

## Informal but Planned Settlements: A Case in Guayaquil

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### ABSTRACT

*Urbanization has been very strong since the middle of the 1900s and from 2007, 50% of the population in the world has become urban. Today almost one third of this urban population, around 1 billion, is living in areas classified as slums with substandard housing and a lack of land rights. In some cases more than 50% of the growth of cities in developing countries has been implemented by the informal sector. The development process of those settlements seems to follow an irrational pattern making legalization and consolidation very expensive and a process that can take several decades, when compared with the logical process of planning settlements in the formal city.*

*This study deals with an informal settlement in Guayaquil, Ecuador and the main objective is to understand the logic and virtues behind informal but planned settlements and to extract lessons from them to achieve a more harmonic urban legalization for governments and societies in developing countries.*

*The case studied shows an informal settlement which is the result of an organized and collective management, planned in advance and accomplished in a manner of precision and discipline. Observations, deep interviews with municipality town planners, land dealers and community leaders and questionnaire surveys with residents show that in only 4 years, 1,500 families classified as poor or very poor, established their neighbourhood, behind the back of the authorities and outside the urban border.*

### KEYWORDS:

Informal settlements, community organization, land use planning, land dealers, Guayaquil

### INTRODUCTION

Cities contain both order and chaos. In them reside beauty and ugliness, virtue and vices....

Cities are the materialization of humanity's noble ideas, ambitions and aspiration but when not planned or governed properly, can be the repository of society's ills. (UN-Habitat, State of the world's cities 2008-2009)

Urbanization has been very strong since the middle of the 1900s, and in 2007, 50% of the population in the world has become urban. Today almost one third of this urban population, around 1 billion, are living in areas classified as slums with substandard housing and lack of land rights. In some cases more than 50% of the growth of cities in developing countries has been implemented by the informal sector. The

development process of those settlements seems to follow an irrational pattern making legalization and consolidation very expensive and a process that can take several decades when compared with the logical process of planning settlements in the formal city.

There is a wide knowledge among urban professional planners, architects and technicians working in the production of sustainable and effective modern cities, in optimizing the urban soil, and in making social cohesion possible and creating harmonious formal cities. But there is limited knowledge about and a lack of understanding of the informal cities, the cities built by the efforts of the citizens themselves outside the law – these cities that are often seen only as chaos.

According to the UN Millennium Development Goals, MDGs (UNDP 2005) the UN has set the goal to significantly improve the quality of life of the world's poor by 2020. Both the United Nations Development Programme (UNDP) and the housing and settlements agency UN-HABITAT, as well as many government agencies in developing countries, are focusing on incremental improvements, legalization and integration of informal settlements into the formal sector (UN-HABITAT 2003). This transformation, however, is going very slowly.

Today, in some cases more than 50% of the growth of cities in developing countries has been implemented by the informal sector. The development process of those cities seems to follow an irrational pattern of consolidation of the precarious human settlements; a process that can cost from 5 to 10 times more, and can run for several decades, when compared with the logical process of formal planning for new neighbourhoods. Informal settlements tend to be low-rise contributing to the urban sprawl, leading to inefficient land use which, in turn, leads to higher transportation costs and more extensive and costly infrastructure (Jenkins et al. 2007).

There is a need to understand the logic and virtues behind slum formation and everyday life when carrying out public interventions. Professionals working in city planning need to develop tools to bridge the gap between formal and informal cities. Today violent urban conflicts for land appropriation are well known both when informal occupation occurs, and when legalization processes are initiated. Often dwellers are trampled between the personal interests of politicians in charge and informal land developers, making the life of poor families very insecure.

## GUAYAQUIL

The urban development of the city of Guayaquil, Ecuador runs parallel to the history of the informal settlements. Guayaquil, the largest city in Ecuador, has a population of 2,5 million, 60% of them live in slums. 70 % of the population started to settle in informal areas that have become neighbourhoods; some of the dwellers have suffered a long process of neighbourhood consolidation, a process that in some cases has taken more than 20 years (INEC 2005).

More important than the lack of opportunities in rural areas near Guayaquil, is the weakness of the authorities, the lack of national housing programmes to allocate land to the new urban families and especially the strong commitment of the “informal housing promoters” or illegal land dealers. The fact that land ownership is often unclear in informal settlements has been one of the major problems for the dwellers (Werlin 1999, UN-habitat 2003).

Illegal land occupation started in Guayaquil during the 1960s in the suburbs to the south. A large area of mangrove swamp south of the city started to be filled up after the construction of the bridge that connects Guayaquil city with the island of Trinitaria. During the 1980s illegal occupation of this land occurred, prolonging the extension of the city to the south. Agricultural production farms like Hacienda Guasmo or nationally protected areas became urban areas. These neighbourhoods toward the south are the result of illegal land occupation without the consent of the owner, and by more or less organized groups of low-income families. This form of self-provided homes is known in Guayaquil as invasion (the term in Spanish is *invasión*). Today these suburbs are formalized or in the process of formalization. During the 1990s, with the construction of two municipal roads in the north, the illegal land occupation phenomena continued in this area using experience gained from the previous occupation in the south. Their experience was that land is an efficient political tool and also very profitable merchandise. Some of the illegal land dealers who started their activities in the south, moved to the north, to settle new families. This time it was not invaded land but land purchased by private owners; to be divided in lots and informally sold to future dwellers. This organized way of management of a neighbourhood is usually categorized as invasion, since there is an owner or a group of owners with legal titles that agree to informally manage the land and the neighbourhood.

Today, the suburbs of the south represent almost a million dwellers and the suburbs in the north are more than half a million in a city of 2.5 million. 60% of land occupation is informal (Huertas 2011). Informal settlement development is a well organised and collective effort that is planned in advance and accomplished in a manner of precision and discipline (C. Bengs 2009).

## METHODOLOGY

The research includes several informal neighbourhoods in Guayaquil. Three study areas were selected: Nigeria (about 6,000 families), Monte Sinai (about 15,000 families) and Sergio Toral phases I, II and III (about 10,000 families). To triangulate data, data was collected from three main sources: the formal sector at the municipality town planning office, top leaders from the informal sector at the neighbourhood, and the dwellers. During the period of October - November 2010, twenty one in-depth interviews were done in the informal sector including interviews with land dealers, top leaders of the organization and dwellers. A total of 50 questionnaire surveys focusing on both quantitative and qualitative issues were also answered by the dwellers of the three informal neighbourhoods. From the formal sector, seven in-depth interviews were done with professionals working in the town planning office of the municipality of Guayaquil.

Both the in-depth interviews and the questionnaire surveys were based on the same content, since the questions were specifically formulated for the focus group and/or the person. Some of the in-depth interviews took more than an hour, sometimes two or more and were adapted to the person and the situation. The content of this data collection is always related to informal housing and informal neighbourhood situations and includes items such as: the background and history of the occupation, relation and comparison with formal neighbourhoods, land issues in legal terms, urban planning and patterns of land occupation, rules in the neighbourhood, local culture and patrimony services, house quality and the environment.

Considering the virtues of the informal and illegal settlements, this paper will focus on the organization of the pre-cooperative Sergio Toral, since it seemed to be the most organized at management level and in morphological structure. In terms of dwellers' satisfaction and neighbourhood security it shows the highest acceptance among the neighbourhoods studied.

## THE CASE OF THE PRE-COOPERATIVE SERGIO TORAL

Sergio Toral is located at the northern part of the city. 'Pre-cooperative' is a local term which refers to a cooperative entity in the process of being formalized. The neighbourhood is partly developed outside the urban border. With previous experience in informal land management, the pre-cooperative Sergio Toral started development of their settlement.

The price for a plot of land 15x8 sqm without services at Sergio Toral is 1,000 USD, and the traditional bamboo house costs 1,000 USD. The formal low income housing programmes by the municipality of Guayaquil, 'Mucho Lote' and 'Mi Lote', today deliver plots of land of 12x6 sqm. at a minimum price of 2,000 USD and houses in concrete blocks cost at least 10,000 USD. The minimum monthly salary in

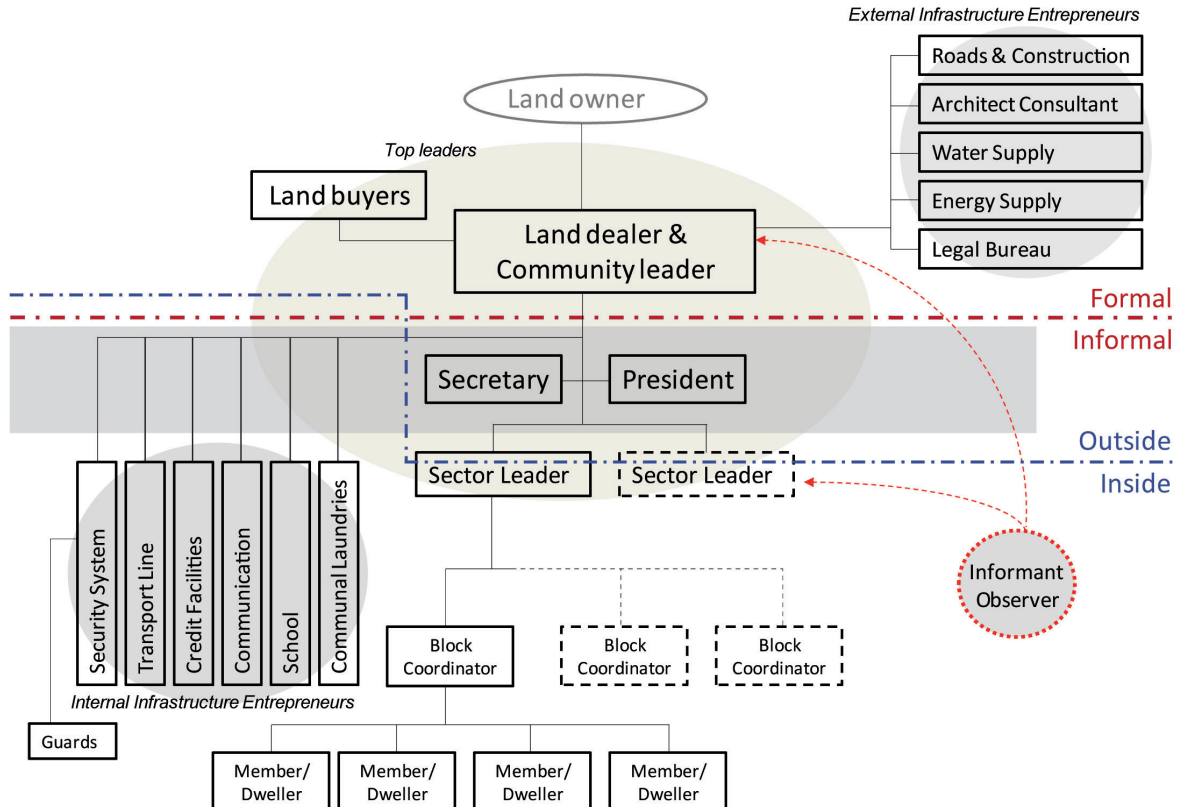
the formal sector in Guayaquil is 220 USD and in Sergio Toral a rough calculation shows that a minimum monthly income of 150 USD is necessary.

As a result of the observations, in-depth interviews, and questionnaire surveys it has been possible to define the organization that has made it possible to develop a neighbourhood for 1,500 families classified as poor and/or very poor in only four years. The organization chart presented below is based on information from the interviews and surveys. This is an attempt to create a formalized organisation chart for an informal settlement. The

chart indicates that active dwellers in this neighbourhood have developed leadership skills that could be used during the formalization, consolidation and management processes.

*Organizational structure*

The graphic below illustrates the results of the research so far. There is a diffuse border between what is “inside” the neighbourhood corresponding to the informal and what is “outside” the neighbourhood corresponding to the formal city. Some actors move easily over the border, some do not.



**Figure 1:** Organizational Chart

*Member or dweller*

Most of the families are poor, young urban families that have moved from the formal city looking for affordable land and homes of their own. Families become not only residents in the new neighbourhood, but also members of the pre-cooperative, sharing benefits such as credit possibilities for land, houses or household appliances. In some specific cases, weak families became beneficiaries obtaining land for free or at a low price. That is the case for widows, single mothers or handicapped people. The families are willing to work on the construction of their own houses, starting with the septic tank and participate in the community meetings and workshops to build the streets, green areas etc. Meetings include political

mobilization when the top leaders of the pre-cooperative ask for it.

*Block coordinator (Coordinador de manzana)*

A block is composed of a double row of 13 lots, meaning more or less 26 families, and a block coordinator manages these families. Block coordinators are appointed by the sector leader and are accepted by the families. These coordinators are in dialogue with the families and inform the sector leaders. They become key persons for the community and for the leader, especially when the leader decides to cancel public meetings with the large community due to the increased amount of members. The block coordinators collect not only complaints but also suggestions, needs, and ideas of the members to

improve the neighbourhood, which are submitted to the sector leaders, who in turn submit them to the top leaders. Block coordinators also collect money for lotteries or for families with health needs, house repair after tropical rains, or infrastructure work such as street repair, electricity connection in informal way, etc. The block coordinator lives on the block.

#### *Top leaders*

The top leaders include the sector leader, a secretary, a president, a community leader, a land dealer, and land buyers.

#### *Sector leader (dirigentes)*

A sector is composed of 10 blocks. A sector leader manages those blocks. The sector leader is appointed by the top leaders of the organization; however, community members cannot always identify them. These leaders have a dialogue with the block coordinators, and submit the information received from the block coordinators to the top leaders. They ensure that rules are followed (see section on rules) and are met by all. The sector leaders are present during the special fortnightly meetings with the top leaders. Some sector leaders have good businesses such as shops in the neighbourhood, although they rarely talk about it. They do not necessarily live in the neighbourhood.

#### *Secretary*

The secretary of the pre-cooperative fulfils several administrative and economic functions, first as secretary for the sector leader, second as a contact for the new possible clients for plots or new members of the pre-cooperative. The secretary also collects the weekly payment for the lots from the established families which still owe money for the land. Third, the secretary handles payments for specific services such as safety and security. The secretary is always present during fortnightly meetings and lives in the neighbourhood. The secretary is the one that introduces the new members into the pre-cooperative, and explains the rules. The secretary receives a salary for his work. The internal, informal transportation line is run by the secretary as his own business.

#### *President*

There is not much information about this role, since he was no longer part of the organization when the field study was carried out. He was living in the neighbourhood, and had a status similar to the secretary, being very close to the leader.

#### *Land dealer and community leader (The same person in this case)*

A land dealer is a person that, in an informal way, buys and sells land, usually to the poorest people in the city, through unofficial transactions, not recognized by the legislation of the country. The land

dealer in the case studied was the initiator of the settlement. He made an economic investment of magnitude in the neighbourhood. He, together with the land buyers, is the legal owner of the land. In this case, he, as lawyer, had been dealing with housing eviction cases and illegal land tenure. As a previous informal developer in the south of the city and as a politician, he arrived with experience in management of informal settlements. He established the rules for living in the community, and even if there are public consultations and meetings with dwellers, he makes the decisions. He sets the agenda and leads the fortnightly meetings, where sector leaders, the secretary and specific entrepreneurs both formal and informal are invited, according to the agenda.

He has several levels of communication with the community, for instance through the sector leaders, but also through anonymous informants. He, as a leader of the community, organizes private meetings or dialogues with residents with social behaviour problems which can result in the person and their family having to leave the neighbourhood. Some dwellers referred to him as "our leader", or as "after God, him". He does not live in the neighbourhood.

The sector leaders and the community leader are the two entities that manage both systems, the "outside" system in the formal city and the "inside" system, the system developed by this informal pre-cooperative. They have access to experts and consultants that work in formal companies. The sector leaders and the community leader act in and belong to both the inside and outside systems.

#### *Land buyers*

The land buyers do not have any important role in the management of the pre-cooperative. Their importance is that they paid for the land, knowing that it would be subdivided and sold on the informal housing market.

#### *Internal Infrastructure Entrepreneurs*

The internal infrastructure includes a security system with guards and informants, an informal transportation line, communication points with telephones and Internet facilities, some stores and credit offices, communal laundries and schools. These are some of the places with local job opportunities for skilled or unskilled labour.

#### *Security System, Guards and Informants*

The security in the neighbourhood was very much appreciated by the dwellers. Several ways of maintaining the security at the neighbourhood level were implemented and paid for individually by each family (1 USD per week). There are security coordinators to manage the security. Groups of guards are placed at the main vehicular entrances, as check points controlling who or what goods come in or leave. There are uniformed guards per sector, with bicycles, portable radios and whistles 24 hours per day. Dwellers inform the coordinators in case of

transporting their own belongings, to avoid property robbery. Parallel to this system, the leader has anonymous informants that watch and control the social behaviour of the dwellers. People do not talk very much about them, but they say that cases of the abuse of women and children have been brought to light and been solved.

*Transportation Line*

Since the neighbourhood is placed outside the city, and no means of formal urban transportation reaches these families, a private and informal bus line services the dwellers. There are also a few small motorized tricycle transports that only circulate within the informal settlement.

*Credit facilities*

The members of the pre-cooperative have several benefits related to credit. For members it is easy to buy a bamboo house at the NGO Hogar de Cristo, which delivers the most economical housing solution of Guayaquil (less than 1,000 USD) on credit. The only paper they need to provide is the informal land ownership document given by the pre-cooperative. Most of the families living in this neighbourhood do not apply for national housing support, since they work basically in the informal sector. In agreement with the sector leader and the community leader, members receive facilities to pay for the lot on credit (5 to 10 USD per week. They can also get a reduction of weekly payments by extending the time for payment in case of, for instance, unemployment or familiar difficulties, or in extreme cases reduction of the price or lots for free. Members receive credit facilities at the household appliance shops, to buy refrigerators, radios, TV, etc. The shops are owned by the community leader.

*Communication*

The neighbourhood has offices with telephones and Internet access, which are strategically placed and are also points for the collection of payments for security guards and credits.

Among the other facilities in the neighbourhood are an informal school and communal laundries. The laundries are provided for free, though the water supply was not functioning during the study. There are a few green areas for sports. All of these facilities are managed by the pre-cooperative and are appreciated by the dwellers.

*External Infrastructure Entrepreneurs*

The infrastructure also includes roads and construction enterprises, architectural consultants, water supply companies, an informal energy supply and a legal services bureau.

*Roads and construction enterprise*

The pre-cooperative hires road enterprises with heavy machines for the construction of the non-paved streets. Sometimes those who live in the

neighbourhood learn to drive the machines and start to work in an informal way with the layout, filling and construction of roads. For the construction of the neighbourhood, it is common that the pre-cooperative buys second hand materials, such as electricity poles and public street lamps. Filling for the streets is usually taken from the open quarries on the site.

*Architectural consultant*

The land division and urban plan of the neighbourhood has been drawn by an architect who made a very simple and rational orthogonal urban pattern, using as much of the land as possible for housing.

*Water and energy supply*

Dwellers buy their water from water tanks, paying higher prices than formal residents. Few families pump their own water from underground sources. Dwellers buy and pay to install the electricity connection, coupled illegally to the municipality's electricity source. They do not pay for electricity consumption.

*Legal Services Bureau*

The cooperative, with the consent of the leader, delivers free legal assistance in land tenure and especially in family legislation. Women in the neighbourhood are proud of being well informed of family rights, in comparison to other similar neighbourhoods.

This organizational structure is governed by several written and non written rules, once again reflecting part of the logic and discipline required when managing an informal and illegal settlement. These rules are defined by the top leaders. Some of the written rules are well detailed such as the requirements to dwell on the site and to build a septic tank and a toilet within a maximum period of 60 days. Other examples of rules include: the plot should preferably be "registered" in the woman's name; payment for the lot and the guard security and the connection to electricity must be made on time; dwellers must be ready to collaborate in community activities and political demonstrations; dwellers must inform the leader of a robbery, drug dealing or child abuse; dwellers should plant a fruit tree on the lot and educate their own children.

What is not allowed in this cooperative are: robbery, drugs, rape, gangs, or men with ear rings; alcoholic beverages in public places, billiards or electronic games; scandals inside and outside the home; or pig breeding on the lot.

Possible reasons for expulsion from the cooperative are: robbery, drugs, rape or not dwelling on the lot. The expulsion could include relatives of the family living in the neighbourhood. The community can take an active role when evictions are carried out.

Members of the pre-cooperative expressed that they were satisfied with the existence of these rules, especially those to educate and protect children.

The interviews and questionnaire surveys show that there are also unwritten rules, most of them related to sexual, religious, or ethnic attitudes.

#### DISCUSSION

Human and financial resources have been invested for the formalization of human settlements in developing countries; however the results are far from being effective or causing significant impact on communities. Among the professionals in Guayaquil working in neighbourhood improvement and with citizens of slums, there is a common feeling of dissatisfaction when looking at the results of interventions. (Huertas 2011)

Focusing on the logic and virtues of a slum and not only on the vices may give architects and urban planners working in developing countries some answers to face the challenge of neighbourhood improvement intervention that can act as strong motors of change in societies.

In the neighbourhood studied, one key issue was identified: the organizational structure for management, including the regulation of behaviour and the rules of the pre-cooperative.

The organization of the community (see chart above) has encouraged their actors/participants to develop leadership skills. Some of them became committed community leaders that could be used during the formalization, legalization, consolidation and management processes for neighbourhoods. These skills are assets in the neighbourhood that, according to Moser's theory, could contribute toward poverty reduction (Moser 2009).

The organization includes "inside" and "outside" actors/participants; land dealers, community leaders and communities that have developed their own fragile, internal management system; including sector leaders, community leaders, block leaders, security guards and informants. They also developed their own external management system to deal with the weak formal sector in the country, which includes professional consultancies, private enterprises and private investors. Together they have built a neighbourhood, classified as poor and/or very poor, and hosting families excluded from the housing programs supported by the government. Management mechanisms introduced by this type of informal settlement could improve land rights (Durand-Lasserve 2002, Payne 2002).

Regulation of behaviour with the rules of the pre-cooperative are common norms to be followed by every dweller. They are explicit and have strong impact on the quality of life and safety in the neighbourhood.

Certainly, there are many weaknesses in these issues regarding democracy, human rights and in breaking national laws. The unequal power relationship between the land dealer and dwellers

deprives many people of their freedom to decide over their own lives, (Tannerfeldt 2006) which is a sign not only of a lack of democracy and inequality, but of poverty (Sida 2002).

#### CONCLUSIONS

The preliminary results of this study of three settlements in Guayaquil, Ecuador, especially the Pre-cooperative Sergio Toral, show that the informal sector has provided five times more "homes" or places to live than the formal sector; plots are larger than in the new formal housing projects delivered by the municipality; and the management system of weak basis payment facilities combined with credit to buy a bamboo house; has made it possible for poor families to afford to build a neighbourhood in very short time.

The credit system in the cooperative, a micro credit system based on the payment of small amounts relatively often also included a social component of flexibility and charity, recognizing the diversity of the users and being aware of the unstable informal economy. This has made housing affordable for the poor families in Guayaquil.

Safety and security, is very much appreciated by the dwellers, possibly because in contrast with the violence in rest of the city, formal or informal, rich or poor residential areas; is a result of the pre-cooperative organization and the behavioural rules for their members.

There is no restriction for current dwellers to move outside of the informal neighbourhood, to the other neighbourhoods in the city; however many members in the pre-cooperative who manage very well in the informal neighbourhood system, are not able to be citizens in the formal city. This includes an inability to use urban transportation, fill out documents in municipal offices or attend formal schools. This dual system becomes extremely complex for most of the families.

Note: The neighbourhood presented in this paper, the Pre-cooperative Sergio Toral, is today controlled by the military and in January 2011 was declared a security zone by the central government of Ecuador as a measure to combat the "trafficking of land". Many families have been removed from the neighbourhood and most of their homes and properties have been destroyed. Further studies in the area are intended to be made. However, the focus of further field studies and research will depend on the political situation and the development of the informal settlements in the north of Guayaquil.

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