Le Marteau

A major blow to the homogenization of Ouagadougou's neighbourhoods

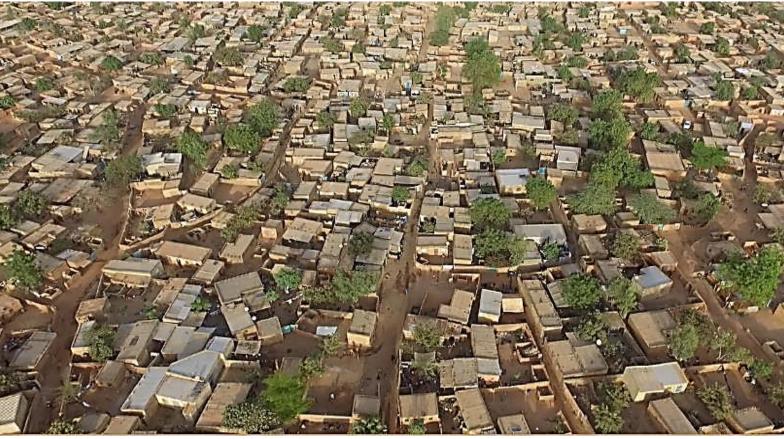


Photo: Non-loti areas of Toukin and Somgandé, 17 February 2019

Léandre Guigma February 2019

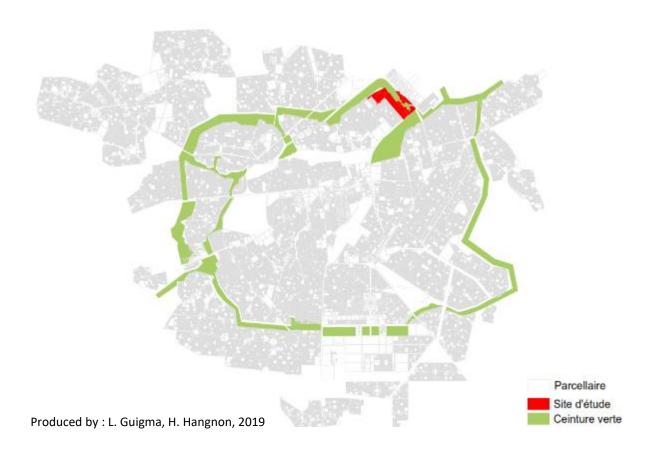


Introduction

The Ouagadougou conurbation is made up of sub-divided districts known as *loti*, i.e. areas that are developed in accordance with current legislation standards, and precarious districts locally known as *non-loti*. The non-loti districts are home to four out of ten Ouagadougou residents and occupy a quarter of the conurbation's territory (L. Guigma, 2017). These neighbourhoods are occupied by urbanites who have purchased their land from landowners or traditional chiefs without the permission of public authorities. Some of them have built their own houses and reside in them. But most of the occupants are waiting for the land regularization of the allotment where they live, which will allow them to be owners of a legal plot.

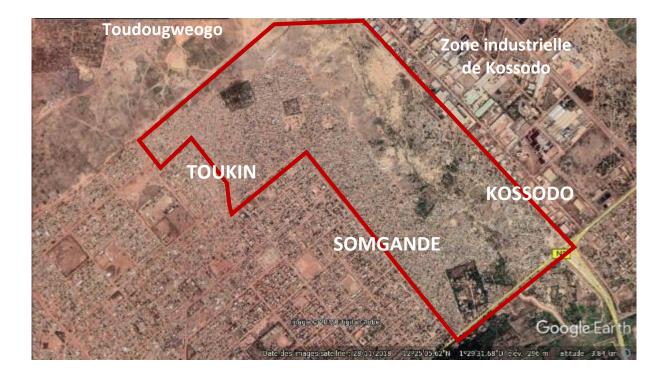
As part of the International Urban Planning Workshop to be held in Ouagadougou, from 1 to 15 March 2019, this text has been produced to provide participants with specific insights into the non-loti urban fabric of Ouagadougou. To this end, we have drawn on L. Guigma's doctoral dissertation (2017) on land deals in the non-loti zones of Ouagadougou, as well as recent studies by UN Habitat (2014, 2016) and the Ministry of Urban Development (2018) on the Informal Settlement Improvement Programme (PPAB, Phase 3) and the reabsorption of informal settlements in Burkina Faso, respectively. We focused on a section of undeveloped neighbourhoods, including the workshop's study site "Le Marteau". Field observations, interviews with neighbourhood leaders, and informal discussions with residents helped to provide greater insight into this urban area, complementing existing documentation on the non-loti neighbourhoods of Ouagadougou.

Figure 1. Geographic situation of the non-loti area known as Le Marteau



"Le Marteau" is a non-loti district located in the northeast of Ouagadougou. It owes its name to its shape which, when viewed from above, looks like a hammer. It occupies the north-west part of the Green Belt of the city. More precisely, Le Marteau is bordered to the north by the Green Belt and another non-loti neighbourhood called Toudougweogo, to the east by the industrial zone of Kossodo, to the south by the RN3 (Ziniaré Road) and the Bangr Weogo Urban Park, and to the west by the Somgandé loti zone. Le Marteau is composed of several non-loti neighbourhoods controlled by traditional chiefs whose boundaries are fluid or even overlapping. Three names are cited by the residents of the non-loti district of Le Marteau: Toukin, Somgandé and Kossodo. These neighbourhoods have both non-loti and loti areas, as shown in the following figure.

Figure 2. Approximate locations of the non-loti areas of Toukin and Somgandé within Le Marteau



We will first present the occupants of theses non-loti zones through their land appropriation strategies. Then, we will describe the specific urban character of these non-loti zones in terms of their urban forms and the access to public facilities and basic urban services by their residents, in relation to the surrounding loti neighbourhoods Finally, by focusing on the forms of urbanization undertaken by residents, we will address the fears and concerns expressed by the inhabitants of Le Marteau regarding their shared spaces; followed by a presentation of the actions they have taken to secure their own neighbourhoods as well as their strategies for legitimising their land occupations and improving their living environment.

1. Loti and non-loti zones: Land appropriation strategies by urbanites

The construction and constant transformation of non-loti neighbourhoods are the result of the forms and strategies of land appropriation conducted by urbanites, in complicity with traditional chiefs and the early occupants of the land. What are the settlement and land tenure dynamics for the study site of Le Marteau's non-loti zone?

1.1. Ouagadougou's youth population comprises the majority of residents

According to the results of the Ouagadougou Population Observatory (OPO), the average age of residents in non-loti zones is 20 years, compared to 22 years in officially developed neighbourhoods (C. Rossier, A. Soura, et al., 2011). After differentiating between early occupants and new arrivals, we will present the reasons why inhabitants choose to settle in non-loti neighbourhoods as well as the main economic activities exercised by these residents.

Early occupants and new arrivals

The young age of Le Marteau's residents, consisting of young couples with young children, is the result of the progressive populating of neighbourhoods and a diversity of residential trajectories.

The history of each non-loti area is unique. But in general, the early occupants established their residences in these areas thanks to the hospitality of traditional chiefs. The Chief of Toukin explained how the early occupants of Somgandé came to settle in the area.

"The people of Somgandé came from Guirgo. Their elder did not have *naam1* and [therefore] stayed near the Mogho Naba. After first housing [the people of Somgandé] next to camp Guillaume, [...] the Mogho Naba looked for another place to settle them. He sent them to Toukin [...] near Sotraco. They initially took up 3 plots. Then, following the commando allotment operations conducted during the revolution, the Cité Somgandé was built."²

Subsequently, these early occupants divided up their land and sold it to new arrivals. The Chief of Toukin added:

"My grandfather was in favour of the settlement of foreigners. Today, Toukin is cosmopolitan. The whole of Burkina Faso is here."

According to the Chief of Kossodo, this progressive occupation of non-loti zones by new arrivals has now reached a level of saturation.

"This was a village. There weren't many of us. It was the bush. The foreigners came gradually. Now there's no more room here."

What motivated this progressive and massive arrival of new occupants to non-loti neighbourhoods?

Reasons for settling in non-loti zones

Those who came as part of the rural exodus, described as the migration of people from the countryside to the city, were considered to be the main impetus of urban growth in Ouagadougou from 1996 to

¹"Naam" means "power" in Mòoré (the language of the Mossi).

²Interview conducted on 26 January 2019 in Toukin.

³Interview conducted on 17 January 2019 in Kossodo

2006 (A. Ouattara, 2004, 2009). Together with the native inhabitants of Ouagadougou, they constitute the principal population of the city. However, in the non-loti neighbourhoods identified in Ouagadougou prior to this study, the dominant source of residents in non-loti neighbourhoods was that of the city's urban districts and neighbourhoods. This clearly shows that it was natural population growth and the increasing adoption of separate accommodations by family members that explains the massive presence of residents from Ouagadougou's central conurbation in the settlement of non-loti districts, rather than just the effects of rural exodus.

In the non-loti districts of Ouagadougou that were previously studied (UN Habitat, 2014, 2016; MUH, 2018), four types of settlement incentives were identified: housing, work, family connections and/or the future acquisition of a plot following a municipal land regulation operation.

In the case of Le Marteau, its proximity to the industrial zone does not constitute a source of motivation for settling there, according to residents interviewed in Toukin and Somgandé. On the contrary, the pollution caused by the Kossodo industrial zone is what was mentioned by most residents. Only one resident of Kossodo told us that the proximity to the industrial area was an employment opportunity and a source of economic income for residents.

The recurring reason for settling in non-loti zones was the search for housing. Indeed, the current demand for housing in Ouagadougou is estimated at 20,000 units per year; whereas, in the last ten years, between 2007 and 2017, the government has produced less than 5,000 units (L. Guigma, 2017). Thus, the occupancy status of residents in non-loti areas consists of a large portion of owners of non-loti land who live together with tenants and persons housed free of charge in dwellings built on non-loti land.

Income and economic activities of residents

The ongoing multisectoral survey report on poverty and inequality in Burkina Faso states that "poverty affects three times as many people living in non-loti areas as in loti areas" and that "more than nine out of ten poor people live in non-loti areas" (INSD, 2015, p. 60)⁶. But several observations in non-loti areas contradict these claims that urban poverty is concentrated in non-loti neighbourhoods and argue that the data from national statistics should be treated in context. Indeed, many residents of non-loti areas claim that they own one or more parcels in an already developed loti zone. Some residents of non-loti neighbourhoods have sufficient means to build, in addition to their own homes, one or more other housing units in the neighbourhood in order to benefit from the rental income generated from these units.

What best characterizes the economic situation of the majority of residents of non-loti neighbourhoods is the irregularity and fluctuation of their incomes, which, for the most part, come from activities in the informal sector or from seasonal work. During an informal discussion in Toukin, three young residents — a driver and two vendors — expressed themselves in these terms:

⁴This view was confirmed by half of the respondents in Bissighin, followed by a quarter of the respondents who reportedly came from provinces other than Kadiogo (UN Habitat, PPAB 2014).

⁵Indeed, the poverty rate in loti areas is 14.4% compared to 47.5% in non-loti areas.

⁶Here, the term non-loti covers the entire national territory and includes rural areas. This is due to the definition of non-loti areas adopted by INSD, which states that they are "the inhabited or uninhabited spaces, which have not been divided by the competent services (approved urban development office, approved surveyor, etc.), unlike the loti areas, which are inhabited or uninhabited spaces, which have been divided up by the competent services" (INSD, 2009, p. 28).

"There is no work. Young people are unemployed. In the factories, we earn 800 CFA francs a day or 1,250 CFA francs a day. The maximum is 2,500, but like this you'll work until you die. We want help finding work."⁷

Despite these fluctuating or irregular incomes, some residents of non-loti neighbourhoods are able to make significant investments, particularly because of their family or community support network. Indeed, their land acquisitions, real estate investments, means of transportation and the schooling of their dependent children testify to their ability to mobilize significant sums for primary needs.

In addition, when travelling through the non-loti area of Le Marteau, a predominant trend of commercial activities is noticeable, ranging from established merchants who run their own shops to the occasional seller of coal, wood, vegetables or food along the roadside. It is also striking to note the presence of various construction materials stored on the roadside (bricks, sand, sheet metal, windows, doors, etc.). Indeed, manual trades (bricklayer, labourer, handicraftsman) linked to the residential nature of the district are also strongly represented in the non-loti area of Le Marteau. The presence of these self-construction professionals lowers construction costs, as project owners benefit from access to materials at advantageous rates. Some public administration or private sector employees with regular incomes are also based there. Agriculture remains a seasonal and residual economic activity in non-loti areas. It relies on unoccupied natural areas and the rainy season cycle, which occurs four months out of twelve (from June to September).

In any case, the diversity of the economic activities exercised by Le Marteau's residents confirms the multifunctional nature of these non-loti neighbourhoods and corroborates the cosmopolitan character of the residents. This heterogeneity of economic activities is also evident at the spatial level in the *non-loti*.

1.2. Typologies of non-loti spatial occupations

How do non-loti neighbourhoods develop? When driving around a non-loti district of Ouaga, like Le Marteau, it is striking to see the presence of large empty estates near densely populated areas and other areas where buildings are spread out. An analysis of the legal status of the land and the typology of the occupations of non-loti areas makes it possible to better understand this spatial organization. The spatial morphology of non-loti areas is the result of a succession of land delimitations, reflecting the spatial needs of the early occupants and the demands of new arrivals.

Non-loti in zones "awaiting development" vs. non-loti in "non-constructible" zones

Le Marteau is a non-loti district surrounded by developed zones. It is actually composed of two types of non-loti areas, with regards to the legal status of the lands that compose them.

6

⁷Informal discussion conducted on 26 January 2019 in Toukin.

Figure 3. Land status of the non-loti areas of Le Marteau



In the west (Toukin and Somgandé), there is a non-loti zone deemed as "awaiting development". Indeed, the homes are built on developable land or on a future urbanization zone, according to the urban planning documents in force.

In contrast, the neighbourhood to the east (Kossodo) is located within the Green Belt. It is a non-loti area in a so-called "non-constructible" zone since it is within the boundaries of the Green Belt, but more precisely in its flood zone, and thus not intended for housing by urban planning documents.

By comparing Google Earth satellite images taken in October 2002 and November 2018, it is clear that the non-loti area of Kossodo within the Green Belt has not always existed. Le Marteau was gradually densified from west to east, beginning with the Somgandé area.

Figure 4. Evolution of the spatial occupation of Le Marteau in 2002 (top) and 2018 (bottom)



In October 2002, the eastern section of Le Marteau (Kossodo), in the heart of the Green Belt, was practically empty.



However, by November 2018, the eastern zone of Le Marteau densified to the east of the lowlands.

And yet, the Chief of Kossodo provided details of the long history of its presence.

"The Green Belt found us here. We even helped to plant the Nimier trees of the Green Belt before the Revolution. [...]There is no more room here. What's left is the Green Belt. By the way, it's in the lowlands where we grow our crops. This is our space. We own the space of our grandparents."

After acknowledging that the Green Belt now encompasses his village, he pointed out that the unoccupied section of his village, i.e. the lowlands, is located in the Green Belt. Thus, according to him, the boundaries of the Green Belt doe not take into account the non-loti dwellings located on either side of the lowlands.

In terms of occupancy typology, non-loti areas are occupied by traditional landowners or the early occupants of neighbourhoods who differ from the urbanites who own small or large non-loti properties that they have purchased from early occupants or the urbanites who squat in the non-loti properties of other landowners.

Owners of non-loti land for residential use

In the non-loti area of Le Marteau, the undeveloped residential land is occupied by residents who have inherited the land from their parents, who squat on it or who have purchased the land from traditional landowners or from the early occupants.

Apart from squats, these plots are delimited and granted according to the principles of customary law, with the agreement of the neighbourhood chief or resident occupying the land, without the authorization of public authorities. In fact, the administration prohibits any occupation of land before its development under regulatory provisions.⁹

Through the years and as a result of internal migration, some early occupants have divided up their land and then sold all or part of the divided land to newcomers. However, the land regulations in force prohibit any titling of residential land before the implementation of an urban development operation.

Until the 1980s, these types of land transactions were carried out free of charge or in exchange for a few symbolic gifts for the seller, the neighbourhood chief and/or the landowner. In the 2000s, non-loti land for residential use was sold for between 100,000 and 200,000 CFA francs. But nowadays (in 2019), the resale of non-loti land requires the mobilization of large sums of money per lessee, up to 2,000,000 or even 3,000,000 CFA francs for a 100- to 150-square-metre parcel of land in the *non-lotie* of Le Marteau. 10

Land transactions in non-loti neighbourhoods always take place between a seller who owns the non-loti land and a buyer. In the case where the non-loti land that is the subject of the transaction is intended for housing, there is no written document testifying to the transaction. However, one or more witnesses serve as intermediaries in the transaction, namely the "démarcheurs" or salesmen who act as informal real estate and land agents, whether or not they reside in the non-loti district. These démarcheurs may be neighbourhood chiefs or their representatives, as well as witnesses close to the buyer or seller who are part of the family or social network.

⁸Interview conducted on 17 January 2019 in Kossodo

⁹"[...]Any occupation without a title is prohibited and eviction shall not result in resettlement or compensation" Art. 39, Law No. 014/96/ADP of 23 May 1996: Agrarian status and land tenure restructuring in Burkina Faso. See also Articles 127 and 154 of Law No. 034-2012/AN of 2 July 2012 on the same subject.

¹⁰Source: Informal discussion conducted on 26 January 2019, with three young people living in the non-loti district of Toukin.

Most occupants of non-loti neighbourhoods formalize their land tenure by building a dwelling on the site, whether to to house themselves or to rent it out and/or wait for the official development of the parcel. They build houses in mud or cement blocks. These houses are commonly called "matchboxes" or referred to by the number of sheets of corrugated metal covering them: six or eight sheets, ¹¹ for example. The cost of building an 18m² house covered with roughly 10 sheets is estimated at 300,000 CFA francs (nearly 500 euros), which is ten times the amount of the guaranteed minimum wage for trade professionals (SMIG), which is currently 30,684 CFA francs (less than 50 euros). ¹² Owners of non-loti residential land therefore do not have any documents to prove their land ownership. The only evidence of their land ownership is the manifestation of their presence on the land, demonstrated by their occupation of the land through a physical demarcation of the land (fence wall) and/or the construction of a building (dwelling).

Owners of large non-loti estates intended for uses other than housing purposes

Some estates or land holdings are for public use while others are considered private property. Publicuse areas are natural, undeveloped zones that are respected as such by all residents. In Le Marteau They consist of public squares, lowlands, cultivated land, orchards or wooded areas. However, there is also other land, whether delimited or not, that is considered private property for specific use (school, place of worship).

Today, Le Marteau is occupied by owners of small residential plots (from 100 to 200 m²) and those of vast estates covering several hectares, which they have acquired in the same way as the occupants of small plots, from traditional landowners. In principle, the current land law stipulates that "the temporary or definitive transfer of land for residential use or for use other than residential purposes to natural or legal persons" must comply with the development plan and texts in force (RAF, 2012, Art.171). But before this 2012 legal provision, pursuant to the 1996 RAF, public authorities granted permission only for the delimitation and titling of land "for purposes other than residential" in non-loti areas. In the event that the transfer of non-loti land was intended for a purpose other than residential use, the title procedure would be initiated in three stages: first, a formal notice would be signed between the buyer, the seller and their witnesses; second, a demarcation plan would be drawn up by an approved expert surveyor; and third, an allocation certificate would be issued by the mayor after consulting with local housing and urban development agencies, the land registry and financial authorities.

But in most cases, new buyers limit themselves to the delimitation of the land by a topographer, and use the land demarcation plan as the title of occupation, which has no legal value in terms of ownership or possession of the land. Nevertheless, there are urbanites who own land titled in non-loti areas. Some of them have marked their land occupations in the non-loti area of Le Marteau by building fences and buildings, especially when it comes to non-loti land for communal use: school facilities, places of worship, leisure areas, etc. But other title holders have no visible evidence of the boundaries of their non-loti estates.

¹¹The number of sheets of corrugated metal covering the buildings and characterizing them makes it possible to estimate the area covered, knowing that one sheet of metal covers approximately 1.8 square metres.

¹²See: Decree No. 2006-655/PRES/PM/MTSS/MFB of 29 December 2006: Establishment of a guaranteed minimum wage for trade professionals.

Squatters on delimited or titled estates in non-loti areas

Delimited and/or titled sections of non-loti estate may be squatted on by urbanites who have built upon small non-loti plots of land which existed before the transaction with the new purchaser of the estate or those who have settled the after the transaction. These occupations of non-loti titled estates are generally carried out without the knowledge of the title holder, but are tolerated by the latter as long as he/she has not yet made a specific investment in his/her estate. But it is not only the large, non-loti estates that are squatted on by other urbanites. Some small non-loti residential plots may also be squatted on if the owner of the land shows no evidence of his/her presence. There is therefore an overlapping of land tenure statuses, which does not help to facilitate the eventual process of land regularization desired by the *non-loti* Inhabitants.

It can thus be deduced from the aforementioned observations that non-loti zones are inhabited mainly by urbanites from periphery districts, driven by strategies aimed at finding housing immediately but also by the process of land appropriation as they wait for their land occupation to be regularized by public authorities.

2. The specific urbanity of non-loti neighbourhoods

Urbanity can be defined as a process of building urban forms, "a behaviour in the city" (Berry-Chikhaoui, 2009). The specificity of the urban character of non-loti neighbourhoods is demonstrated through the diversity of the spatial forms that make up the non-loti zone of Le Marteau, as well as the modalities of residents in accessing public facilities and basic urban services.

2.1. Diverse spatial forms in non-loti zones

By comparing the spatial forms of the loti and non-loti zones of the Le Marteau, we can identify the spatial morphology of the non-loti zone.

 Urban forms of non-loti neighbourhoods that are similar to urban forms of formal developments.

Linear, concentric or star-shaped urban forms are similar to those of non-loti neighbourhoods.

Figure 5. Urban forms of non-loti neighbourhoods located near loti zones

Linear and reticulated urban forms in Kossodo



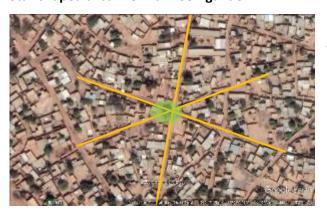
This form of linear settlement is most noticeable along the main roads that border or structure the area of Le Marteau. But this reticulated grid is especially visible in the non-loti zone of Kossodo, located within the boundaries of the Green Belt. These linear construction layouts thus form a reticulated urban fabric that points to the easy establishment of an allotment grid made of rectangular blocks.

Radiocentric urban forms in Toukin



This urban fabric, whose road structure has a concentric appearance, can be seen in the Toukin neighbourhood, close to the royal palace. This is a sign of a long-standing presence in the neighbourhood, i.e. an old village whose spatial morphology was radioconcentric, as in the case of the Mossi concessions.

Star-shaped urban forms in Somgandé



The star-shaped structure of the urban fabric's road network converges into a shared space. Here, in the non-loti neighbourhood of Somgandé, it is a public *placette*. This starshaped spatial form is also visible in some of Ouagadougou's developed allotments, particularly in the vicinity of public squares containing monuments.

• Urban forms specific to non-loti neighbourhoods

Serpentine, tree-like or dispersed urban forms are specific to non-loti neighbourhoods.

Figure 6. Urban forms specific to non-loti neighbourhoods located near loti zones

Serpentine urban forms in Somgandé



Tree-like urban forms in Somgandé

This undulating or serpentine structure of the road network can be seen in the non-loti neighbourhood of Somgandé. This urban form, which dominates the non-loti area, is rarely exploited in Ouagadougou's residential allotment schemes. This spatial morphology is modelled on water passages, as the routes work together with the area's elevation contours and the "water path" after heavy rainfall during the rainy season.



This tree-like structure of the urban road network can be seen in Somgandé and is often found in non-loti areas. It consists of branches of different roads that vary in grade and dimension. These different paths are hierarchically interconnected by a trunk formed by the main road.

Dispersed urban forms in Kossodo



The dispersed locations of buildings are not determined by the layout of the road network that serves them. These settlements are present in the non-loti area of Kossodo. They are found in areas where urbanization is prohibited by urban planning documents, such as in the case of the Green Belt. They are the sign of new non-loti neighbourhoods in the process of being created and/or those that constitute the boundaries of existing non-loti neighbourhoods.

Of the six variants that characterize the urban morphology and which are all present in non-loti neighbourhoods, three of them — the reticulated, radioconcentric and star-shaped — are comparable to the geometric shapes regularly proposed by developers, while the other three — tree-like, serpentine and dispersed — are not found in Ouagadougou's developed urban grid. The non-loti neighbourhoods therefore have a greater morphological variety than the designed loti zones of the urban centres.

2.2. Proximity and accessibility of public facilities

The accessibility of facilities in the non-loti neighbourhoods in this study will be analysed not only in terms of geographical accessibility but also in terms of economic accessibility when it comes to public services (such as education and healthcare). A more detailed analysis of the accessibility to facilities makes it possible to detect nuances between the presence of a facility and its use. For each category (education, healthcare, commerce, sports, cultural and leisure facilities), the accessibility for residents of non-loti zones will be assessed in geographical terms (presence in non-loti neighbourhoods or nearby in the surrounding loti zones) but also in economic terms.

The following map shows the education and health care facilities in Le Marteau and the surrounding loti zones: one public primary school, four private primary schools and two secondary schools.

Situature de scrins

Code primaire

Ecole primaire

Ecole socindaire

Arrêl ce bus

Cours d'esu

Prisce

Plan ribau

Parcellaire

Zone de culture

Zone de culture

Zone na noite

Zone providé

Zone

Figure 7. Location of education and healthcare facilities in the non-loti neighbourhood of Le Marteau and the surrounding loti zones

Produced by: L. Guigma & H. Hangnon. (2019)

The only public primary school seems to be located within the green belt's boundaries, north of Le Marteau. It is called the Anatole School, named after the mayor. However, there is no secondary school or public health infrastructure in the non-loti zone of Le Marteau.

Figure 8. Primary schools in the non-loti areas of Toukin (Anatole School, left), Somgandé (Trésor School, centre), and Kossodo (students in the courtyard of the Wendbenedo School, right)



Source: Photos by L. Guigma, 26 January 2019 (left and centre), 5 February 2019 (right)

Most primary schools are built and run by private developers and may be denominational or secular. Despite the presence of some school facilities in their neighbourhoods, residents of non-loti areas in Le Marteau feel they are being unfairly treated due to the fact that they do not have school facilities with official public status. Indeed, the tuition costs applied by private schools remain high, while schooling is almost free in public primary schools. Thus, the school facilities (especially secondary schools) present in non-loti areas are not economically accessible to all residents of the neighbourhood. In terms of health care, residents of Le Marteau's non-loti area visit the CSPS in Toukin the most. It is called "Lortoryirmiidu", meaning the "red health centre", due to the reddish colour of its walls. It is a public structure located in the loti area of Toukin. The second health centre near Le Marteau is the "Hamadja", a private, denominational centre located in the Somgandé loti area, 300 m from the RN3. Inadequate or non-existent public facilities seem to be compensated for by the presence of private facilities whose quality and price structure residents wish the government would set and regulated. But beyond economic accessibility, some of the public and private facilities (schools, healthcare) are not always accessible year round and require major detours due to the poor quality of the roads in non-loti areas.

As far as commercial facilities are concerned, the most popular market is the Toukin Market located in the loti zone. But for small everyday needs, there are many stalls and stands on the main streets or in the small alleys of the non-loti areas, where diverse and assorted goods can be purchased in small quantities. This contributes to the dynamism of the local economy. Similarly, several bars, *maquis* and small restaurants line the main streets of these districts. *Dolo cabarets* (bars named after the local millet beer they serve) and maquis are also present inside the non-loti neighbourhoods of Le Marteau. Lively, they are often frequented by residents of the non-loti zone. The location of shops, bars and restaurants is indistinguishable from one side of the street to the other, even if these streets separate the loti and non-loti zones of the Somgandé and Toukin neighbourhoods, making it difficult to distinguish the loti and non-loti section of these places, as the following photo show.

Figure 9. Road separating the loti zone to the right and the non-loti zone to the left in Somgandé (left). Road separating the loti zone to the left and the non-loti zone to the right in Somgandé (right).



Source: Photos by L. Guigma, 26 January 2019

Figure 10. Maquis at the edge of the non-loti area of Somgandé



Source: Photo by L. Guigma, 26 January 2019

Various activities and services are present on the edge of these very lively streets: hairdressing, sewing, carpentry, welding, sales of phone accessories, electronics, construction materials, bottled gasoline, charcoal and so on.

Figure 11. Activities in the non-loti areas of Somgandé (left and centre) and Kossodo (right)



Source: Photos by L. Guigma, 26 January 2019

Figure 12: Activities in the non-loti areas of Toukin (telephone stand, left; construction materials, right)



Source: Photos by L. Guigma, 26 January 2019

We visited a cow hide processing business (skinning, cleaning/washing, drying, smoking, etc.) carried out by a dozen young people from the non-loti neighbourhood of Somgandé near the drainage outlet of the Green Belt. "We've been working here for 10 years. We sell the hides in Nigeria," said one of the young people. These cow hides are used in the preparation of specialities in Togo, Benin and Nigeria, but are increasingly appreciated by Burkinabe people themselves. Near the young people, women transform used soft metal into cooking instruments to reduce coal consumption. These two types of processing businesses are quite rare in loti neighbourhoods. They reflect the savoir-faire of the residents and the specificity of the non-loti neighbourhood of Somgandé.

Figure 13. Processing of cow hides (left) and soft metal (right) in the non-loti neighbourhood of Somgandé



In the case of sports, football fields in the non-loti areas are generally located in schools or on private, delimited, unoccupied land. There are no developed sports fields. Football is very popular among young boys who are content with embryonic and self-made structures for playing ball after school. Cultural facilities are rare. Culture is part of everyday life and is particularly highlighted during traditional ceremonies at the royal palace or during social events (weddings, baptisms, funerals, et.). The presence of video clubs can be observed particularly in the streets separating the loti and non-loti areas of Toukin and Somgandé in the west of Le Marteau. These video clubs broadcast action films and football matches. As a result, non-loti residents report that they are satisfied with the recreational facilities in their neighbourhoods and claim that they have nothing to envy of residents of loti neighbourhoods.

Figure 14. Recreational activities in the non-loti areas of Toukin (football goal, left), Somgandé (video club, centre) and Kossodo (beef trotter soup in a maquis, right).



Source: Photos by L. Guigma, 26 January 2019 (left and centre), 5 February 2019 (right)

From our observations, we can confirm that the density and diversity of the public facilities present in the non-loti areas of Kossodo is lower than in the non-loti areas of Toukin and Somgandé.

2.3. Access to basic urban services: Solidarity and local ingenuity

The basic urban services being considered correspond to the most important needs expressed by the residents of the non-loti area of Le Marteau. These are, in order of priority, drinking water supply, stormwater drainage and access to electricity. Some residents of Le Marteau benefit from the proximity of the basic urban services (drinking water, electricity) present in the surrounding loti areas. The strategies for the use of these services by residents of non-loti areas will be further explained.¹³

• Innovative techniques for procuring drinking water in non-loti areas

The National Office for Water and Sanitation (ONEA) does not operate directly in non-loti neighbourhoods (C. Baron, 2014, p.6). This is due to the lack of formal ownership titles for residents and the difficulties of laying the pipeline network under the winding and narrow streets of these areas. But in Ouagadougou, ONEA has built collective water points in the form of standpipes on the outskirts of non-loti neighbourhoods, which it manages by entrusting the responsibility to managers, some of which are neighbourhood associations. Similarly, since 2009, with the support of technical and financial partners (AFD, World Bank), a delegated management model based on a flexible mini-grid for supplying drinking water has been designed and implemented in five peripheral non-loti areas of Ouagadougou.

"This is the first time that ONEA has experimented with serving non-loti peripheral areas.

To adapt to their specific context, the project consists of several innovations:

- ONEA entrusts the commercial management and maintenance of the networks to a private operator,
 and is content to supply water "in bulk" at the front-end of the network. A lease contract binds ONEA,
 the operator and the municipality;
- ONEA provides drinking water "in bulk" at the entrance to these areas. The delegates then, at their own risk, assume the commercial aspect, i.e. the distribution of water and the management of subscribers in their respective districts;
- In addition to the standpipe service, people have access to private connections at the same rate as in loti zones;
- The usual technical standards for building an AEP network are adapted to the context of non-loti areas."

Source: ONEA & WSP. (2013). Hydroconseil: Evaluation du projet pilote de la délégation de gestion dans cinq quartiers périphériques non-lotis de Ouagadougou dans la perspective d'amélioration du service pour les plus défavorisés, Final Report (p.18).

Figure 15. Location of the hydraulic infrastructure present in the non-loti zone of Le Marteau and the surrounding loti neighbourhoods

18

¹³Interview with the Chief of Kossodo, conducted on 17 January 2019.



Produced by: L. Guigma & H. Hangnon. (2019)

The management of this mini-grid is entrusted to small private operators, to whom ONEA sells water in bulk (C. Baron, 2014). This delegated management is governed by a so-called leasing contract signed between ONEA, the town hall of Ouagadougou and the private operator (C. Baron, ibid.). The zone of Le Marteau, called Toukin by ONEA, is one of the five districts identified in Ouagadougou. This minigrid supplies subsidized standpipes and individual connections. The rate schedule applied to consumers benefiting from individual connections in non-loti areas is the same as that applied in loti neighbourhoods, in a spirit of spatial justice (P. Gervais Lambony, 2014). This effort to reduce sociospatial inequalities is limited because the coverage of the drinking water supply network for non-loti neighbourhoods is less than optimal within the district.¹⁴

Residents of non-loti areas are subject to unexpected water cuts, especially during the hot periods (March to May) of the year. But it should be stressed that these alternating cuts and deliveries of drinking water concern all districts of the Ouagadougou conurbation. In anticipation of the densification of standpipes and the mini-grid, which will enable access for individual connections, the difficulty of accessing drinking water by residents of non-loti districts is offset by the presence of a number of boreholes in said districts, particularly within public facilities (schools, places of worship), even if the quality of the water from the wells is not always guaranteed. ONEA's current policy is to develop the collective drinking water distribution network in urban areas rather than allowing households to drill individual wells within their parcels in an effort to preserve groundwater. It is only

⁻

¹⁴The five peripheral non-loti districts of Ouagadouogou that benefit from the drinking water mini-grid are: Zongo, Bissighin, Bogodogo, Toukin, and Nioko 2. While three districts do not benefit from any land redevelopment projects, Zongo and Bogodogo are in the process of being regularized into official allotments.

in rural areas where the implementation of boreholes or mini-networks of drinking water supplied from individual boreholes is encouraged.

Figure 16: A standpipe (left) and a borehole (right) in the non-loti area of Somgandé



Source: Photos by L. Guigma, 26 January 2019

In terms of the drinking water supply, the non-loti districts of Toukin and Somgandé use their proximity to the loti districts to benefit from standpipes connected to the network, while the residents of the loti districts benefit from the presence of some boreholes in the neighbouring non-loti areas in the event of a prolonged interruption in the urban drinking water supply system.

Drainage of rainwater, wastewater and household waste through the streets of nonloti areas

An analysis of stormwater drainage, wastewater disposal and household waste management leads to the assessment that residents are exposed to climatic and urban risks. From our observations, we have established a link between stormwater, wastewater and household waste in non-loti neighbourhoods: they all end up in the shared space of the street.

Figure 17. Streets in the non-loti areas of Somgandé with cesspits full of wastewater and garbage (left) and visible stormwater runoff (right)



Source: Photos by L. Guigma, 26 January 2019

The health challenge of urban risk is linked to the vulnerability of residents of non-loti neighbourhoods to bacterial infections and waterborne diseases. The exposure factors of residents are tied to the stagnation of stormwater and wastewater in the vicinity of homes. Indeed, the shared spaces of Le Marteau's non-loti area are generally marked by stormwater runoff and stagnation, piles of rubbish and wastewater discharge from family yards. Most wastewater from showers and laundry is discharged directly onto the outdoor roadway through a hole under the wall or into a cesspit. When they are present, these pits are mainly located outside occupied areas, which reduces the footprint of

the roadway and the passage of stormwater. In non-loti neighbourhoods, rainwater drainage also includes wastewater and household waste with which stormwater is mixed. These waste products are sometimes accumulated or drained by water near existing boreholes and can pollute the groundwater table.

The second residential issue is the exposure of residents to the risk of home collapse. This risk is caused by a combination of vulnerability factors: the precariousness of building materials, particularly the earthen foundations of dwellings, stagnation at the foot of buildings, rainwater and wastewater whose drainage is blocked by household waste, and the risk of heavy rains that raise the water level at the base of earthen constructions. To protect themselves from road damage caused by gullies or water stagnation, some residents replace earthen foundations with cement bricks or build buttresses with cement on the sides of their homes.

Figure 18. Sidewall protection for non-loti constructions in Toukin (left) and Kossodo (right)



Source: Photos by L. Guigma, 26 January 2019

The third issue, which is also residential, is related to the exposure of residents to the risk of of home collapse due to having been built on so-called non-constructible land, as they are likely to be flooded in the event of heavy rainfall. Some buildings are located on the banks of the drainage outlet, within the boundaries of the Green Belt. Ouagadougou experienced a "100-year flood" in 2009 that caused severe flooding, particularly in the non-loti zone of Kossodo, which caused several houses to collapse. The boundary markers, beyond which all construction is prohibited, that were installed by the Ministry of Urban Development in the non-loti zone of Kossodo are still visible.

Figure 19. Boundary marker (left and centre) and suspended construction (right) in the non-loti zone of Kossodo



Source: Photos by L. Guigma, 5 February 2019

Stormwater drainage is perceived by residents of the non-loti areas as a basic urban service deficit for the entire urban periphery, in both loti and non-loti areas, but which affects residents of non-loti areas more because of their greater vulnerability to climate risks and the precariousness of their buildings. Indeed, the presence of rainwater, wastewater and rubbish heaps on the shared spaces of the road network is a factor of vulnerability and increases the accumulation of risks because it contributes to exposing dwellings and their residents to climatic hazards (e.g. natural flood risks).

Local solutions for the production and use of electricity in non-loti zones

For the Société Nationale Burkinabè d'Électricité (SONABEL), which currently holds a monopoly on the production of grid-distributed electricity in Burkina Faso, non-loti zones are not officially connected to the national electricity grid. But since 2015, ¹⁵ a study financed by the World Bank has been carried out to ensure so-called peri-urban electrification encompassing all peripheral districts that are not equipped with electricity. Pending official peri-urban electrification, residents of non-lot neighbourhoods have been developing their own formal and informal strategies to access electricity.

Solar panels can be seen on the roofs of some houses in the three non-loti areas of Le Marteau. It is the most common source of energy in the non-loti zone. Some households also use used batteries that they regularly recharge to obtain electricity.



Figure 20. Roofs topped with solar panels (left) and battery recharging shop (right) in the non-loti zone of Toukin

Source: Photos by L. Guigma, 26 January 2019

In the non-loti areas of Toukin and Somgandé, several streets are lined with electrical wires, as shown in the photos below.

¹⁵Other sources of production are operational, but the electricity produced, usually by solar devices, is consumed at the production site.

Figure 21. Alleys lined with electrical wires in the non-loti zone of Somgandé



Source: Photos by L. Guigma, 26 January 2019

These electrical wires are connected to poles located on the edge of the adjacent loti zone. As such, this informal electricity network operating in the Somgandé and Toukin districts is actually connected to the official electricity grid of the neighbouring loti districts. In practice, SONABEL offers the possibility for households located less than 200 m from the national grid to connect it following a request to the National Electricity Company and after obtaining prior authorization from the town hall. But in any case, residents abuse this provision as some households connect informally via those who are officially connected to the national grid. This informal practice has grown to such an extent that SONABEL has decided not to punish the actors involved in these illegal connections but rather to supervise their distribution in order to ensure better security in the neighbourhood. While a study has been conducted by SONABEL to this end, SONABEL is still faced with the need to find technical solutions that guarantee safety while still offering financially accessible services to residents.

Electricity is mainly used for individual use in household lighting, mobile phone charging and the operation of some household appliances: televisions and radios, refrigerators for the sale of chilled water (L. Guigma, C. Kayser-Brill, et al., 2015).

3. The imperfect urbanity of "mal loti" residents

Urbanity is understood as the set of practices and representations of populations living in cities (P. Gervais-Lambony, 1994). It connects the processes of integration, affiliation and construction of an urban identity. This concept serves as an analytical framework to describe the ambiguous relationships of some urbanites with their shared social spaces, their strategies for protecting their neighbourhoods, their contributions to improving their living environments, all as they await the regularization of their land occupations.

3.1 Shared social spaces, cherished or despised?

As the occupation of non-loti districts is not officially recognized by public authorities, the term "public space" is used to distinguish a private space that does not legally exist. In fact, the shared spaces in question concern the gaps or undeveloped open spaces that include the neighbourhood's circulation areas and natural spaces. These shared places are for the most part multi-purpose spaces or are used by several activities simultaneously or consecutively. Through the diversity of practices, these places are the most powerful expression of the urban character of non-loti zones.

The Chiefs' Court

The traditional chiefs of Toukin and Kossodo reside in the non-loti sections of their districts, while the chief of Somgandé lives in the loti section of Somgadé. The Chiefs' Courts or the courts of the traditional chiefdom are hardly monumental or prestigious spaces. They do not have distinctive signs

that would allow a non-resident of the neighbourhood to identify them at first glance. The Chiefs' Courts are therefore not limited to the enclosed spaces of the chiefs' residences. They extend into the shared spaces adjacent to the enclosures of the chiefs' residences. These are ordinary spaces, with the same level of development as the interstitial shared spaces between the neighbourhood's occupied lands.

Figure 22. In the shade of the Chief of Toukin's court (non-loti zone, left) and the court structure of the Chief of Somgandé (loti zone, right)



Source: Photos by L. Guigma, 26 January 2019 (left), 17 January 2019 (right)

The courts of the traditional chiefdom therefore include an intermediate area with a shed, which is neither the chief's private residence nor the public space of the street. This shared space is occupied by playing children and chatting adults and seniors. Several activities can be carried out there at the same time. It is also a place of passage. In this case, passers-by respectfully greet the occupants, especially when prominent people or the chief are present. This shared space is distinct from the specific space of the palaver tree or the chief's hut, where certain ceremonial rites are put into practice, and where the chief of the district receives his guests, convenes his notables and provides responses to questions or problems that are posed to him. A place of convergence and liveliness, the chief's court seems to be similar to a community centre, a place open to all residents of the neighbourhood.

But, beyond its external aspect, the chief's court remains a space charged with the historical and cultural memory of the district, in particular through the personality of the chief who resides there. It is an obligatory passage for the guests and visitors of the neighbourhood, but also a place where the social construction of the urban area can take place through the alleviation of certain crises or social tensions in the neighbourhood.

• The shared space of "dolo cabarets"

Several *dolo cabarets* are found in non-loti areas. They are often grouped around a square in the neighbourhood or along certain sections of the streets. These relaxation places or spaces are centres of social magnetism and centrality in that they generate the development of several associated activities (local drinks, grills, soups and other traditional dishes) and because they contribute to the liveliness of the neighbourhoods. Sometimes adjoining bars and maquis that serve modern drinks, they manage to remain crowded and lively, often much more so than modern bars and restaurants, since the cost of a calabash of *dolo* starts at 50 CFA francs while a bottle of beer costs at least 500 CFA francs.

Figure 23. Atmosphere of dolo cabarets in the non-loti section of Kossodo



Source: Photos by L. Guigma, 5 February 2019

Beyond drinking, these places for consuming dolo (local millet beer) served in traditional calabashes are sites of sociability, information, relaxation, chitchat, jokes, etc and appreciated by the residents of non-loti zones.

The shared space of the town crier

The use of a town crier to inform residents is a widespread practice in *non-loti* neighbourhoods. It should be noted that this practice is less and less used in the loti districts of Ouagadougou. Town criers regularly criss-cross the streets of Le Marteau to provide information to residents. They serve to encourage the mobilizations related to the political, social and cultural life of the neighbourhood. They are also solicited by various organizers of public events within the non-loti sections of Le Marteau, but also by health workers to convey social messages related to vaccination campaigns or various awareness campaigns using a loudspeaker. The streets of the non-loti areas crossed by town criers are distinguished by their human scale (6 to 8 m on average), smaller than the streets serving the homes in loti areas (12 to 15 m).

The presence of graves in family courtyards

Le Marteau benefits from its proximity to the municipal cemetery of Toudougweogo in the northwest, yet some tombs can be found within the non-loti zone. In loti areas, burials in family courtyards are only authorized by municipal authorities after a justified request and compliance with strict burial regulations based on health standards. The graves found in the family courtyards of the non-loti area of Le Marteau do not respect this formal process, but their presence in family courtyards reflects the family's or the community's esteem towards the deceased. According to Mossi tradition, among the category of the dead who may become ancestors, the most honourable are buried near family courtyards, while the others are buried in village or neighbourhood cemeteries, because after burial, the "Mossi believe that the spirit of the deceased remains near the homes of the living" (A. Degorce, 2010, p.59).

The practice of informal burials in non-loti zones can present health risks for local residents as a result of the contamination of the groundwater water that feeds the district's boreholes. Despite this health risk, the presence of graves in non-loti courtyards is a sign of appropriation and attachment to the land by its occupants. Indeed, the graves of generations of family members can still be see in the courtyards of early occupants.

• The "bancotière – exutoire"

The bancotière is a quarry for extracting the clay soil necessary for the production of mud bricks, which are blocks that have been moulded and dried in the sun.¹⁶ The mud bricks, known locally as banco, have given their name to the quarry from which they come: the bancotière. Banco is the most commonly used material for masonry constructions in loti neighbourhoods, which justifies their location in or near non-loti neighbourhoods.

Le Marteau is crossed by a natural drainage outlet, more precisely in the non-loti section of Kossodo that is located within the boundaries of the Green Belt. The southern part of the outlet has been constructed as a concrete canal, while the northern part, which crosses the non-loti area and the Green Belt, remains in its natural state.

Figure 24. Portion of the drainage outlet developed in the loti area south of the RN3 (left) and a portion of the undeveloped outlet in the non-loti section of Kossodo





Source: Photos by L. Guigma, 17 January 2019

The clay is extracted from the bancotière, particularly during the rainy season, hence the designation of "natural bancotières" or "bancotières-exutoires", as opposed to so-called "artificial" bancotières, which are clay quarries that have been created by residents.

The bancotières-exutoire of the non-loti area of Kossodo collects stormwater from both the drained non-loti area and from the other districts of the city. Indeed, the natural slopes of the district already drain rainwater to the lower reaches of the outlet. The extraction of sand and soil at several points along the main channel of the bancotière gives it a morphology punctuated by numerous holes of varying sizes. Nowadays, the soil is rarely extracted as its quality no longer seems suitable for the production of good mud bricks. However, during the rainy season and particularly after heavy rains, sand deposits form naturally inside the bancotière. This sand is collected by residents and operators to later be sold. Its quality is average because it contains organic matter, soil and the waste that accompanies the water from the neighbourhoods.

Figure 25. Discarded household waste (left) and incinerated waste (left) in the Kossodo bancotière-exutoire

¹⁶The term **bancotière** is based on the term **banco**, which means mud brick. It was created in 2011 during a study to prepare and draft the Participatory Informal Settlement Improvement Programme (L. Pierre Louis, L. Guigma, 2011).



Source: Photos by L. Guigma, 5 February 2019

The main function of this bancotière is to provide an outlet for rainwater and household wastewater at the district level. In addition to this main function, the drainage outlet serves as a sand and/or soil extraction site, a place of convenience for residents who do not have toilets in their backyards, a household waste disposal site and a playground for children. It should be noted that the drainage outlet is a developed infrastructure.

In terms of urban risks, the bancotière- exutoire exposes residents to disease, the dangers of drowning, vandalism and flooding. Residents also mention the health risks associated with their proximity to the bancotière as it stores water, which is a source of mosquitoes and other pathogens that threaten the health of residents. Similarly, at night, the bancotière is also perceived by some residents as unsafe due to its isolation and steep morphology. In the event of a flood in the bancotière, all residents of the non-loti area face immediate flooding.

• The Green Belt and its scrubland

The southern end of the Green Belt or "green strip" is partially occupied by non-loti zones. However, in the north, this area is uninhabited. During the rainy season, agriculture is practiced these parts of the Green Belt. There are also some animals housed in stalls or left out to graze. Otherwise, the northern part of the belt is overrun with household waste and bordered by shrubs.

Figure 26. Non-loti occupations within the Green Belt inToukin (passage surrounded by waste, left), Somgandé (oxen in stalls, centre) and Kossodo (shrubs bordering the drainage outlet, right)



Source: Photos by L. Guigma, 26 January 2019 (left and right), 5 February 2019 (centre)

The Chief of Toukin did not seem to appreciate the presence of these shrubs near the Green Belt.

"At nightfall people leave the city, the prostitutes of the city go to the edge of the green strip where there are maquis [scrubland] that attract drug addicts, criminals who bring insecurity to the neighborhood.".¹⁷

It should be noted that this practice of concealment and drug use, as well as that of prostitution, is no more prevalent in non-loti neighbourhoods than in loti areas. The association of these practices to specific places in non-loti neighbourhoods can therefore be interpreted as the process of marginalizing certain spaces within the non-loti zone by the residents themselves.

Unlike the singular functions of some shared spaces appreciated by the residents of non-loti areas (such as the mediation role of the Chief's Court, the sociability of the dolo cabarets, and the information provided by the town criers), the tombs, the bancotières and the scrubland of the green belt, which are marginalized due to their occupation by prostitutes or drug users and sellers, are less attractive spaces and therefore avoided, especially at night, because of their image as spiritual (spirit of the dead), physical (steep embankments of the bancotière and waterlogged soil) or social (drug use and prostitution being marginalized practices in Burkinabe society) perils. These spaces contribute to the definition of a non-loti urbanity which is constructed as a contradiction to the image of a "hygienic" and "safe" city (L. Guigma 2017). This is due to the risks, both urban and health related, and the representations of insecurity that are evoked in some residents.

Another category of spaces and activities that characterize the urban specificity of these non-loti districts is that of the "Kologweogo", which refers to magical spaces and invisible protectors.

3.2. The use of Kologweogo, protectors of the bush or the city?

To guarantee the protection against diseases, bad spirits, bad luck and all kinds of misfortune (theft, accidents etc.), urban residents and non-residents of non-loti districts consult witch doctors, known as Kologweogo, residing in non-loti areas. These witch doctors are known for their magical-religious powers, capable of curing diseases, hunting down or protecting against evil spirits or positively changing a person's destiny (academic or professional success, marriage, fertility, etc.). To ensure the protection, sacrifices or rites must be performed. Thus, many signs of sacrifices can be seen in the shared spaces of the non-loti neighbourhoods. According to the testimonies of some residents, the best places to make sacrifices are at crossroads, cemeteries and markets, and the best time to do them is at night or very early in the morning, at sunrise. It should be noted that these magical-religious practices are also present in some sparsely populated loti neighbourhoods such as Ouaga 2000, although in general they are less frequent in working-class loti neighbourhoods. This confirms that they are an indicator of urbanity and that non-loti districts are one of the urban places favoured by Ouagadougou's urbanites as a result of these magical-religious practices.

The feeling of insecurity in neighbourhoods is a concern evoked by many urbanites in the loti districts of Ouagadougou as well as by some residents of the non-loti area of Le Marteau, as evidenced by the remarks of the Chief of Toukin:

"In the non-loti, it's like the Wild West. I had to call on the Kologweogo. If you are close to the city and people live as if in a village, then you have to act as if in a village to make it safe. In the middle of the day, if you leave your yard, you'll be robbed. It wasn't like that before. The village wasn't dense and everyone knew each other; there was less theft. [...] I have called the police

28

¹⁷Interview conducted on 26 January 2019 in Toukin.

at 1010 many times, but they don't do anything. As a result, we let the Kologweogo, who are the residents of the neighbourhood, do the work so that we can identify the bad people and get them out of the way. Since 21 September 2018, when the Kologweogo were installed, there has been peace and quiet in the neighbourhood."18

Kologweogo in Mooré literally translates to "protector of the bush". These popular self-defence groups are widespread in rural areas, especially in sparsely populated areas, and serve to fight against highway bandits and robbers who loot, steal and rape peaceful citizens. They are most prevalent in areas known to be at risk of insecurity, where official security forces are poorly represented or ineffective. These self-defence groups are very much feared by thieves and robbers because of the fines and physical abuse they apply to the people they arrest. They are also endowed with magical-religious powers obtained following an induction ritual. They are an expression of the customary and structured authority present throughout the territory in rural areas. However, these popular self-defence groups divide national public opinion, with some viewing them as a risk of deviating towards an unacceptable eye-for-an-eye justice in a country that follows the rule of law.

In reality, these self-defence groups, replicated from rural to urban areas, act as invisible forces capable of deterring and capturing robbers and thieves who operate in non-loti neighbourhoods. They thus act as relays or substitutes for official security forces, which are too expensive for public authorities to equip and operate throughout the national territory. All these magical spaces and "invisible protectors" contribute to building an urbanity of non-loti areas based on an image of a "safe city".

3.3. Hoping and waiting for land regularization

Non-loti residents are said to be motivated by individual and collective strategies for accessing housing and/or land ownership. Hence the perception by residents of an incomplete or imperfect urbanity, as they are constantly seeking the land regularization of their plots. This perception is nuanced depending on the residents' particular situation in non-loti areas.

Regularization challenges depending on the type of non-loti neighbourhood

The residents of Toukin and Somgandin are in favour of the official regularization of their lands and have asked public authorities to begin the process of developing the areas into loti neighbourhoods. The presence of occupants in the Kossodo Green Belt is denounced by other residents of Le Marteau. Indeed, following the flood of September 2009, the affected people who lost their homes were identified and allocated plots of land in Yagma, in the new residential catchment area. But according to the Chief of Toukin, "they sold their plots and returned to the Kossodo Green Belt".

Residents of the Kossodo Green Belt were not included in the census for the 2007 regularization programme. In any case, it seems that they wish to remain in the neighbourhood to maintain their original "homeland".

"The green strip found us here. We even helped plant the Nimier trees of the Green Belt before the revolution. [...] We don't want to live anywhere else. I'm a chief. I can't go and live in another chief's territory. If we leave here, then we no longer exist, we will no longer have a territory, no village. The neighbourhood is named after us. We don't want to leave. That's why I'm here. I live here alone with my wife. Otherwise I have plots elsewhere, so do my children. But if I move, it's over. That is why I accept to live here in the darkness and with a lack of water."

29

¹⁸Interview conducted on 26 January 2019 in Toukin.

In accordance with the legal texts in force, only the delimitations of large estates or titled lands can be regularized by the act of subsequent parcelling. Squatters on delimited and/or titled non-loti estates as well as tenants of non-loti dwellings will be evicted from the non-loti area at the time of official regularization.

For all other owners of non-loti land intended for residential use, the challenge is to be identified as resident in the non-loti zone so as to be identified as a prioritized beneficiary when the non-loti parcels are allocated by the developer.

• Regularization challenges: Early occupants vs newcomers

Preceding the official regularization of non-loti areas, developers and the initial landowners and traditional chiefs engage in a series of negotiations. During this time, the latter can demand the allocation of plots as compensation for the loss of their land. It should be recalled that these early occupants may have already sold most of their undeveloped land to newcomers for varying amounts of money depending on the time of the transaction. Depending on the surface area of the land to be regularized and the negotiations, the number of plots allocated by the developer to the early occupants via their traditional chiefs can reach several dozen depending on the surface area of the site.¹⁹ But since these negotiations do not always take into account the newcomers occupying small residential plots in the non-loti area, some newcomers will be evicted from the future developed parcel and will be directed towards a new non-loti district, which will gradually be densified in hopes of also one day being regularized. Therefore, early occupants will never accept to be evicted in any way whatsoever, to the benefit of newcomers.

• Non-loti neighbourhoods, road access to dwellings and/or plots?

The non-loti districts are occupied not only to satisfy a housing need, but also in anticipation of land regularization through the allocation of plots as part of a housing estate scheme. This regularization consists allocating parcels in priority to the residents of the newly redeveloped non-loti district. This act of regularization therefore makes it possible to move from the status of an owner of an untitled non-loti plot of land to that of an owner of an officially allocated parcel. At present, a $200m^2$ plot of undeveloped land in Le Marteau, for which a contractor must pay a tax of 500 CFA francs per square metre (100,000 CFA francs in total), would have the same value as a neighbouring loti parcel of land, that is 15,000,000 to 20,000,000 CFA francs. It is this increased land price that explains the enthusiasm of some residents for the regularization of the non-loti districts that comprise Le Marteau.

A partial justification can be found here due to the fact that non-loti districts are among the densest of Ouagadougou²⁰: they make it possible to house those who do not have financial access to renting a home in loti districts;²¹ but, moreover, they give hope to some urbanites that the eventual land regularization will provide them with an immediate land value increase that can be transformed into a large sum of money.

¹⁹Approximately five (5) serviced parcels are granted to landowners in exchange for each (1) hectare developed by the developer.

²⁰Non-loti areas have an occupancy density of 100 to 150 inhabitants per hectare, while the average density of Ouagadougou is between 40 and 50 inhabitants per hectare.

²¹According to surveys (PPAB, 2011, 2014), housing in a non-loti neighbourhood can cost three to five times more than the same type of housing in a loti neighbourhood.

3.4. Improving the neighbourhood, while waiting...?

It appears from previous studies on the non-loti districts of Ouagadougou that it is mainly the newcomers to non-loti districts who generally do not support actions to improve the district. The early occupants, confident that they will never be evicted from their "home village", are more favourable to actions to improve their non-loti neighbourhood. For newcomers, these actions would lead to a state of "slumming it", by forcing them to stay on their small parcel of non-loti land in a situation of permanent tinkering and improvement of the neighbourhood, which would never lead to the desired radical change represented by the image of a non-loti neighbourhood, "with wide, straight streets and well aligned buildings"²².

In Le Marteau, both the early occupants and the newcomers all seem to be in favour of the regularization of their neighbourhood. The Chief of Toukin clearly stated:

"The non-loti zones are a powder keg. If you have lived here for some 30 years and are located 4-5 km from the city centre, you are ready for the land to be regularized. This pocket of insecurity must be eradicated."²³

The same is true for some Green Belt residents who deny its very existence: "I don't know that this is the Green Belt here," said a shopkeeper located east of the Green Belt in the non-loti area of Kossodo.

The Chief of Kossodo made no secret of his fear of the projects envisaged by national and municipal officials.

"The airport road will pass through the non-loti area of Kossodo and there will be displaced people. We're afraid of being displaced. We're very scared. [...] People are afraid to improve their homes. They're just protecting themselves from flooding. But, if we're sure to stay, then give us a year; if you come back, you won't be able to recognize the neighbourhood anymore."

Consequently, it can be seen that as residents await the regularization of their occupations by public authorities, this sense of land status insecurity does not prevent them from improving their housing, nor from consolidating their homes.

In contrast, the residents of the non-loti area of Kossodo, who lack more basic urban facilities and services than the residents of Toukin and Somgandé, are more favourable to actions to improve their living environment (construction of public facilities, improvement of the neighbourhood's viability) and to innovative approaches to community land management (collective ownership and titling). Indeed, these improvements would contribute in forming a tacit recognition and legitimization of their presence in this part of the urban territory by public authorities.

Finally, the perception of non-loti residents as "mal lotis", i.e. poorly off since they lack individual land tenure security as well as an adequate level of urban services and development, seems to be the basis for a rationale by both residents and some officials in justifying and legitimizing the regularization of this type of neighbourhood.

²²Resident of Bissighin, quoted by L. Guigma, (2017).

²³Interview conducted on 26 January 2019 in Toukin.

Conclusion

Le Marteau, through its non-loti sub-districts of Toukin, Somgandé and Kossodo, served as a field of investigation to understand the heterogeneity and diversity of spatial forms present in the non-loti districts of Ouagadougou, but also those of the surrounding loti sub-districts. The consolidation of housing, the construction of local facilities, the establishment of services and informal activities, the ingenuity of residents to guarantee access to basic urban services are specific urban features of the non-loti districts of Ouagadougou. While also addressing environmental concerns, their shared spaces, which constitute the porosity of the urban fabric, are sources of inspiration for developing neighbourhoods, cities and metropolitan areas (B. Secchi, P. Vigani, 2011). Are the residents of non-loti neighbourhoods really "poorly off", or can they take advantage of their insufficient infrastructure, facilities and land insecurity to invent and build new a form of urbanity?

Pending the implementation of the Ministry of Urban Planning and Housing's "Intervention Programme for the Reabsorption of Informal Settlements in Burkina Faso" (MUH, 2018), the participatory neighbourhood improvement actions promoted by UN Habitat in Bissighin and YAAM Solidarité in Boansa, along with the municipal actions taken in the development of loti and non-loti districts of Ouagadougou, offer opportunities to bring awareness to and promote the civic engagement of residents in non-loti areas, thus encouraging experts and government officials to recognize their know-how and the uniqueness of their districts. The presence in the city of these non-loti districts, which are transformed and improved every day, represents a form of both passive and active resistance by their residents against the homogenization of urban forms and the rationale of individual land appropriation fed by an illusory political and social will to produce and distribute plots to all households residing in Ouagadougou.

Non-loti neighbourhoods are thus the ideal place to experiment with new urban development and land regularization practices, particularly with the active participation and assistance of the residents themselves.

Bibliography

BARON C. (2014) - « Hybrid water governance in Burkina Faso: The ONEA experience» in McDonald D.A., *Rethinking Corporatization and Public Services in the Global South,* éd. Zed books, 240p. trad. Municipal services project, 19p.

BOLY M. (non daté), Quartiers spontanés et développement urbain, 10p.

DEBOULET A. (2016) - Repenser les quartiers précaires, Paris, éd AFD, 276p.

DEGORCE A. (2010) – « Les espaces des morts dans les chants funéraires de moosé (Burkina Faso) », in Journal des Africanistes n°79-2 | 2010 : L'expression de l'espace dans les langues africaines II, pp.43-63

GUIGMA L. (2017) – Vivre dans le non-loti de Ouagadougou : Processus de marchandages fonciers entre citadins, chefs traditionnels et autorités publiques. (DEBOULET A, PIERRE LOUIS L., dir), Thèse de doctorat en études urbaines, aménagement et urbanisme, Université Paris 8, Vincennes Saint-Denis, 613p.

GUIGMA L., KAYSER-BRILL C. (et al 2015) — Modèle d'électrification de zone périurbaine d'habitat spontané : état des lieux basé sur les résultats d'enquêtes, IED, 37p.

HYDROCONSEIL, ONEA (2011) - Appui à l'ONEA pour l'expérimentation de la gestion déléguée du service de l'eau potable et la promotion des services d'assainissement dans les quartiers périurbains défavorisés, rapport de démarrage, 43p.

MUH (2018) - Cadre d'intervention pour la résorption de l'habitat spontané dans les treize chefs-lieux de régions du Burkina Faso et à Pouytenga, rapport d'expertise réalisé par PERS-PECTIVE, 139p.

ONU HABITAT, MHU (2011) – Documents-projet du programme participatif d'amélioration des bidonvilles à Ouagadougou, composantes 1 à 5, rapport d'expertise réalisé par PERSPECTIVE Ouagadougou, 180p.

ONU –HABITAT, MHU (2014), Stratégie préliminaire pour la mise en œuvre du Programme participatif d'amélioration des bidonvilles à Bissighin (PPAB 3), rapport d'expertise réalisé par PERSPECTIVE, Ouagadougou, Septembre 2014.

OUATTARA A. (2004) - « Les enjeux de la dynamique des extensions périurbaines à Ouagadougou (Burkina Faso) », http://www.ceped.org

OUATTARA A. SOME L. (2009) — Recensement général de la population et de l'habitation, RGPH, Thème 9 : « La croissance urbaine au Burkina Faso », INSD, 118p

ROSSIER C., SOURA A., B. LANKOUANDE, R. MILLOGO (2012) – « Les non-lotis sont-ils des villages urbains ? Le cas de la périphérie de Ouagadougou ». 15p.

SECCHI B., VIGANO P. (2011) – La ville poreuse : un projet pour le Grand Paris et la métropole de l'après Kyoto, éd. MetisPresses, 294p.

PIERRE LOUIS L. (2013) – « Cadres réglementaire et institutionnel des lotissements au Burkina Faso ». Rapport de thématique 2 des États généraux des lotissements au Burkina Faso, 42p.

Liste des figures?
Figure 1 Plan de situation de la zone non lotie du Marteau 2
Figure 2 Localisation approximative des quartiers non lotis de Toukin, Songandé au sein du Marteau
3
Figure 3 : Statut foncier des non lotis du Marteau 7
Figure 4: Evolution de l'occupation spatiale du Marteau de 2002 (en haut) à 2018 (en bas) 8
Figure 5 : Formes urbaines des quartiers non lotis proches des quartiers lotis Figure 6 : Formes urbaines spécifiques aux quartiers non lotis proches des quartiers lotis 13
Figure 7: Localisation des équipements scolaires et sanitaires dans le non-loti du Marteau et les
Figure 8 : Ecoles primaires dans les non-lotis de Toukin (à gauche, « Anatole école »), de Somgandé (au milieu, école « Trésor ») et de Kossodo (à droite, élèves dans la cour de l'école « Wend-
benedo ») 15
Figure 9 : Rue séparant le loti à droite et le non - loti de Somgandé à gauche (photographie de
gauche) et rue séparant le loti à gauche et le non - loti de Somgandé à droite (photographie de
<u>droite)</u> 16 Figure 10 : Maquis en bordure du non-loti de Somgandé 16
Figure 10 : Maquis en bordure du non-loti de Somgandé 16 Figure 11 : Activités informelles dans le non-loti de Somgandé (à gauche et au milieu) et Kossodo (à
droite) 16
Figure 12 : Activités dans le non-loti de Toukin (téléphonie à gauche, matériaux de construction à
droite) 16
Figure 13 : Transformation de peaux de bœufs (à gauche) et de fils de fers mous (à droite) dans le
quartier non loti de Somgandé 17 Figure 14: Activités de lairire dans les non lotis de Toukin (noteau de terrain de foetball à gauche)
Figure 14 : Activités de loisirs dans les non-lotis de Toukin (poteau de terrain de football à gauche), Somgandé (vidéoclub, au milieu) et Kossodo (soupe de patte de bœuf dans un maquis, à droite)
17
Figure 15: Localisation des infrastructures hydrauliques dans le non-loti du Marteau et les quartiers
lotis environnants 19
Figure 16 : Une borne-fontaine (à gauche) et un forage (à droite) dans le non-loti de Somgandé 20
Figure 17 : Ruelles du non-loti de Somgandé avec puisards remplis d'eau usées et de déchets (à
gauche) et passage visible des eaux pluviales au milieu de la ruelle (à droite) 20
Figure 18: Protections aux flancs des constructions du non-loti de Toukin (à gauche) et de Kossodo (à
droite) 21
Figure 19 : Borne (à gauche et au milieu) et chantier arrêté (à droite) dans le non-loti de Kossodo
<u>22</u> Figure 20 : Toits surmontés de panneaux photovoltaïques (à gauche) et recharge de batteries (à
droite) dans le non -loti de Toukin 23
Figure 21 : Ruelles surmontées de fils électriques dans le non loti de Somgandé 23
Figure 22 : Sous le hangar du Chef de Toukin (non-loti à gauche) et hangar du Chef de Somgandé (loti,
à droite) 25
Figure 23: Ambiance de cabarets de dolo dans le non loti de Kossodo 26 Figure 24: Portion de l'ayutaire aménagé dans la zone lotie au Sud de la RN2 (à gaushe) et portion de
Figure 24 : Portion de l'exutoire aménagé dans la zone lotie au Sud de la RN3 (à gauche) et portion de l'exutoire non aménagé dans la populati de Kossado (à droite) 27
<u>l'exutoire non aménagé dans le non-loti de Kossodo (à droite)</u> 27
Figure 25 : Ordures ménagères jetées (à gauche) et incinérées (à droite) dans la bancotière-exutoire
<u>de Kossodo</u> <u>28</u> Figure 26 : Occupations de la ceinture verte des non-lotis de Toukin (nassage au milieu de déchets à

gauche), de Somgandé (boeufs en stabulation, au milieu) et de Kossodo (arbustes bordant l'exutoire,

?

à droite)

<u>28</u>