report provides a comprehensive description of the current *problématique* of the precarious neighbourhoods in Managua, and also introduces innovative solutions to it. My approach to the problem was to point out solutions reducing the many types of vulnerability of the informal settlers. The result is a paper offering a series of significant tools that can help the poor to overcome risks on their own and to reintegrate the city and its public realm.

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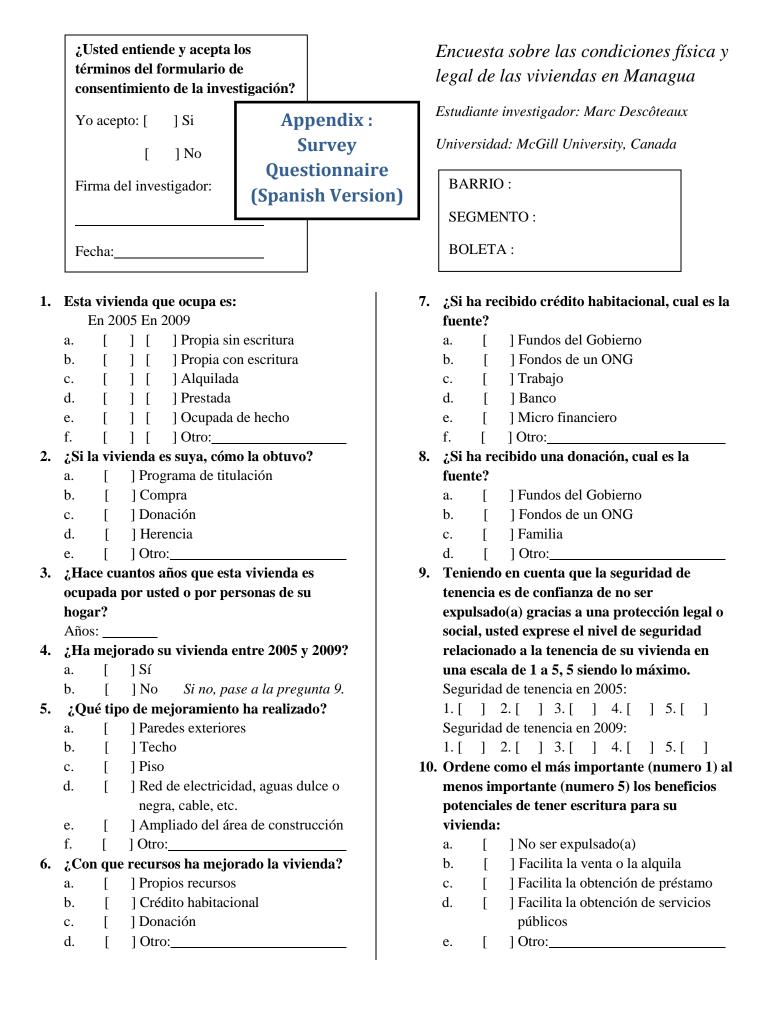
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The Role of Land Policies in Managua



Do you understand and a terms of consent of the investigation consent form	-		Survey of the conditions of
I accept : [] Yes [] No	S	oendix : urvey	Student research McGill Universi
Researcher's signature:	Questionnaire (English Version)		NEIGHBOUR
Date:			CENSUS TRA

This house, where you live in, was/is: 1.

in 2005 in 2009

-] owned with deed 1 [a. ſ
- 1 [] owned without deed b. ſ
- [1 [] rented c.
- d. ſ 1 [] borrowed
-] factually occupied e. ſ 1 [
- f. [] [] Other:

2. If the house is yours, how did you get it?

-] Titling program [a.
- b. ſ] Sale
-] Donation ſ c.
- d.] Heritage [
- ſ] Other: e.
- 3. For how long this house has been occupied by you or by someone of your household? Years:
- 4. Have you improved your house since 2005?
 - a. ſ] Yes
 -] No If no, go to question 9. b. ſ
- 5. What type of improvement did you do?
 - a. [] Exterior walls
 - b. [] Roof
 - c. ſ] Floor
 - d. [] Electricity, plumbing, cable, etc.
 -] Enlargement of the built area e. ſ
 - f.] Other:_ [
- With what resources did you do that? 6.
 - ſ] Own resources a.
 - b. [] Housing credit
 - ſ] Donation c.
 - d. ſ] Other:
- 7. If you received housing credit, what was the source?

e legal and physical f houses in Managua

her: Marc Descôteaux

ty, Canada

RHOOD:

ACT:

AIRE NO:

-] Government funds a. ſ
-] NGO funds b. ſ
- с. [] Employer
-] Bank d. ſ
-] Micro credit e. ſ
- f. ſ] Other:
- If you received a donation, what was the 8. source?
 -] Government funds a. ſ
 -] NGO funds b. [
 - c. ſ] Family
 - d. Γ] Other:
- 9. Taking into account that tenure security is the confidence that you will not be evicted from your house since you have a social or legal protection, express the level of security related to the tenure of your house on a 1 to 5 scale, 5 being the maximum.

Tenure security in 2005:

1. [] 2. [] 3. [] 4. [] 5. [1 Tenure security in 2009:

1. [] 2. [] 3. [] 4. [] 5. [

- 10. Order from the most important (number 1) to the least important (number 5) the potential benefits of having a registered deed of property:
 -] Improves tenure security ſ a.
 -] Facilitates transactions b. ſ
 -] Facilitates getting credit ſ c.
 - d. ſ] Facilitates getting public services
 - ſ] Other: e.