

# El Alto's Housing:



## Current Trends, Policies and Interventions in Zona 16 de Julio



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EL ALTO'S HOUSING AND RESIDENTIAL MOBILITY:

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POLICIES AND INTERVENTIONS  
IN ZONA 16 DE JULIO

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*"A house is an Alteño's greatest asset."*  
(Jaime Durán Chuquimía, 2010)



## EXECUTIVE SUMMARY

Housing is an important part of the development of El Alto. Housing projects have been carried out by the Bolivian government and by NGOs. In Zona 16 de Julio, directly north of the airport, a neighbourhood upgrading project was carried out in the 1980s. Following this project, a longitudinal research was started up by the University of Utrecht, which monitored the situation of the area every five years by carrying out a survey. As part of this research, a survey was held in 2010 concerning housing, mobility, and home-based economic activities. The former two are the subject of this dissertation. The main research question is: *What are current trends in the housing and residential mobility situation of Zona 16 de Julio, El Alto, and what current policies and interventions are employed to ameliorate the housing situation?*

The dissertation consists of five parts. Part I contains a literature review and the methodology. Residential mobility is scrutinised. Household characteristics as well as household environment have in the past turned out to be important push and pull factors. Incremental housing is an important housing strategy for the poor, and needs to be incorporated in formal policy. An institutional perspective is maintained, which differentiates between culture and social structure, and the hierarchy of the factors which contribute to the instalment of institutions and organisations. Part II describes the context of El Alto and Zona 16 de Julio, narrating the residential history of Latin America's urbanisation phase and accounting for the current structure of the city, and especially the Zona. Also, a stakeholder analysis is carried out. Civil society tries to intervene in the interaction between the different stakeholders. Progress is being made, but it is slow. Institutions need to be strengthened, in order for a more efficient and effective interplay between roles to be possible.

Part III and IV deal with the results of the investigation. Part III outlines current trends in residential mobility and housing. In recent years, natural growth has become more important than migration for the growth of the city. Residential mobility has changed as well. Current trend is that intra-urban migration is the most important form of residential mobility, instead of rural-urban migration and urban-urban migration like before. Motives to move into Zona 16 de Julio are still the housing situation, economic factors, and family relations. Tenure plays an important role in the household decision-making process, as home owners have different priorities than tenants. For home owners, the security of ownership is the most important housing priority, whereas for tenants, priorities lie in location and servicing.

Housing conditions leave much to be desired. The five indicators UN Habitat has stated for shelter deprivation, being a lack of durable housing, a lack of sufficient living space, a lack of access to improved drinking water, a lack of access to improved sanitation, and a lack of tenure security, are at least partially met, meaning part of the Zona population is deprived of sufficient shelter. Crowding and a below-average housing standard are the most important shelter deprivation factors. 16 de Julio has the best housing circumstances, because it is the least poor. Los Andes has the lowest housing standard, which can be explained by the fact that it is the poorest neighbourhood, although economic activities are starting to come up there. Overall, shelter deprivation occurs less in the Zona than is average in Bolivia.

Though partial contentment about some of the residential attributes is widely spread, dissatisfaction with the neighbourhood is more widespread than dissatisfaction with the residence. In this respect, safety and social networks are the main concerns of Zona inhabitants. For the rest, most people feel the same about their first and their current residence, although between 10% and 15% find one or

more aspects of their home or neighbourhood worse than was the case when they lived in their first residence within the agglomeration.

Many households wanting improvement cannot realise their wish, because of a lack of ownership, a lack of funds, or not being able to find a new residence. After everyone who wants to improve and is able to has either moved or renovated, still almost 1 in every 3 families inhabiting the Zona will be in a housing situation they are dissatisfied with enough to want to renovate or move. This is a measure for the overall development of the Zona. Housing often gets priority over education and health care, and if a third of the Zona households has no opportunity to be in a housing situation they prefer, they certainly will not pay much attention to these other important elements of development. Because housing is intertwined with other factors of development, overall development will also contribute to a higher housing standard, and vice versa.

Part IV deals with housing policies and projects. Different public housing programmes have been installed and have ended because the poor could not be reached. At this time, sites-and-services programmes are being carried out which aim to reach the poorest, but only partly succeed in doing so. The housing quality of these projects leaves much to be desired, self-help housing is hardly possible because of the standardised housing which is constructed in advance, and services are often lacking. Next to this, people who labour in the informal economy are not reached. As long as the informal market and incremental housing are not thoroughly incorporated in the policies, most Alteños will not be reached.

Part V contains the discussion and the conclusion. The most important theoretical consideration is that in the case of El Alto, and perhaps that of other Latin American cities, the existence of a housing deficit plays an important role. The informal economy is the level on which most Alteños move. Housing decisions are not based on formal policies, and often have nothing to do with them. In the end, the inhabitants themselves are the ones creating the housing market and residential mobility patterns in the Zona, by means of incremental housing. They will have to keep realising their own dreams, as the government has thus far hardly been able to cope.

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## List of Terms and Abbreviations

<i>Alteño</i>	Inhabitant of El Alto
<i>BOB</i>	Bolivian Boliviano
<i>FUNDAPROVI</i>	FUNDación PRO VVienda
<i>FONVI(S)</i>	FONdo Nacional de VVienda (Social)
<i>FSE</i>	Fondo Social de Emergencia
<i>Household</i>	Two or more closely related persons living under a common roof
<i>Housing Strategies</i>	The total of purposive actions which are made by the household to achieve access to the land and housing market and/or improvements in the quality of the own housing circumstances
<i>HDI</i>	Human Development Index
<i>Improvement</i>	Improvement of the housing situation by either moving or renovating
<i>Incremental Housing</i>	Housing which is established step by step, according to the financial possibilities and current wishes of its inhabitants
<i>ISHD</i>	Index of Socio-Habitational Development
<i>IVS</i>	Instituto de Vivienda Social
<i>Leavers</i>	Households who are going to move out of their current residence
<i>Loteador</i>	Person who illegally sells state-owned land
<i>LPP</i>	Ley de Participación Popular
<i>MAS</i>	Movimiento Al Socialismo
<i>NGO</i>	Non-Governmental Organisation
<i>PND</i>	Plan Nacional de Desarrollo
<i>PNVP</i>	Plan Nacional de Vivienda Popular
<i>PVS</i>	Programa de Vivienda Social y Solidaria
<i>(Semi)tenant</i>	Someone who rents a home or room or has an antichretic or mixed contract
<i>Settler</i>	Someone who moved to their current house less than five years ago
<i>Stayer</i>	Someone who moved to their current house more than five years ago

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## INTRODUCTION

Housing is so important for inhabitants of El Alto that they will let chances for education or proper health care go by in order to be able to have a proper home (Durán Chuquimía et al., 2007). This makes housing a very important requirement for development, as well as an outcome of it. Hence, it deserves all the attention it can get.

Local housing interventions in Latin American countries have in the past included neighbourhood improvement projects and sites-and-services projects (Kranenburg, 2002). Neighbourhood improvement projects usually entail the regulation of land rights, and/or the instalment of services like electricity, running water, sewerage, education, and health care. With these projects, governments aim to improve the health situation, increase the housing stock, and bring land use in line with urban planning through as little government interference as possible. Sites-and-services projects consist of the provision of households with a core unit: a parcel with basic servicing, and sometimes a basic dwelling. These parcels were suitable for self-help housing, which means the poor could be served with residences.

In the 1980s, a neighbourhood improvement project was carried out in 16 de Julio and Ballivian. This project was executed by the HAM-BIRF, funded by a loan from the World Bank. HAM-BIRF is a joint venture of the Honorable Alcaldía Municipal de La Paz (HAM) and Banco Interamericano de Reconstrucción y Fomento (BIRF). The project mainly entailed the installation of running water and sewerage. Its implementation was top-down, and local labour was hardly made use of. Only SAMAPA (Sociedad Autónoma Municipal para Agua Potable y Alcantarillado) gained an important place in the project, as it had made a blueprint for water pipes and sewerage in the 1970s.

Following this project, a longitudinal research was started up as part of the urban research of the Utrecht University. Every five years, students were sent to El Alto to perform a survey as a partial fulfilment of their degree. A doctorate investigation was executed by Kranenburg (2002). As part of the longitudinal research, an investigation was carried out in the year 2010, investigating the current circumstances of Zona 16 de Julio. The housing situation as well as residential mobility was part of this investigation. The main research question is:

*What are current trends in the housing and residential mobility situation of Zona 16 de Julio, El Alto, and what current policies and interventions are employed to ameliorate the housing situation?*

The dissertation was written from an institutional perspective, as described in chapter 1. The chapter furthermore explains the underlying theory of residential mobility and incremental housing, and the methodology of the research. It forms part I of this dissertation. Part II involves a contextual analysis of El Alto and Zona 16 de Julio. Part III and IV continue with the results of the investigation: an analysis of housing and mobility trends, policies, and interventions. In part V, the first four parts are merged into a theoretical discussion and a conclusion. Additional information on the research can be found in the appendices.

# **Part 1**

# **Literature Review**

## Chapter 1 Literature on Residential Mobility and Housing

In this chapter, residential mobility is scrutinised in terms of household decision making. Also, attention will be paid to incremental housing. After this, a conceptual model is given with the contextual factors of the housing market, which will serve to steer the research. The institutional perspective is explained in this chapter as well. At the end of the chapter, some comments will be made on the methodology.

Cities are dynamic phenomena. The Latin American city is a special case within this topic (Gilbert, 2004). Latin America's rapid urbanisation is connected to a vast number of people needing cheap housing. Self-help construction was a solution for this problem (Balchin & Stewart, 2001). New neighbourhoods and whole cities arose in a relatively small amount of time. After a while, neighbourhoods began to consolidate.

Three factors are important when a neighbourhood consolidates (Baken et al. 1991). First of all, tenure becomes more secure, which means people have more hope of being able to stay on the plot they started to build a dwelling on. This will result in nicer dwellings being built than if the squatters would constantly face the risk of being evicted. This is the second part of the consolidation process. Not only the housing stock will become nicer, also infrastructure and servicing begin to take shape. Finally, social networks will become more refined, and organisations come into place which provide security and credit. New migrants can be received, and the neighbourhood starts to gain in density. Important is the fact that, through neighbourhood consolidation, land prices keep on rising, according to Dunkerley's model of land use and value (Dunkerley, 1983). This means, land prices are highest in the consolidated areas of cities. Households which moved into a city before the consolidation process would have a large sum of income if they sold their land after consolidation, which would be about ten to twenty years later. However, land owners in a consolidating neighbourhood sooner improve their residence than moving house, because they would have to move to a place with low land prices if they would want to gain financially by selling their land.

This brings us to the subject of household decision making. What this research is mainly concerned with are individual housing strategies. These are the strategies of individual households, as opposed to a collective of households (Kranenburg, 2002). Individual households are caught in a web of restrictions which determine the moving space they have. Collective strategies, such as demand making towards the government, are aimed to enlarge this moving space.

### 1.1 Household Decision Making

Van Ham (2006) makes clear that the choices which households have to make can be either short-term, mid-term, or long-term. Residential mobility choices are mid-term choices. They affect a longer period of time than choices of activities or travels or which route to follow, but a shorter period than choices about family or labour career. Moving house is a normal event in the course of the development of people's life. Changes in life stage and in family or job status are important motives for households to move, though not in every case (Dieleman, 2001).

A household can be defined as *"two or more closely related persons living under a common roof"* (Adamowicz et al., 2005). These people have a common history and a common future, and will practice more altruism in their decision making than sole persons. Housing strategies of households can be defined as *"the total of purposive actions which are made by the household to achieve access to the land and housing market and/or improvements in the quality of the own housing circumstances"* (Van Lindert, 1991). This means, the first housing strategy involves gaining access to the urban housing market, after which improvements can be made to the housing conditions by

either moving house or by the second housing strategy: improving the house itself (Kranenburg, 2002). In this thesis, it is important to distinguish between three terms. First of all, there is improvement. This entails the overall betterment of the housing situation and can be either moving house or renovating. The term incremental construction or incremental housing is used when the topic is the improvement of the house a family currently inhabits. Improvement does, therefore, not mean the same as incremental construction, because in this thesis, it means both incremental construction and moving house.

A household is a group of people. When a group of people makes a decision, this is influenced by the size and composition of the group (Adamowicz et al., 2005). It is harder to reach a decision in a large group than in a small one. As mentioned before, members of a household tend to be closely related and therefore more altruistic in their decisions. This is especially the case if the household is a family rather than a random group of people.

Household strategies are influenced by the circumstances, and vice versa. When making residential decisions, households consider two types of factors: factors considering the potential of the residence itself in relation to household characteristics, with as key factors the number of rooms, monthly living costs, servicing, and the type of tenure; and that of the neighbourhood of the residence and of the household, involving type of neighbourhood, frequency of public transport, and travel time to the places of activity (Dieleman, 2001). These factors may differ between households which have lived somewhere for a longer time (stayers) and households which moved there in the past five years (settlers). They may be in a different life stage, and may display socio-economic differences (Kranenburg 2002).

According to Randall et al. (2008), poor residents have little choice in where they live, even if they are socially isolated and would therefore be able to move anywhere. A higher socio-economic status may offer a household more choice in terms of mobility. A lack of affluence is a severe constraint in the choice-making process, even for more affluent households. Therefore, the housing strategy of the poor may involve the illegal squatting of a plot by land invasion and incrementally building a residence on it, or moving in with family or friends (Kranenburg, 2002). For more affluent people, (sub-)renting a room or a house may be an option. Also, social housing may be an option, if available. If enough money is available, a plot of land can be bought on which to build a residence, mostly incrementally. Income is, in short, an important factor influencing residential mobility and consolidation processes.

Often, actual housing decisions differ from the original housing preferences. These can be called constrained residential choices (Dieleman, 2001). Sometimes, the preferred type of housing is in short supply, leading to the choice of a less preferred residence and an adaptation process in which the residence will be adjusted in order for the housing satisfaction to be higher. Another constraint, already mentioned, can be the level of affluence of the household. Their socio-economic status can inhibit households in their housing choice, as they may have no choice but to invade a plot of land or to rent a home where they would have preferred to buy it. Next to this, a household may be forced to remain in their current dwelling where they had rather moved to another one.

### 1.1.1 Life Stage and Socio-Economic Factors

According to John Turner (1968), and corresponding with the three urbanisation phases, migrants coming into the city show three life cycle stages, each with their own housing conditions, economic status, and location within a city's concentric zones: bridge-header, consolidator, and status seeker, in that order (Klak & Holtzclaw, 1993). Bridge-headers, mostly young males looking for better job opportunities, have proximity to work as their first priority. The crowded city centre does not

present a problem for them, because they have no family responsibilities yet. When they get better employment and start a family, however, their priorities shift to the security of owning a plot of land on which they can build a dwelling. Therefore, they move to the periphery of the city to build a shanty, using cheap materials. After this, when some money has been saved up, the third life cycle stage starts, which is the one of status seeker. The shanties are transformed into real houses, step by step, with a focus on being comfortable.

These life cycle stages which in-migrants show have their influence on the city or agglomeration. Neighbourhoods get a different role to play in the urban network. As the city expands, the former shanty towns become more consolidated low-income neighbourhoods, which are in turn enclosed by new shanty towns of in-migrants.

If people change marital status, or their family grows, they will be in need of a larger number of rooms, which is one of the major aspects of a residence which households find important. The number of rooms and their size will be more important if more members of the household are made part of the decision-making process. Overall, households in larger residences will be less mobile because of a lower room stress. However, the household may be constrained in their choice by the available housing stock or by their socio-economic status (Dieleman, 2001; Randall et al., 2008). The costs per month which living in a residence entails is also a factor which has its influence on mobility choices. Houses and neighbourhoods are chosen where the costs match the socio-economic status of the household.

According to Randall et al. (2008), the perception of their quality of life is linked to both neighbourhood stability and to residential mobility. The level of intra-urban mobility is related to the level of attachment have to the place they live in. The more people are attached to the place they live, the less they are inclined to move. The status of a neighbourhood is also important in this respect (Dieleman, 2001).

A change in employment can have an influence on more than one aspect of household life. First of all, it may involve a change of income, as described in the paragraph above. Next to this, a change in job may imply a change in life cycle stage, which means that for example a bridge-header may become a consolidator. This results in the move to another dwelling (Gilbert, 1993). What also may be the case, is that the location of employment changes, which means a move may be necessary. As Dieleman (2001) states, a change of jobs over a long distance will result in a change of residence to a location near the employment. However, in intra-urban residential mobility, a change of job does not form a major motive to move. Other factors are more important in the case of partial displacement moves. Of influence here are the commuting costs and the question whether people own or rent their current housing. People have a maximum commuting tolerance in terms of time and cost (Van Ham, 2006). Next to this, home owners are less prone to move house than renters in the event of a job change (Dieleman, 2001).

Social cohesion and social isolation have been prominent concepts in the body of literature on intra-urban mobility (Kan, 2006; Randall et al., 2008). Based on residential mobility literature, in general it may be expected that households which have a higher sense of community in their neighbourhood move away less quickly. Neighbourhood dynamics are to an important extent driven by residential mobility. Given the fact that social capital has its spatial dimension in the sense that contacts who are close by will prove more useful than contacts who are far away, the presence of a social network in a certain neighbourhood will attract a household to it if it moves. Similarly, if a household has a stronger social network in their residential neighbourhood, it will be less likely to move away.

People with a different level of education will show different mobility patterns (Van Ham, 2006). Labour and education possibilities will attract households from outside the city, but will have much less of an influence on intra-urban mobility (Dieleman, 2001).

### 1.1.2 Tenure

A change in ownership status is an important reason for intra-urban mobility. According to Turner (1968) and Mangin & Turner (1968), households with a different type of tenure will have different preferences as to their residence and their housing activity. Households living for free or renting a room or house will want more security of ownership, and will therefore look for a dwelling which will give them a change in tenure type. Home owners will have their mind set on the improvement of infrastructure and of their residence, and will therefore be less inclined to move. Therefore, overall, tenants tend to have a higher rate of residential mobility than home owners.

Tenure type can be related to income. Many studies have concluded that owners and renters differ significantly as to the socio-economic grouping they belong to. First of all, owners tend to be more affluent than renters, sometimes because of higher male incomes, but more often because other family members in owner households have a larger contribution to the housing costs. In Latin America, though, this pattern has been less distinctive. Earlier evidence exists that new owners in Latin American cities may even be poorer than renters in terms of income per capita (Gilbert, 1993).

Tenure type can also be related to life cycle stage. If people get married or have children, they will sooner want to have the security of owning their own plot of land or their own house (Randall et al., 2008; Klak & Holtzclaw, 1993). Therefore, tenants and sharers tend to be younger than owners. However, in different zones of Latin American cities, differences may show. Though tenants in consolidated areas are generally much younger than owners, in the central city they can have the same age as new owners in the periphery. Next to this, tenure type has to do with family structure. In Latin American cities, owners tend to have larger households than tenants (Gilbert, 1993).

## **1.2 Housing Market and Incremental Housing**

The housing market has a special place in the economy, because both housing and investment motives are involved (Sommervoll et al., 2010). Next to this, a residence can serve as collateral if ownership has been established. According to Dieleman (2001), contextual factors of residential mobility play a role at different geographical scales. The circumstances of the country compared to other countries plays a role. At this national level, the overall wealth of the country (including its welfare system; Ortalo-Magné & Prat, 2007), the type of housing market, and the overall structure of tenure are important factors. These factors influence the regional context, which entails the circumstances a county finds itself in. At this level, demographic changes, inflation, and economic fluctuations are the most important factors. Regional factors in turn have an influence on the local context, which includes the circumstances of a city, village, or group of villages. At this level, tenure composition and price level determine the housing market, which are in turn determined by the turnover rate. Together, these three levels define the context of the housing market. This thesis mainly deals with the local context.

It has become clear that residential attributes are important factors contributing to residential mobility (Dieleman, 2001; Hooimeijer et al., 1996; Kranenburg, 2002). Households aiming to improve their housing situation can indeed plan to move house. However, constrained residential choices have to be made, because desired housing is not always available, and more importantly, poor people often cannot afford the desired housing (Dieleman, 2001; Randall et al., 2008).

### 1.2.1 Housing Quality

There is a quantitative housing need in developing countries. Next to this, the quality of the housing is often sub-standard (Bredenoord & Van Lindert, 2010). This means not enough housing is available, and if it is available, the quality is often lacking, meaning the housing conditions are poor. UN Habitat (2006) has stated five indicators of shelter deprivation. These are lack of durable housing, lack of sufficient living space, lack of access to improved drinking water, lack of access to improved sanitation, and lack of tenure security. If a household lacks any one of those elements, it is called a *slum household*.

A lack of durable housing relates to the quality of the housing stock. It is defined as the lack of a permanent floor or a foundation. This definition is used because information about walls and roofs is often not available. It does mean this element of shelter deprivation is overlooked in many cases (Bredenoord & Van Lindert, 2010).

Lack of sufficient living space can also be called crowding. It occurs if a residence has three or more inhabitants per bedroom. If this is the case, the residents are actually homeless, albeit in a hidden form. Crowding is related to health issues such as diseases and child.

A lack of access to improved drinking water means the household is unable to drink potable water from a tap. One-third of the global urban population lacks this access, resulting in water-borne and water related diseases. It is not only the lack of tap water, but undrinkable tap water which causes health issues. More health problems occur when there is a lack of access to improved sanitation. ...

Lack of secure tenure occurs when a fear of eviction comes up. If there is a lack in tenure security, the household is deprived of suitable shelter needs. In developing countries, legal ownership does not necessarily have the norm for tenure security. According to Gilbert (2002), it is the perception of security, and not the actual possession of a legal land title which is the key to self-help construction. In consolidated areas, there is security of tenure once they are serviced by the local government (Bredenoord & Van Lindert, 2010).

In developing countries worldwide, 33% of the urban households have to cope with at least one shelter deprivation. In Latin America and the Caribbean, this is 24% (UN Habitat, 2009). This means, an urgent housing shortage exists worldwide, and governments need to devise policies to ameliorate this situation. As through the years, informal self-help housing has become more important than formal housing, policies aiming at aided self-help housing are the most sensible choice (Balchin & Stewart, 2001; Bredenoord & Van Lindert, 2010; Joshi & Khan, 2010).

### 1.2.2 Incremental Housing

Because of the urgent housing need in developing countries, its governments construct public housing policies to ameliorate the housing situation. In the past, these policies were mainly aimed at increasing the housing stock by building readily available residences. However, this kind of policies has proven to be unable to reach the poor population, as poor people cannot afford to buy a readily built house (Balchin & Stewart, 2001).

Affordability depends on whether policies are capable of reducing costs for land, infrastructure, and materials. Next to this, the standards and design, location, and modes of production need to be appropriate for the income level of the households (UN Habitat, 2005). Because of this, incremental housing is important for them. It allows them to make additions and improvements to their

residence by means of self-help activities and informal financing, which is a natural strategy to build housing in the informal sector (Lizarralde, 2011).

As Bredenoord and Van Lindert (2010) make clear, the design and building process of self-help housing take many shapes and forms. These are dependent on environmental, cultural, technical, and socio-economic factors. Between different contexts, differences occur because of differences in the availability of materials, architectural traditions, and climate conditions. Within these contexts, differences arise because of socio-economic factors like purchasing power and earning capacity. Key is also whether infrastructure and servicing are provided by governments.

Incrementally built residences generally do not amount to much at first, but later on grow to resemble true houses when households invest the money they have saved through the years in their residence. The ideal plot size to incrementally build a residence lies between 80 and 120 square meters. If plots are larger, often subdivision occurs at a later stage. If a plot is smaller, vertical expansion will become necessary at a later stage, which is often more difficult to realise because of technical issues.

Through the years, governments recognised self-help as a valid housing strategy, and embraced a self-help approach in their policies. The self-help approach to housing aims at creating an environment which enables occupants of a piece of land to fulfil their current housing needs by building their own house and progressively expanding and improving it. This way, the poor can change their residence according to their current needs, and in such a way realise affordable housing (Joshi & Khan, 2010). Such policies are different from housing policies in the sense that they deal with both the formal and the informal housing market (Landman & Napier, 2010).

There are different ways for governments to provide assistance for incremental housing. Informal housing can be upgraded, and formal self-help housing can be promoted (Balchin & Stewart, 2001). In the past, upgrading of informal housing meant governments granting land tenure, providing subsidies, and support systems. Nowadays, it is often done by community-driven development, as this the beneficiaries can have an active influence that way, meaning an understanding exists of local needs, sustainable decisions can be based on them, and the community being in control of financial resources, rather than individuals (Wakeley, 2000). Formal self-help housing is possible for households deriving their income both from the formal and the informal sector. Governments provide formal opportunities to create self-help housing by providing public funding programmes.

Key is the provision and enabling of a differentiated provision of housing. For example, as well as self-help housing, subsidised rental housing may be of interest for the poor, and definitely for middle income households (Landman & Napier, 2010). For low-income households, different self-help packages can be made available. The plot size can vary, and choices can be made as to how much built-up living space is readily available at delivery. Next to this, a choice can be made as to which services will be made available (see table 1.1). Prices vary accordingly, giving each household the opportunity to obtain a plot with or without a house and with or without certain servicing, according to their earning capacity and purchasing power (Bredenoord & Van Lindert, 2010).

**Table 1.1 Estimated Price of Self-Help Housing Packages**

Site		Services					Estimated Price (US \$)
Plot size (m <sup>2</sup> )	Built-up living space (m <sup>2</sup> )	Electricity	Piped Water	Septic Tank	Paved Road	Sewerage	
80	0						1,000
80	0	X	X				1,500
80	20	X	X				2,000
100	20	X	X	X			3,000
100	40	X	X	X			5,000
120	60	X	X	X	X		7,000
120	80	X	X		X	X	10,000 – 15,000

Source: Bredenoord & Van Lindert, 2010

In terms of assistance, both basic and additional assistance may be offered (Bredenoord & Van Lindert, 2010). Basic assistance entails the provision of a plot in an adequate urban locality, at a price which is affordable for the household, or with affordable pay-off conditions; a legal land title; and an access road and main infrastructure, meaning drinking water, electricity and sewerage. Additional assistance may be offered concerning the construction of the house. Technical assistance may be offered, building materials may be provided which have high quality, housing cooperatives may be supported, and micro-finance may be offered.

In employing these assistance activities, governments should have an open eye for the situation on the housing market, for land supply and values, and for mixing tenure (Landman & Napier, 2010). In Latin America, overall, institutional strengthening is necessary, as its welfare regimes are in a rudimentary stage of development (Balchin & Stewart, 2001).

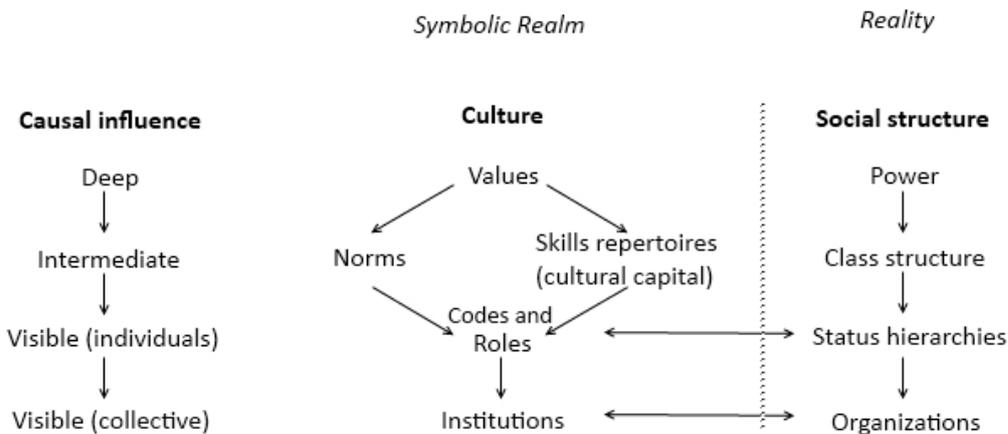
### 1.3 Institutional Perspective

This researched has in an institutional perspective. What this means, is explained by Portes (2006). Central is the distinction between culture and social structure. Culture is part of the symbolic realm, whereas social structure is part of the material reality (see figure 1.1). Underneath the visible reality, a hierarchy of causal influences exists. In the symbolic realm, values underlie the norms and the cultural capital which people have. In turn, they cause occupants of particular social positions to have a prescribed set of behaviours: roles. Roles are the building blocks of social life and link the symbolic world to real social structures: status hierarchies.

At the individual level, status hierarchies are visible in the material world. The ability of social actors to compel others to do what they say – power – causes a differentiation between social classes. They are defined as large aggregates whose possession of or exclusion from resources leads to varying life chances and capacities to influence the course of events. Power needs to constantly be legitimised to become authority, as otherwise, the non-powerful classes will not keep accepting it. Authority produces status hierarchies, linked to the prescribed set of behaviours for each class: roles.

Institutions are the blueprints of the rules concerning interaction between role occupants. They can be constraints, motivators, or enablers of behaviour. Roles exist as a part of social organisations. These organisations can be, for example, families, companies, or governments. Institutions and organisations are therefore not the same thing; institutions are blueprints, part of culture, for the

actual organisations, which are part of social structure. The two have mutual influences. Human interaction, guided by institutions, again affects the institutions, because ideas about how the interplay between role occupants should come about can change.



**Figure 1.1 Institutional Conceptualisation**

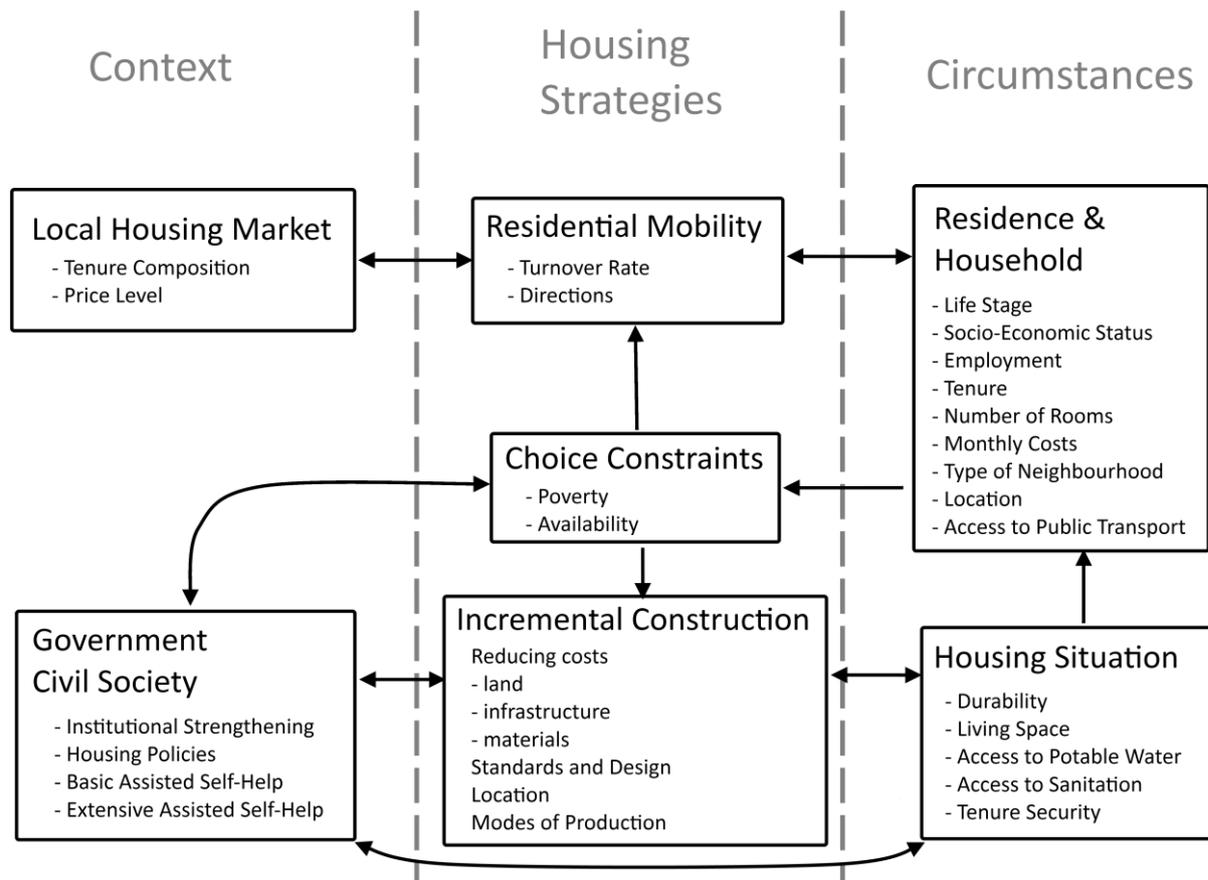
Source: Portes, 2006

Understanding the principle of the institutional perspective is necessary to be able to analyse the housing and residential mobility situation in its context. Separating the different levels of causal influences means cause and effect can be distinguished. Also, institutions and organisations can thus be embedded in a thorough understanding of their causes. With this institutional perspective as a basis, institutional monocropping can be prevented; meaning, institutions of the developed world will not simply be transplanted into the system of developing countries, but new institutions will be engineered, embedded in the culture and social structure of the concerning region, country or locality.

## 1.4 Conceptual Model

In order to gain a more integrated view of the provided theoretical considerations, they were put into a conceptual model, as can be seen in figure 1.2. The local context influences the housing strategies households employ, and vice versa. Household strategies in turn create the circumstances, and vice versa.

Residential mobility and incremental construction are the housing strategies dealt with in this thesis. They are influenced by the constraints caused by poverty and the availability of housing. Household characteristics in relation to the residence and the neighbourhood are factors influencing residential mobility, and vice versa. Incremental construction has an influence on the housing situation, as do policies and interventions.



**Figure 1.2 Conceptual Model**

Sources: Adamowicz et al. 2005, Bredenoord & Van Lindert 2010, Dieleman 2001, Gilbert 2002, Hooimeijer 1996, Kranenburg 2002, Randall et al. 2008, UN Habitat 2005&2006

## 1.5 Methodology

The empirical part of the research was executed in Zona 16 de Julio in El Alto, from here on out simply called Zona. The main method used was a survey, encompassing 723 questionnaires. Next to this, interviews were held with nine Zona inhabitants, three government organisations, two NGOs, and one researcher.

### 1.4.1 Partial Questions and Hypotheses

The main research question encompasses multiple subjects. Therefore, secondary questions have been created. These are:

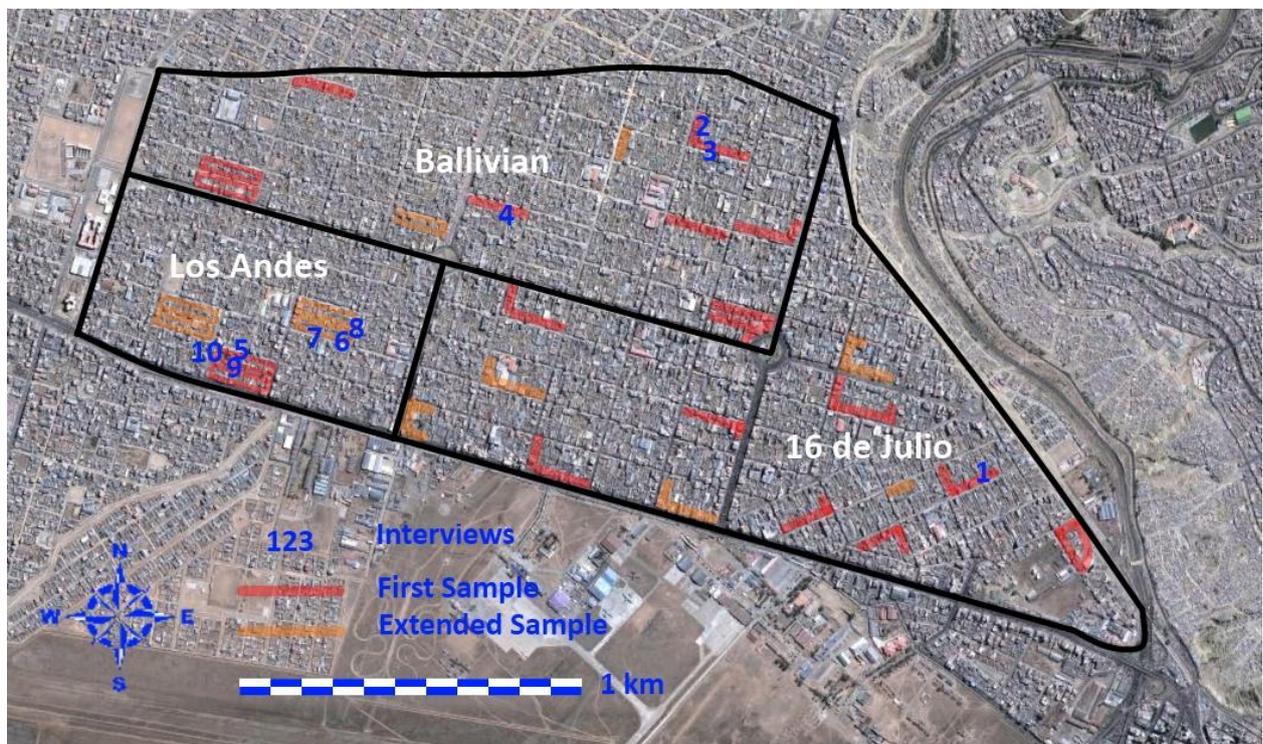
1. Where were heads of households currently inhabiting Zona 16 de Julio born?
2. From where did Zona households move in?
3. What is the residential history of Zona households?
4. What are current trends in housing situation and perception?
5. What are current housing strategies of Zona households?
6. What housing policies does the Bolivian government have, and what interventions does it employ?
7. What influence does civil society have on the housing situation in El Alto?

Partial questions 1 to 5 will be answered in part III of this dissertation, and question 6 and 7 in part IV. The partial questions lead up to the main question, which will be answered in the conclusion in part V.

### 1.4.2 Survey

In total, the survey held had 723 respondents. The survey was more or less equally spread over the three neighbourhoods which Zona 16 de Julio entails: 16 de Julio, Ballivian, and Los Andes. For the questionnaire of the survey, see appendix 3. It was filled in by local research assistants who work part-time for RED Hábitat. Apart from the survey held, 204 of the respondents were asked a question as to their housing priorities (see appendix 4). Information given in this thesis without reference, was extracted or calculated from the gathered survey data.

Figure 1.3 shows the research area. The original sample can be seen in red. This is the same sample which was taken from the start of the longitudinal research. To make sure enough questionnaires would be filled out, an extended sample was taken, which is the same as the sample taken in 2005. As the respondents were mainly people who are either the head of household or their spouse, the survey gives information about the heads of household.



**Figure 1.3 First and Extended Sample of the Survey, and Location of Interviews with Locals**

From the literature review, the survey, and the interviews, information was distilled about the housing situation in the Zona, residential mobility patterns, and policies and interventions influencing the housing market. As seen in the conceptual model in figure 1.2, residential mobility is influenced by the housing market, and vice versa. Both subjects will be dealt with in part II, in which the context of the Zona is described, and part III, which deals with the actual residential mobility and housing trends of the Zona.



# **Part 2**

# **Contextual Analysis**

## Chapter 2 El Alto

During the rapid urbanisation phase of Latin America, which started in the 1950s, many Bolivians came to La Paz to seek a better life for themselves and their family. Mostly young men came in, looking to rent a room and find a job (Klak & Holtzclaw, 1993; Kranenburg, 2002). These bridge-headers did not mind living in a small room. They lived by themselves, and work was their main focus. After a while, they would come into a new life stage, which meant their housing priorities changed. They became consolidators, looking for a place to settle down and gain security for them and the family they had started. In La Paz, there was no more room. Hence, the poor people moved from the city centre to the Altiplano, a large plateau situated at about 4000 meters altitude. There, they built themselves a home. After that, many people have come into a new life stage to become status seekers. The city of El Alto (figure 2.1) started to grow.



Figure 2.1 El Alto

Many neighbourhoods in El Alto are named after the villages from where the original inhabitants came (Kranenburg, 2002). For example, Cota Cota, Pucarani, and Chasqui Huyo Pampa originally are the names of villages in the countryside. In the city, people originating from the same localities preferred living close to each other in the city as well. To city dwellers, by now the names are known as the names of the neighbourhoods and not of the original rural villages, because day in and day out they are heard as the destination shouted out from the mini buses which serve as public transport.

The city of El Alto has been consolidating for decades. Infrastructure has been realised, and services are available. Organisations have come into being which provide security. Banks have been established, which provide credit. The city receives and sends out migrants. Land prices in the centre of the city have gone up, which provides opportunities to move to the cheaper outskirts of the city, according to Dunkerley's model. All these things make El Alto into a consolidated city (see chapter 1). Yet, it is still growing. New neighbourhoods are being built which will consolidate in time. It is a dynamic, growing city. Though Bolivia's economy is largely stable, because of the city's omnipresent poverty, the informal economy is very important (Indaburu Quintana, 2004; Durán Chuquimia, 2010). Most Alteños have some kind of connection with the informal market.

## 2.1 Culture and Social Structure

The underlying factors for the organisation of society are culture and social structure (Portes, 2006). As for culture, El Alto mainly has Aymara inhabitants. These are native South Americans who are easily recognisable by their clothes and bodily figure (figure 2.2). They were originally part of the Inca culture. Their language is also called Aymara. It is a very complicated language. Aymara Indians believe the earth to be a being in it of itself called Pachamama (Mother Earth). It is worshiped as a god. Offerings are made to Pachamama so that the earth will look kindly upon the people dwelling on it (Timmer, 2005). This religion is often mixed with Roman Catholicism.



Figure 2.2 Aymara Ladies with Child

The Aymara culture has a linear view of time (Johnsson, 2010). Three spiritual spaces exist: the east (Arajpacha) symbolises light and life. The west (Manquepacha) symbolises death. In between lies Akapacha, in which the current Aymara lives. The Día de los Muertos is an important festival which takes place in November. Families go to the cemetery to honour their ancestors and ask them for their blessing. Traditionally, a picnic is held at the cemetery. For many elderly people, living close to the cemetery is important. Also, decision-making is influenced by this culture. For example, every year the Feria de Miniaturas takes place, during which people can buy miniatures of what they would like to achieve in life; a house or a diploma, for example. They believe their dreams will be realised if they possess such a miniature. They work hard, but essentially they believe their future is dependent on spiritual and natural factors. Because so much is influenced by Pachamama and by the ancestors, people do not think they have the ability to create their own society. The thought of a society which can be constructed by the people themselves is coming up, but it is rather new, and is not yet integrated in Aymara culture (Durán Chuquimia, 2010).

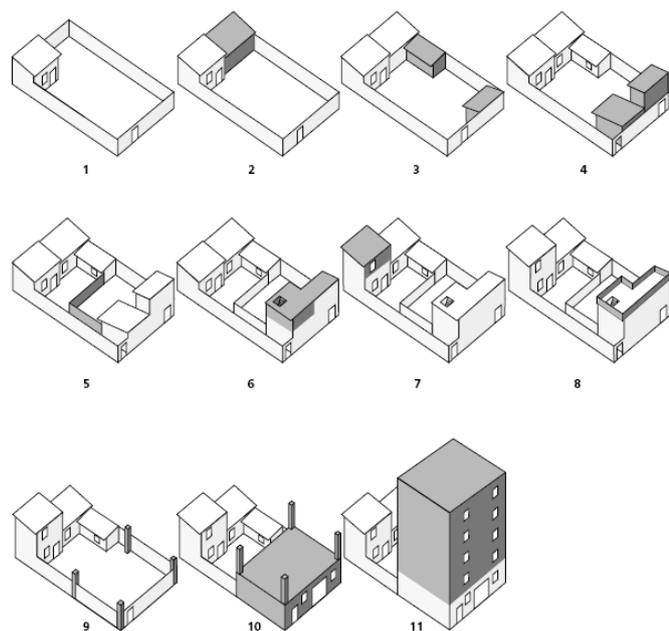
Nationalism is an important part of society, because Bolivia has had to fight for its independence (Bolivian, 2011). Many streets are named after important dates or national heroes. 16 de Julio for example, the neighbourhood after which the Zona is named, is the birthday of La Paz, which came into being through a revolution. Because of its external and, more so, internal political struggles, contact between the government and private people is not as effective as it could be (Acarapi, 2010).

Segregation is clearly visible in the agglomeration of La Paz and El Alto (Gray Molina et al., 2002; Indaburu Quintana, 2004). Aymara Indians are generally of a lower class than cholos (Bolivians of mixed white and Amerindian lineage) and whites. This also has an influence in the definition of the different roles (Portes, 2006). People of cholo or white lineage show a difference in roles from Aymaras. For example, a young mother of cholo descent will have a different role than one of Aymara descent, and a white bank teller will have a different role than an Aymara one. The definition of these roles influence institutions, and vice versa, meaning ethnicity has an influence on the organisation of society as a whole (Durán Chuquimia, 2010).

## 2.2 Housing Market

According to Durán Chuquimia et al. (2007), the housing market of El Alto is organised in an inefficient manner. It is largely informal. Reason for this is the influence loteadores have had (Kranenburg, 2002). Loteadores are people who already saw the rise in land value coming during the urbanisation phase, and claimed ownership of the land. They sold off the land to families wanting to settle on the high plane. Thus, most home owners do not legally own the land they live on, though they did pay for it. Because of the informality, the government does not issue licenses for incremental construction in El Alto. New quarters or entire floors can be built without permission from the government. The government does not have much influence in what exactly happens with private residences.

Through the years, the design of residences changed from rural to urban, through the processes of incremental self-help construction, subdivision, and densification (Bredenoord & Van Lindert, 2010; see figure 2.3). First action after the acquisition of a parcel was the construction of a wall. These were made out of adobe. Then, a small dwelling at the end of the parcel was built. Later on, if time and money would permit, more quarters would be built. At some point, parcels would be divided, which meant another household would come to live on the parcel. As more floors were added to the buildings, made of brick, which is lighter than adobe, they started to have an urban design. Later, when services like electricity and running water had been installed, these buildings were sometimes demolished to make place for larger apartment buildings. Highrise



**Figure 2.3 From Rural to Urban Design**

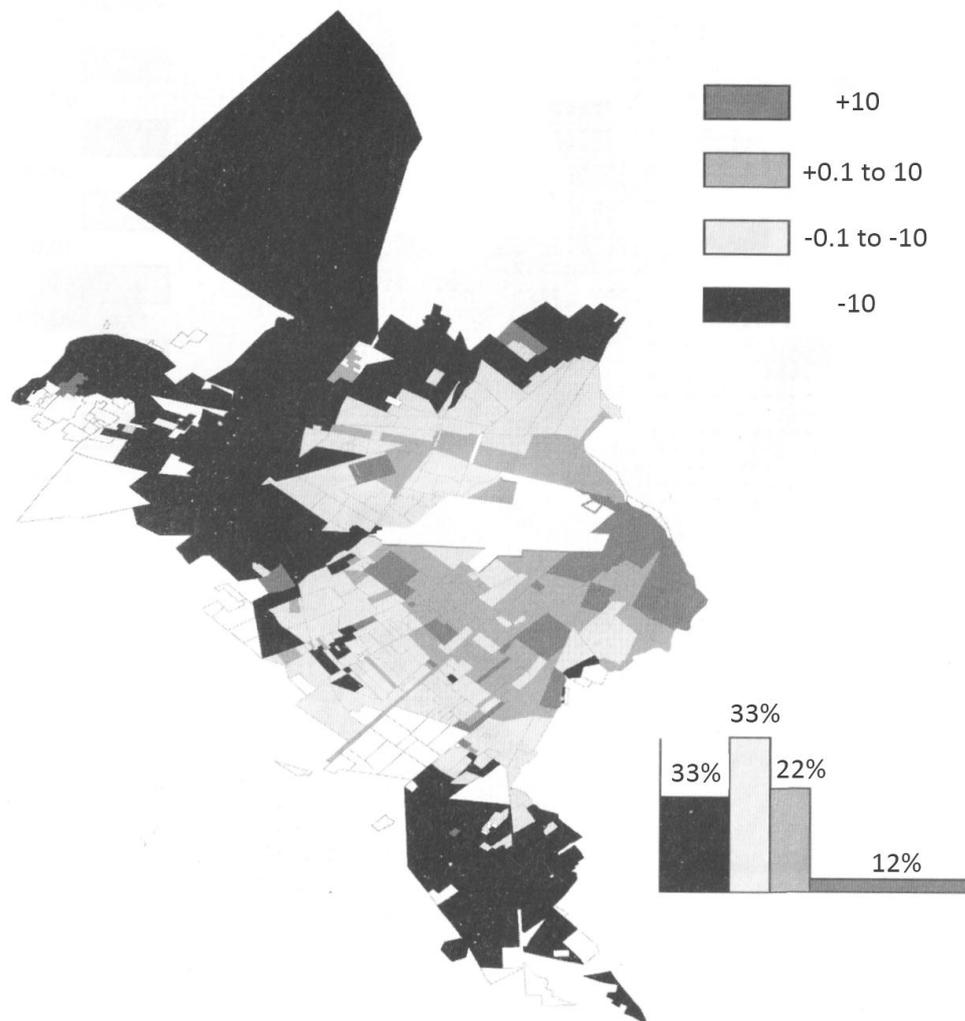
*Source: Kranenburg, 2002*

thus came into being, taking better care of the urban housing needs. All this went hand in hand with a tenure transition. Whereas firstly, Alteños were mainly home owners, as the city developed, it became opportune to take in tenants. Thus, renting homes or parts of homes became possible. The more consolidated areas of El Alto have gained a different function within the metropolitan system. Whereas they were first peripheral neighbourhoods, they started to fulfil a more central role as the city grew. Since El Alto is its own city now, which as a whole has a peripheral function towards La Paz, it has a centre and periphery of its own. In the centre, commerce has come up, and rental housing has become available, so that bridge-headers can move there (Kranenburg, 2002; Klak & Holtzclaw, 1993). Throughout El Alto, houses of different design stages can be found. The current housing situation in Zona 16 de Julio will be described in part III of this dissertation.

### 2.2.1 Significance of Housing in El Alto

As in most of the rest of El Alto, housing conditions in the Zona have a disproportionately high contribution to development: higher than is the case in other cities, and higher than the other factors (Durán Chuquimia et al., 2007). A few years ago, the Zona had an Index of Socio-Habitational

Development (ISHD) of between +0.1 and 10. The factors contributing to this ISHD are Adequate Housing, Tertiary Education, Access to Health Care, Employment of Quality, and Living Conditions. It resembles the Human Development Index (HDI), except for the fact that housing conditions have been added to the calculation. Values of ISHD are between -10 and 10. This means, the Zona had a moderate ISHD in 2001. Only Western Ballivian (2<sup>a</sup> Sección) has a low ISHD of between -0.1 and +0.1. Moderate ISHD can be found in southern El Alto as well, adjacent to the airport. Low ISHD can be found in areas around these neighbourhoods. The highest ISHD cannot be found in the Zona, but in the neighbourhoods east of the airport, mainly in Ciudad Satélite (see figure 2.4).



**Figure 2.4 ISDH of El Alto Neighbourhoods**

*Source: Durán Chuquimia et al., 2007*

## 2.3 Stakeholder Analysis

Every aspect of society has stakeholders. On the housing market, stakeholders are, first of all, the people who want to own a house (figure 2.5). They are the ones saving up money, either through solidarity financing as in the PVS, or by themselves, and having to invest time and energy. Home owners will want renovate their residence, or sell their house at the highest price possible if they are moving. When someone sells a house, a broker may be called in, who will in turn be a stakeholder. For incremental construction or the construction of a new house, materials are needed, which means merchants are stakeholders as well. In terms of employment, labourers hold a stake. Land owners may wish to sell their land, as was the case in the early years of El Alto. They divide the land and sell it to local households. This is illegal, but it still happens. If money has to be saved, which is mostly the case in El Alto, stakeholders are private banks, who want to make a profit with the money which is put in the bank accounts. Next to this, someone taking out a loan will mean a profit for banks, as they charge interest. The borrowers will have an interest in keeping the debt as low as possible. If it is impossible for the borrower to give the money back, the bank will lose money. Hence, it has an interest in making sure the borrower is financially capable of paying back the loan. The borrower himself has an interest in this as well, as it will keep him out of debt.

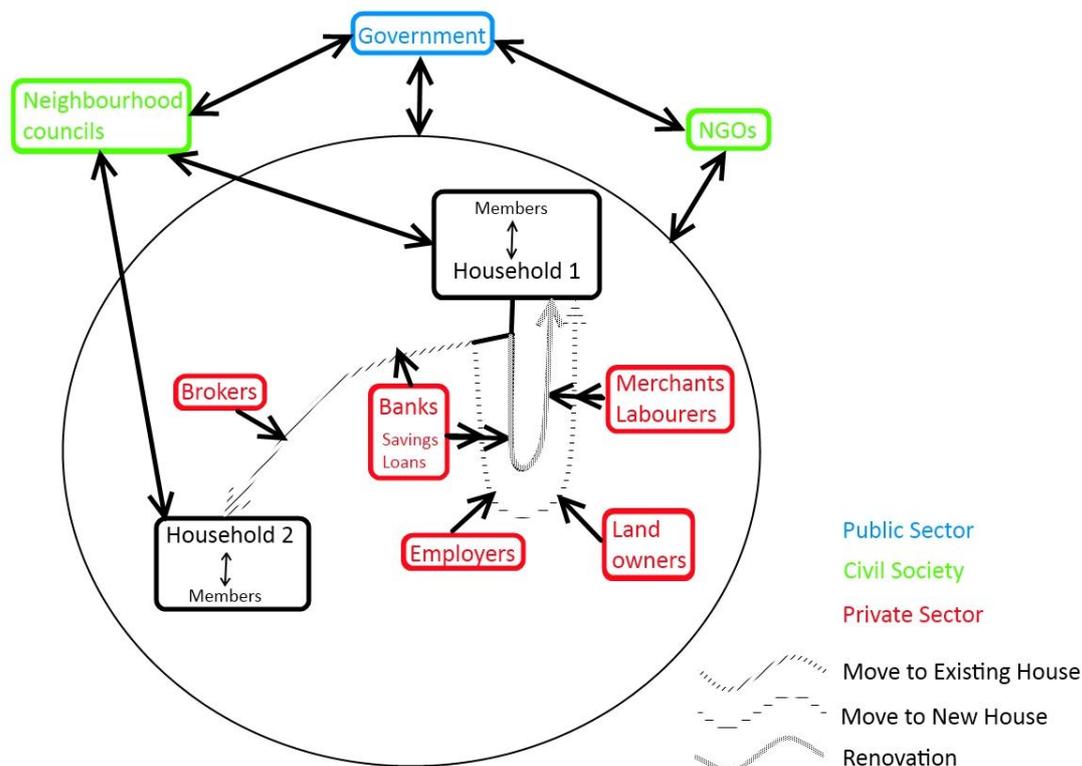


Figure 2.5 Stakeholder Analysis

Stakeholders of solidarity financing are, next to the employees, the employers. They are the ones responsible for the deduction of the loans and handing this money over to the bank, either by themselves or through the government. The government itself is a stakeholder as well. If it wants to stay in power, its housing policies have to be effective. Next to the government as a whole, individual ministers and civil servants have their own personal priorities. They may strive for the application of a certain policy, or simply want to climb the social ladder.

Civil society plays a role in the interaction between the different stakeholders. An NGO may intervene in the process of interaction itself or lobby for the interest of local people. The NGO's interest is the wellbeing of the households and their members. They are included in the analysis because of their importance in the interaction between stakeholders. Neighbourhood councils, however, are stakeholders. They have the interest of the majority at heart, which may be contrary to the interest of an individual person or family. The same counts within households: one person may have a different opinion than the rest of the household.

The housing market therefore has stakeholders in the public and the private sector, as well as in civil society. All these stakeholders play a role in the housing market. The interaction between these stakeholders and between roles within the organisations is blueprinted in institutions, which in turn arise from the different roles defined by norms and values (Portes, 2006). In turn, the organisations influence the institutions, and hierarchical statuses from which the organisations stem influence the roles. The government tries to manage the interaction between the different stakeholders, as do NGOs, which in turn influence and are influenced by the government, like neighbourhood councils are. In this thesis, the focus lies on the households themselves, neighbourhood councils, government, and NGOs. Information on government and civil society (i.e. neighbourhood councils and NGOs) will be dealt with in paragraph 2.3.1. The households which are stakeholder are the main subject of this thesis. General information about them can be found in chapter 3.

### 2.3.1 Government and Civil Society

In 1982, Bolivia became a democratic republic. In 1985, new macro-economic policies were installed to counter the economic crisis. This was done by means of the Decreto Supremo 21060 (Paz Estenssoro, 1985). This decree aimed for monetary stabilisation. Ways to accomplish this were the reduction of government interference, the reduction of the state deficit, the introduction of the Boliviano as currency, the introduction of a free market, stimulation of export and the implementation of a new tax system. Thus, Bolivia became a neoliberal state. Around the same time, in 1985, El Alto became administratively and financially independent, and in 1988 it was officially declared a city by the National Congress (Gilbert, 2004; Kranenburg, 2002).

Juan Evo Morales Aima of the MAS (Movimiento Al Socialismo) became president of Bolivia in 2006. He is an Aymara Indian, and aims to break through the traditional class structure and status hierarchies which define the interplay between different roles (Mira Bolivia, 2010a&b; Portes, 2006). Since he became president, policies changed, as the state took more control again. Neoliberalism was abandoned, and the aim became to create a socialist state. Because of this, *Alteños* moving around in the informal economy have become more afraid of the government. Though officially, the MAS aims to let the rich pay the highest taxes, *Alteños* are still afraid, as they do not want to pay taxes at all. A reluctance to pay taxes is a normal thing in Latin America, and certainly in El Alto, where the poor live who have no money for this (Durán Chuquimia, 2010). This fear means it is harder for the government to reach the actual poor. The new administration has developed a National Development Plan (Plan Nacional de Desarrollo, PND). In this plan, three factors are important: productive development and employment generation; justice and social inclusion; and macro-economic stability (Villegas Quiroga, 2006). This has had consequences for housing policy as well (see chapter 6).

The Bolivian government is not decentralised where housing policies are concerned. It is the national government which deals with the issues of housing and urban planning. The Bolivian state is very bureaucratically organised, which means a whole institutional tangle exists. Because of the new transparency law, it is possible to ask for information on government policy (Mendez M., 2010; Unidad de Transparencia, 2010). One has to fill out a form in which is asked what information is

asked for and why, and which department has the information. It is then decided within the ministries whether the person had a valid reason to ask for information or not. If they find the reason valid, the request forms land on a large pile, and the person in question has to wait for the information for a very long time. Researchers get priority, but locals may never get the information.

Furthermore, within public organisations, strict status hierarchies have been established (Durán Chuquimia, 2010). Everyone does what the boss tells them to do and immediately reports back to them. The different roles are very clearly defined. However, the institutional environment is inefficient. The person at one desk does not know what the person at the next desk is working on. The extreme hierarchy extinguishes the chance to show initiative. The institutional context prescribing the interaction between roles is organised in such a way that organisations cannot operate efficiently or effectively, because the underlying values and norms demand certain behaviours (Portes, 2006). For example, a value of Bolivian culture is that relationship is most important. It is therefore considered impolite to say no when someone asks to get something done. The answer will mostly state that of course the work will be done, and it will be done in time. Through Western eyes, these constitute empty promises. However, in Bolivia, it is the norm to show your willingness, even if you know beforehand that you will not make the deadline. One cannot be certain, therefore, that made promises will be kept.

As for civil society, neighbourhood councils (*juntas de vecinos*, also called OTBs: Organizaciones Territoriales de Base) have an influence on the state of each neighbourhood. They have become formal institutions since the implementation of the Ley de Participación Popular (LPP) in the year 1994, which has as its purpose to raise the life standard of the Bolivian population. Next to the municipal reorganisation and citizen participation, a redistribution of funds played a role (Sanchez de Lozada, 1994).

The municipal reorganisation meant that municipalities were called into life, as they had not existed before. Spatial differentiation between areas fell because urban and rural areas were united in territorial municipalities. The formal dichotomy considering rural and urban land ownership ceased to exist. In rural areas, citizen participation has had the largest impact, because before the LPP was installed, the rural population did not have any political influence, because the national government was important to them, yet the outcome of national elections were determined by the urban votes. By registration of neighbourhood councils, the LPP aims to enhance participation of the whole population in local government. These stakeholder groups were given independence. They can present their wishes to the municipality in the form of projects.

The redistribution of financial funds had a great impact on Bolivian municipalities. Twenty per cent of the national tax income is now distributed among the municipalities. The more inhabitants a municipality has, the higher the amount of money it gets. This means, La Paz does not get a disproportionately high part of the money anymore. For El Alto, the implication of the LPP in combination with municipal independence was that the city needed to develop an independent basis for industry and manual labour. This meant the sources of income would benefit El Alto, and not La Paz. By maintaining close economic relations with La Paz, the economy would have more of a chance to profit by local spendings. This way, financial dependency was decreased, and a domestic (economic) identity could be established (Kranenburg, 2002).

Next to the neighbourhood councils gaining importance and independence, El Alto has many Non-Governmental Organisations (NGOs). They play a part in the interaction between state, private organisations, and local people. For the most important NGOs concerning housing and residential mobility, see chapter 6.

## 2.4 Concluding Remarks

El Alto has developed from a peripheral neighbourhood of La Paz into a city of its own. It is inhabited by people of all life stages. Its inhabitants are mainly Aymara, who lead their life according to their traditional belief in ancestors and natural influences, and thus have not integrated the idea of a society which can be constructed by its people into their line of thought. Aymara are segregated from the cholo and white ruling class, though the administration of president Evo Morales tries to ameliorate this situation. However, institutionally, Bolivia is not very strong, which means the government has difficulty ruling the country. Thus far, it has been unable to incorporate the informal market in its policies, as will become clear in chapter 6.

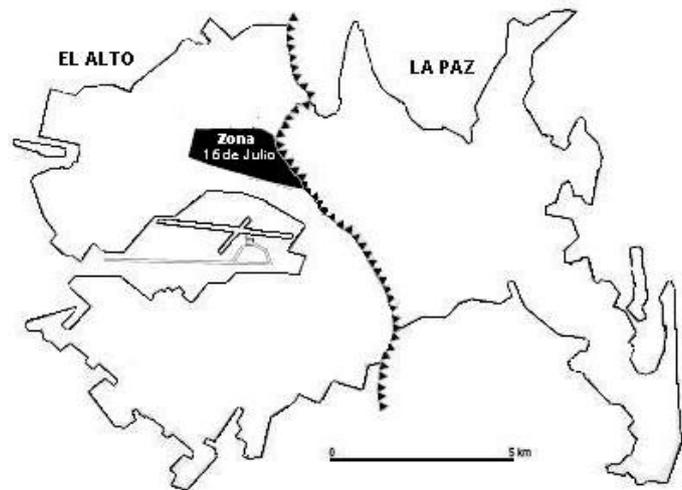
The housing market of El Alto, which is mainly informally organised, has evolved from a rural to an urban one, and has seen a tenure transition as neighbourhood functions within the metropolitan system changed. Housing is very important for the overall development of El Alto. Stakeholders which are important for this research are the local households, NGOs, neighbourhood councils, and the government. Let us move on to the specific context of Zona 16 de Julio.

## Chapter 3 Zona 16 de Julio

Housing and residential mobility are influenced by factors on different geographical levels. In chapter 2 became clear that culture is the underlying factor contributing to the organisation of the Bolivian society. The interplay between different roles has become clear. Now, we move on to the situation of the Zona and the significance housing has.

### 3.1 General Information

Zona 16 de Julio is situated next to the Ceja of El Alto. 'Ceja' is the Spanish word for 'eyebrow'. Indeed, the locality has a curved shape. The black market of El Alto is situated there, because three main roads are connected to it (Durán Chuquimía, 2010). The Zona, situated west of the Ceja and north of the airport (figure 3.1), encompasses three neighbourhoods: 16 de Julio, Ballivian and Los Andes. For a general impression of the Zona, see box 3.1. The neighbourhoods are divided into sections. Eastern 16 de Julio, around the Ceja, is 1<sup>a</sup> sección, northern and central 16 de Julio form 2<sup>a</sup> sección and western 16 de Julio is 3<sup>a</sup> sección. Eastern Ballivian is 1<sup>a</sup> sección, and western Ballivian is 2<sup>a</sup> sección. Los Andes has the size of one section and is therefore not divided. Each of the sections has their own neighbourhood council.

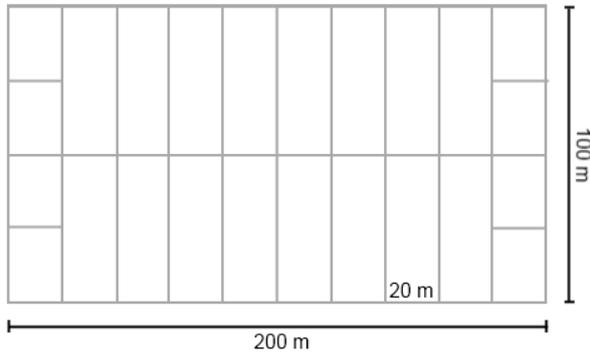


**Figure 3.1 Location of Zona 16 de Julio**  
*Adapted from Kranenburg, 2002*

In the Zona, housing of all sizes and shapes can be found. Brick apartment buildings stand next to tiny adobe houses. The whole Zona is packed with buildings (figure 3.2). The streets in the Zona are mostly straight. The land was divided into blocks, which in turn were divided into equal parcels (see figure 3.3a). During the past decades, these parcels were partitioned when the owners sold off part of the land they owned. This is in accordance with Bredenoord & Van Lindert (2010), who state that plots larger than 80 to 120 m<sup>2</sup> tend to be subdivided, because they are too large to be practical for incremental housing. Currently, the blocks look more like the one shown in figure 3.3b. Some parcels have been combined, others have been partitioned. Also, we see that some parcels were partitioned to such a degree that alleys run in between the plots.

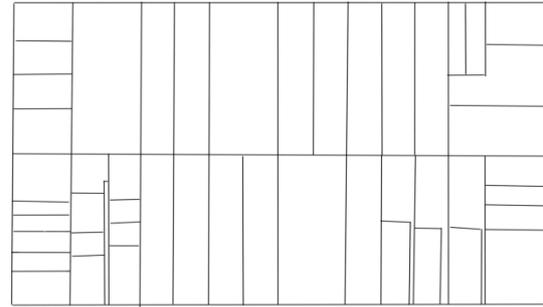


**Figure 3.2 View Over the Zona From the South**



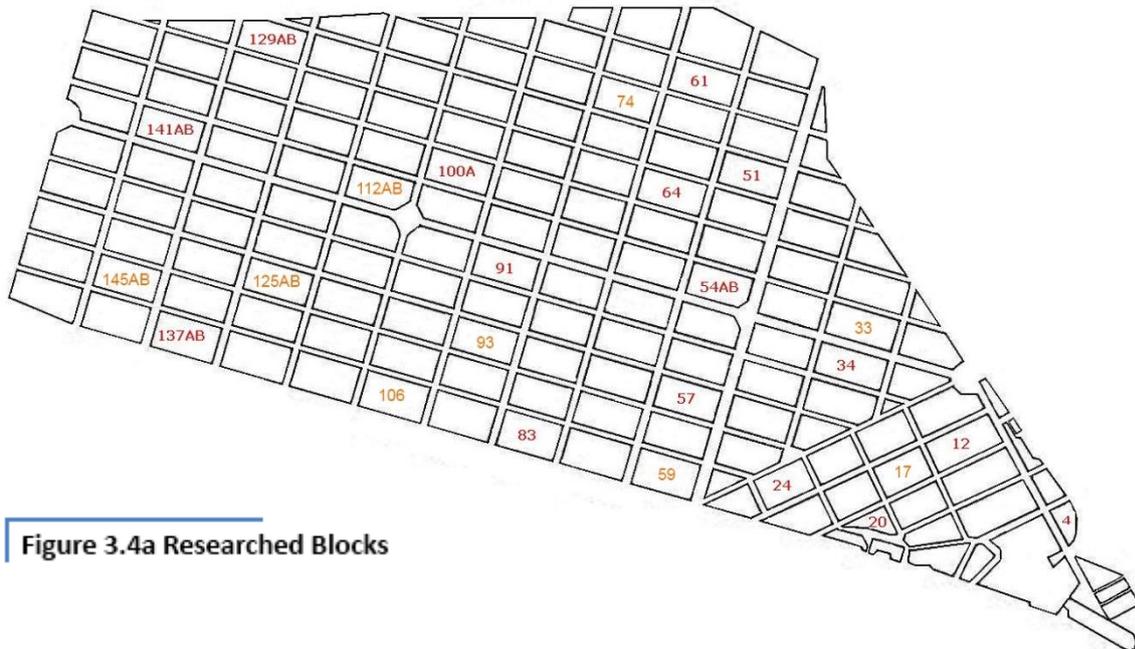
**Figure 3.3a Original Division of Each Block**

*Source: Kranenburg, 2002*



**Figure 3.3b Current Division of Block 137**

Because the Zona has been consolidating for decades now, land value has gone up (see chapter 1). The role of the Zona has changed into a commercial one in the past decades. 16 de Julio is now the most commercial. Los Andes is coming up as the next commercial area (Acarapi, 2010). In figure 3.4a, the blocks of the Zona are displayed, and in figure 3.4b, photos of most of the corresponding blocks. It can be seen that along the larger roads (Av. Juan Pablo II, Av. 16 de Julio, and Av. La Paz), economic activities are centred. Furthermore, especially in Ballivian, great differences can be noticed in housing quality. Some housing is absolutely rich, like the villa along J. Chacon in block 61. Other housing is very poor. In Los Andes, and to a lesser degree in 16 de Julio, housing is more uniform.



**Figure 3.4a Researched Blocks**

**Figure 3.4b Photos of Researched Blocks**

16 de Julio

**Block 12**



Montaña



J. Arzabe

**Block 17**



J. Euler



J. Euler

**Block 20**



Montaña

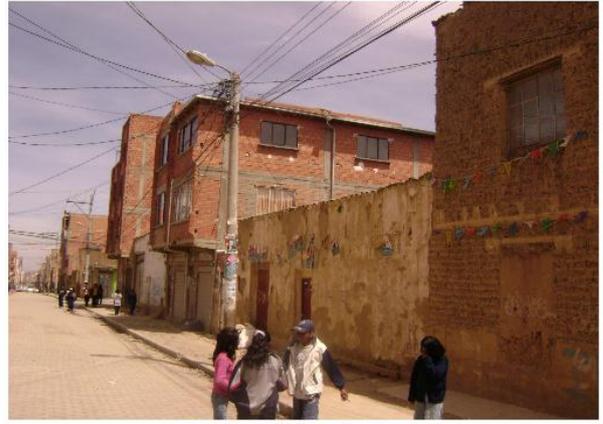


Pascoe

**Block 34**



H. Santa Cruz



J. Arzabe

**Block 91**



Catacora



J. Arzabe

**Block 93**



A. Valle



Catacora

Block 106



Av. La Paz



Av. La Paz

Ballivian

Block 61



Nisthaus



J. Chacon

Block 74

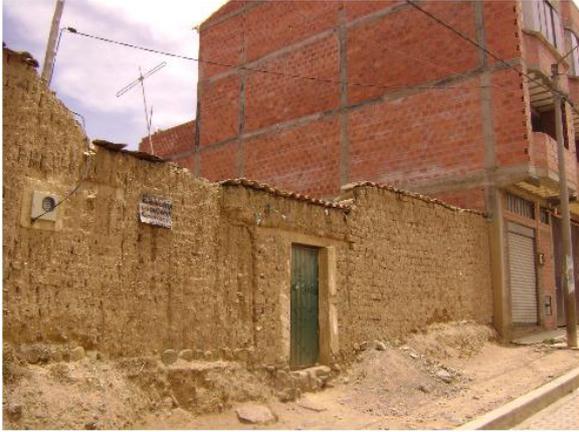


A. Plata



A. Plata

**Block 100**



Catacora



De la Vega

**Block 112**



18 de Noviembre



Av. La Paz

**Block 141**



Néry



Av. 16 de Julio

Los Andes

Block 125



13 de Septiembre



A. Garcia

Block 137



B. Garcia



Av. Juan Pabo II

Block 145



V. Gutierrez



A. Valle

As can be seen in the photos of figure 3.4b, much differentiation exists in architecture. There are houses made of adobe, and houses made out of bricks. Some houses have a façade, others do not. Some houses have many windows, in other houses the windows have been bricked up because of a lack of money. Originally, self-help housing had a rural-urban design. As the neighbourhood consolidated, commercial housing came up, recognisable by the rolling shutters on the ground floor. Emerging architecture is a renovation of existing housing. It can be seen, for example in Calle De la Vega in block 100, as represented in the figure. This is the architecture of future El Alto (Cárdenas et al., 2010).

### **Box 3.1 First Acquaintance with the Zona**

When walking through the Zona from the Ceja to the west on a regular weekday, the first thing which catches the eye is how poor this city is compared to La Paz. The buildings are made out of bare brick or brown-grey adobe. Many houses are still in the process of being constructed. Many streets are unpaved. This is the city of the poor, though not all its inhabitants are poor anymore. Suppose regarding it as the shanty town of La Paz. Then, what is striking is that there are no shacks: even the poorest have walls made of adobe. The buildings look more or less uniform, and knowing the area is serviced with electricity, running water and gas changes the perspective.

During the week, the streets of the Zona are abandoned, as can be seen on the photos of figure 3.4b. Children are kept at home and therefore do not play in the streets. Hardly anyone can be found in the streets. On Thursdays and Sundays, however, the streets of 16 de Julio are filled with people coming to the Feria, the black market. At the sides of the streets, people build booths or lay down a rug on which to display the items they wish to sell. Along the larger roads in Ballivian and Los Andes, such activity can be found as well, though to a lesser extent. But during the rest of the week, it is a desolate area, except for the economic activity along the main roads. On Friday mornings, the streets tend to be unsafe. The reason for this is that Friday is the 'Day of the Drunks' as locals call it. The men take time off work to be together and drink lots of alcoholic beverages. Physical assaults regularly occur on these days.

Walking through the Zona as a white person feels unsafe. People stare at strangers, and especially at foreigners. Taking photos is scary, because stories are told of people getting beaten up for that, and cameras may get stolen. For the same reason, no photos were made during the Feria. If someone writes things down about what they see, locals start asking questions about what they are doing, because they are afraid of the government and of local banks. Next to this, the dogs in the street are hungry and scared. They may attack at any moment. Everyone has a wall around their house. If something were to happen, nobody would notice. After sunset, the streets are unsafe.

## 3.2 Socio-Economic Situation

The population of the Zona is a young one, as can be seen in figure 3.5. Around 35% of the population is under the age of 20 years, and 75% is 39 years or younger. This means 40% is between 20 and 40 years old, and the population is older than it was ten years ago, when 75% was under the age of 30 (Kranenburg, 2002). The percentage of men and women is about the same. The shape of the figure reflects the function of the Zona within the city. It is a central, commercial area, which means many young people go there to make a living. People who came into a different life stage, have moved away to become status seekers (Klak & Holtzclaw, 1993).

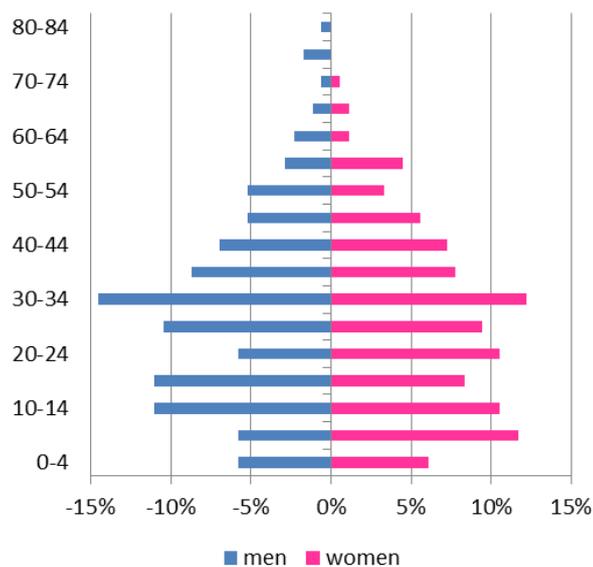


Figure 3.5 Population Pyramid of Zona 16 de Julio, 2010

Heads of household are mostly married or live together with their significant other (see table 3.1). A significant relationship exists between the neighbourhood heads of household live in and their marital status (see appendix 1.1). In Ballivian, more heads of household are married and less live together with their significant other. In 16 de Julio, more live with their significant other than in the other two neighbourhoods. In Los Andes, more heads of household are widowed than in the other two neighbourhoods. Ballivian knows the highest percentage of divorced heads of household.

Table 3.1 Marital Status of Heads of Household in the Zona, 2010

	16 de Julio	Ballivian	Los Andes	Zona
<i>Single</i>	3.6%	4.5%	4.1%	4.0%
<i>Married</i>	62.3%	74.4%	63.6%	66.2%
<i>Living Together</i>	25.0%	12.1%	22.1%	20.4%
<i>Divorced/Separated</i>	5.8%	8.0%	4.1%	5.9%
<i>Widowed</i>	3.3%	1.0%	6.0%	3.5%

### 3.2.1 Education

Most of the Zona's labour force (people from 18 to 65 years old) has no higher than a secondary education (see table 3.2). In fact, around 5% only knows how to read and write, and 18% has only completed the lowest classes of primary school. Around 18% completed primary school. Striking is the difference between Ballivian and the other two neighbourhoods for the percentage of people who completed secondary school: it is much lower. At the same time, the percentage of people who completed university is much higher.

**Table 3.2 Education of Zona Labour Force, 2010**

	<b>16 de Julio</b>	<b>Ballivian</b>	<b>Los Andes</b>	<b>Zona</b>
<i>None</i>	4%	7%	2%	5%
<i>Alphabetisation</i>	1%	1%	1%	1%
<i>Primary Lower Classes</i>	16%	21%	18%	18%
<i>Primary</i>	22%	13%	19%	18%
<i>Secondary</i>	42%	31%	44%	39%
<i>A-Levels</i>	3%	6%	4%	4%
<i>College</i>	3%	3%	3%	3%
<i>University</i>	9%	17%	9%	12%
<i>Total</i>	N = 668	N = 547	N = 496	N = 1171

### 3.2.2 Income

Like most Alteños, Zona inhabitants are mainly Aymara. This means, they live in a situation of segregation (Gray Molina et al., 2002). Zona 16 de Julio is one of the best areas of El Alto. Because of this, income is higher than in other parts of the city (Acarapi, 2010; Durán Chuquimia, 2010). In table 3.3, the differentiation in income per person is marked per neighbourhood and calculated into PPP dollars (Purchasing Power Parity; CIA, 2010a). From the table, it can be understood that the yearly income per capita in the Zona ranges from PPP \$730 to PPP \$2,377. The range used is from the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile. The average yearly income is PPP \$1860. This is much lower than the yearly Gross National Income, which is PPP \$4,453 per capita in 2010 (World Bank, 2011; CIA, 2010a).

**Table 3.3 Income of Zona Inhabitants, 2010**

	<b>16 de Julio (N = 481)</b>	<b>Ballivian (N = 520)</b>	<b>Los Andes (N = 431)</b>	<b>Zona (N = 1432)</b>
<i>Yearly Income, BOB</i>	3,000 – 7,200 bs. Mean: 5,604 bs.	2,400 – 6,720 bs. Mean: 5,267 bs.	3,300 – 6,600 bs. Mean: 5,090 bs.	2,796 – 6,804 bs. Mean: 5,327 bs.
<i>Yearly Income, PPP</i>	\$962 – \$2,310 Mean: \$1,798	\$770 - \$2,156 Mean: \$1,690	\$962 - \$2,117 Mean: \$1633	\$730 - \$2,377 Mean: \$1,860
<i>1<sup>st</sup>-25<sup>th</sup> Zona Percentile</i>	20%	34%	21%	25%
<i>26-50<sup>th</sup> Zona Percentile</i>	28%	20%	32%	25%
<i>51<sup>st</sup> – 75<sup>th</sup> Zona Percentile</i>	25%	22%	24%	25%
<i>76<sup>th</sup> to 100<sup>th</sup> Zona Percentile</i>	27%	24%	23%	25%
<i>Lowest Yearly Income</i>	960 bs. PPP \$308	171 bs. PPP \$55	1200 bs. PPP \$385	171 bs. PPP \$55
<i>Highest Yearly Income</i>	24,000 bs. PPP \$7,699	36,000 bs. PPP \$11,548	33,000 bs. PPP \$10,586	36,000 bs. PPP \$11,548

The table makes clear that a significant difference exists in income between the three neighbourhoods (see appendix 1.2). In Ballivian, 34% of the people have an income which lies in the lowest percentile of the Zona. In 16 de Julio and Los Andes, these percentages are only 20% and 21%, respectively, meaning that Ballivian has the highest contribution to that percentile. This means, significantly more people have a very low income in that neighbourhood. Also, the lowest as well as the highest incomes can be found there, meaning inequality is highest. This can be seen in the housing stock of the neighbourhood as well, which displays large differences.

### 3.2.3 Employment

The unemployment rate is around 4%, which is lower than Bolivia's 6.5% (CIA, 2010b). This is explainable by the fact that Alteños are very creative in finding employment. Most jobs are informal and do not pay much (which explains the low income level; Durán Chuquimia et al., 2010). Of the paid occupations, commerce is the largest sector (see table 3.4a). People own small shops which supply the neighbourhood with their daily necessities or clothing. The clothing sold is mainly Aymara clothing, called pollera. There are also people who try to sell commodities or food in the streets. For this, they use their house for storage (Acarapi, 2010). Manual labour and handcrafts form the other most important job category. This mostly includes construction work, sewing, and handiwork made to sell to tourists. Quite a number of people drives one of the many buses or taxis in the city. Some even drive micros (larger line buses), and are therefore formally employed.

A significant relationship exists between the inhabited neighbourhood and the employment position people occupy (see appendix 1.3). In Ballivian, more people are self-employed, though in all three neighbourhoods, self-employment is the most important (see table 3.4b). The high rate of self-employment shows the high percentage of people moving around on the informal market. In 16 de Julio, more people are employees than in the rest of the Zona.

No significant relationship exists between neighbourhood and job stability (see appendix 1.4). Jobs are equally stable in all three neighbourhoods. 64% of the employed people has a permanent job, around 27% is temporarily employed, and around 9% has an occasional income, meaning they have to look for assignments (see table 3.4c). However, it is likely that the term permanent only means this is what the people have been doing for a long time, and will probably be doing. In the context of the informal market, it probably does not mean the income is stable.

**Table 3.4a Occupation of Zona Labour Force, 2010**

	16 de Julio	Ballivian	Los Andes	Zona
<i>Student</i>	13%	23%	13%	16%
<i>Housewife</i>	19%	15%	15%	17%
<i>Unemployed</i>	4%	2%	5%	4%
<i>Retired/ Rentier</i>	0%	1%	1%	1%
<i>Taxi/ Bus Driver</i>	4%	5%	6%	5%
<i>Manual Labour &amp; Crafts</i>	13%	13%	13%	13%
<i>Catering</i>	3%	2%	3%	2%
<i>Commerce</i>	23%	19%	22%	21%
<i>Services</i>	6%	5%	7%	6%
<i>Institutional</i>	7%	8%	6%	7%
<i>Employed (not otherwise specified)</i>	5%	6%	8%	6%
<i>Agrarian</i>	1%	0%	0%	1%
<i>Other</i>	0%	0%	0%	0%
<i>Total</i>	N = 654	N = 555	N = 497	N = 1706

**Table 3.4b Employment Position of Zona Inhabitants, 2010**

	<b>16 de Julio</b>	<b>Ballivian</b>	<b>Los Andes</b>	<b>Zona</b>
<i>Employee</i>	38.4%	35.7%	34.1%	36.2%
<i>Day Labourer</i>	6.3%	1.6%	6.4%	4.7%
<i>Self-Employed</i>	48.7%	58.1%	53.8%	53.4%
<i>Employer</i>	4.9%	1.8%	1.7%	2.9%
<i>Other</i>	1.6%	2.8%	4.0%	2.8%
<i>Total</i>	N = 427	N = 387	N = 346	N = 1160

**Table 3.4c Stability of Employment of Zona Inhabitants, 2010**

	<b>16 de Julio</b>	<b>Ballivian</b>	<b>Los Andes</b>	<b>Zona</b>
<i>Permanent</i>	63.2%	65.8%	62.9%	64.0%
<i>Temporary</i>	28.1%	24.5%	27.1%	26.6%
<i>Occasional</i>	8.7%	9.7%	10.0%	9.4%

### 3.3 Concluding Remarks

Zona 16 de Julio has been consolidating for decades. Its original structure has been maintained. However, parcels have been subdivided, thus, along with the vertical expansion, giving rise to densification. Differences exist in housing design and materials, as people from different income levels inhabit the Zona. The population of the Zona is young, yet getting older. Heads of household are mainly married or live together with their significant other. Education mostly does not surpass the secondary level.

Income lies around 5,300 bolivianos per year, which is about PPP \$1,860 per year. Inequality in income level is highest in Ballivian, thus giving rise to greater differences in housing quality. Unemployment is around 4% in the Zona, which is lower than the unemployment rate in Bolivia. Most jobs are in commerce, manual labour, and handcrafts. Because much of the labour takes place on the informal market, many people are self-employed. Employment is mostly permanent, as opposed to temporary and occasional.



# **Part 3**

## **Housing and Mobility in the Zona**

## Chapter 4 Histories and Motives

Zona households originally came from the countryside. By now, these patterns have changed. Motives to settle in the Zona are mixed, and tenure plays a special role in this. The partial questions discussed in this chapter are: 1. Where were heads of Zona households born?, 2. From where did Zona households move in? And: 3. What residential motives and priorities do Zona inhabitants have?

### 4.1 From Recent Settlers to Stayers

Originally, El Alto was a city with rural inhabitants who had moved to La Paz seeking a better life in the city. Its enormous growth over the past five decades was therefore mainly due to rural-urban migration (Kranenburg, 2002). Today, 5% was born in a city outside La Paz and El Alto. Currently, only 25% of the heads of household in the Zona was born in the countryside, as can be seen in table 4.1. Before 1987, this was 75%, and between 1987 and 1992, this was 68%. This shows an increasing part of the heads of households originated from inside the agglomeration of La Paz and El Alto.

**Table 4.1 Mobility History of Heads of Household, 2010**

<b>Movements</b>	<b>16 de Julio</b>	<b>Ballivian</b>	<b>Los Andes</b>	<b>Zona</b>
<i>none</i>	24.5%	23.6%	19.2%	22.6%
<i>countryside → La Paz → El Alto</i>	1.8%	7.9%	3.7%	4.2%
<i>city → La Paz → El Alto</i>	0.4%	3.0%	0.0%	1.0%
<i>countryside → El Alto → Zona</i>	3.6%	12.3%	10.3%	8.2%
<i>city → El Alto → Zona</i>	1.1%	0.5%	1.4%	1.0%
<i>countryside → Zona</i>	11.5%	15.8%	9.8%	12.2%
<i>city → Zona</i>	2.2%	2.0%	3.7%	2.6%
<i>La Paz → El Alto</i>	30.6%	13.8%	26.2%	24.3%
<i>within El Alto</i>	20.1%	10.8%	17.3%	16.5%
<i>El Alto → La Paz → El Alto</i>	0.0%	0.0%	0.5%	0.1%
<i>within Zona 16 de Julio</i>	4.3%	9.9%	7.9%	7.1%
<i>other</i>	0.0%	0.5%	0.0%	0.1%
<b>Total</b>	<b>N = 278</b>	<b>N = 203</b>	<b>N = 214</b>	<b>N = 695</b>

12% of the households living in the Zona moved in directly from the countryside. Of the respondents who moved in from outside La Paz and El Alto, only 17% (5% of the total) first moved to La Paz and later to El Alto. This is a noticeable difference with El Alto's early years, during which bridge-headers first moved to the centre of La Paz, and only moved to El Alto when coming into a different life stage. Nowadays, a much smaller number of bridge-headers move into the agglomeration of La Paz and El Alto, and mostly they move in directly from outside to El Alto. This is possible because El Alto has developed as a city, and therefore, short-term housing is available there as well as in La Paz (Kranenburg, 2002; Durán Chuquimia et al., 2007).

Zona inhabitants of the dominant generation who were not born on the countryside (70% of the total amount of respondents) were born inside the agglomeration of La Paz and El Alto. This means the current growth is mainly due to natural growth. In fact, only 19% of the households in the Zona are settlers: households which moved into their current residence in the past five years. This is a marked difference with earlier years, as opposed to stayer, who moved into their current residence more than five years ago. In the 1980s, about half of the households were settlers, and in the 1990s, between 35% and 40%. The turnover rate has therefore dropped to a lower level. More and more

households are staying households instead of settling ones, which means natural growth has become more important than rural-urban migration.

15% of the dominant generation in the Zona moved more than once within the agglomeration of La Paz and El Alto. Almost half (47%) only moved once within the agglomeration. Furthermore, table 4.1 makes clear that 24% of the dominant generation never moved at all. This part of the population lives on the parcel owned or rented by their parents. Mostly, they have their own quarters which they built next to their parents'. The other 14% moved in directly from the countryside, which in recent years has fallen to 2%, as can be seen in table 4.2. This means, rural-urban migration hardly contributes to the growth of the Zona at all anymore. Instead, inter-urban and, more especially intra-urban mobility have become important, especially within El Alto itself. After natural growth, intra-urban mobility is the most important factor of growth.

Table 4.2 shows where settlers moved in from over different time periods since 1984. It hence states the location of their previous residence. Since 1989, the dominance of movements within the Zona has come to an end and settling families began to mainly have other areas of El Alto and La Paz as their provenance (Kranenburg, 2002). Nowadays, as can be seen in the table, mobility directly from the countryside has stagnated and 98% of the settlers move from inside La Paz and El Alto. In fact, current trend is that the main stream flows within El Alto (88%). The Zona and, more especially, the rest of El Alto have become the provenances of settlers.

**Table 4.2 Provenance of Zona Settlers, 1984-1989, 1989-1994, 1994-1999, 2005-2010 (%)**

	1984-1989	1989-1994	1994-1999	2005-2010
Zona 16 de Julio	64	26	26	35
El Alto	10	33	32	53
La Paz	14	26	17	10
Outside La Paz/El Alto	12	15	25	2
Total	N=155	N=104	N=167	N=136

*Sources: Kranenburg (2002), own field research*

The question arises where people coming in from inside the agglomeration of La Paz and El Alto moved from exactly. For this reason, figure 4.1 was made, in which the different areas of La Paz and El Alto can be seen (see appendix 2). As is the rule, proportional symbols are used, because the percentages are not tied to acreage. For each part of the agglomeration, the percentage of Zona stayers (in blue) and of Zona settlers (in red) that originated from it is marked with a dot which is representative in size. The map makes clear that the Zona itself contributes the highest amount of people who move to the Zona (28% of the stayers and 37% of the settlers). Current trend is therefore that after a decline in mobility, more people are again starting move within the Zona. From the rest of El Alto, more households move into the Zona than before as well, except from the east around Dolores (EA Sur 3) and the utter south around La Merced (EA Sur 4). This map also makes clear that less households settle in the Zona from La Paz than in earlier years, as could already be seen in Table 4.2.

A little over 2% of all Zona households (settlers and stayers combined) have moved into El Alto from La Paz in the past five years. This is a difference with earlier years, as in 1992, this was over 10%. Inter-urban mobility is therefore becoming less important, whereas intra-urban mobility increasingly gains importance.

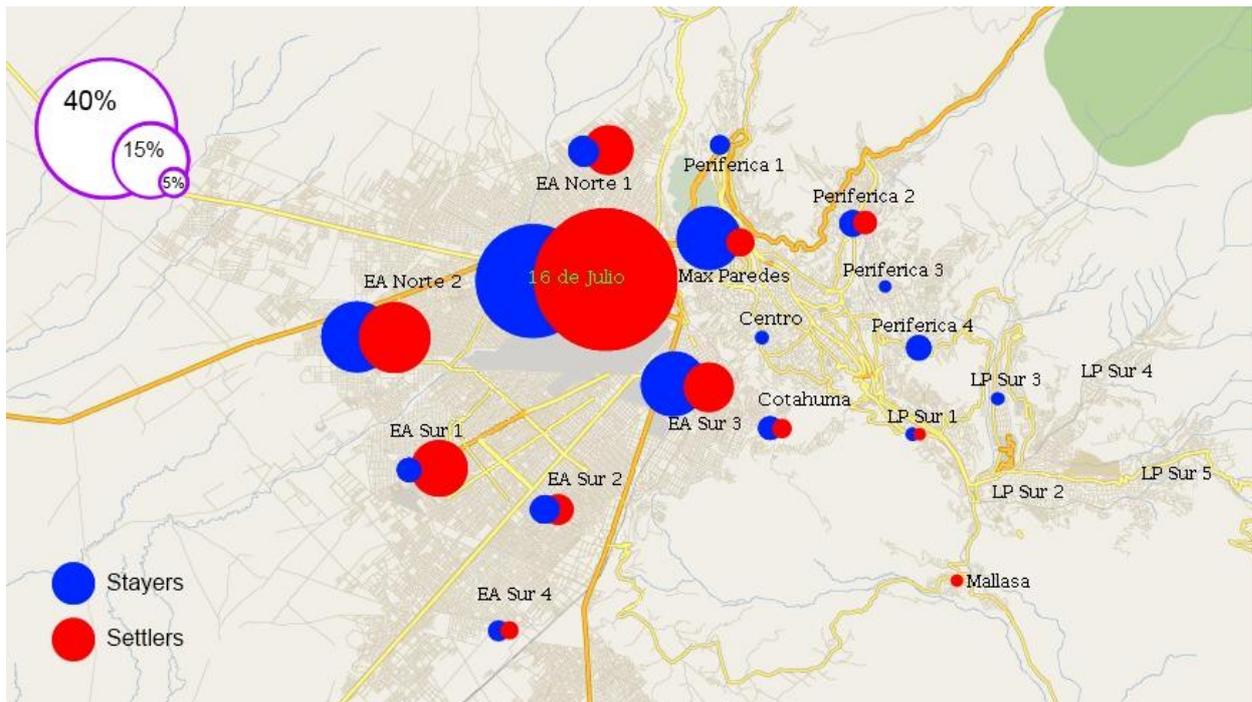


Figure 4.1 Provenance of Zona Settlers and Stayers, percentages, 2010

## 4.2 Housing, Family, and Economics

As described in chapter 1, households can move for many reasons, both having to do with household composition and household environment. The same is true for inhabitants of the Zona. Between 16 de Julio, Ballivian and Los Andes, no significant difference exists in the motives households have for living in the current residence (see appendix 1.5). Therefore, the focus will be on the motives of respondents from the entire Zona. They appear to find location to for example work or the market most important (table 4.3). Other reasons to live in their current residence are having been born there and wanting to live with family or friends. This is interesting: apparently, proximity to work and family relations were more important reasons to settle in the Zona than the type of tenure. This is explainable by the fact that the Zona is situated next to the Ceja, the great market of El Alto. Because the Zona is so central, households move there to be close to work or to the market (Durán Chuquimia et al., 2007).

Table 4.3 Motives for Living in the Zona, 2010

Born there	11%
Life/ Household Stage	14%
Money/ Housing Costs	11%
Location	5%
Tenure Type	25%
Housing/ Neighbourhood Perceptions	8%
Family	14%
Other	12%
Total	N = 945

In the recent past, the most important reasons for households to move to the Zona were family relations, economic circumstances, and housing conditions (Kranenburg, 2002). The status of the Zona was not very important, albeit the perception of the residence did play a role. Reason for this is the fact that the Zona is a lot like many other neighbourhoods in El Alto. Its status is higher than that of peripheral neighbourhoods, but lower than that of neighbourhoods with institutional housing.

The only difference with those other ‘middle status’ areas is the larger proportion of highrise buildings.

What had been a more important factor than neighbourhood status up until the start of the millennium, is residence size. Also, a change in tenure had been an important residential motive for moving to the Zona. For households moving in from outside the agglomeration of La Paz-El Alto, the housing situation increasingly became a more important motive to settle in the Zona in the 1990s, whilst before, they came for the economic opportunities of the city. In the past, the factor of housing had mainly been important for people moving in from El Alto or La Paz (Kranenburg, 2002). For them, the size of the residence and the type of tenure were important reasons to move to a residence in the Zona.

Nowadays, so little settlers moved in from the countryside that it is unknown which factor would be the most important one for them had more households moved in from outside the agglomeration. For people moving in from La Paz, the importance of housing has decreased strongly, and for almost none of the settlers it is the size of the residence which is important anymore. The same counts for Zona households which want to move away from their current residence. Other housing (5%) and neighbourhood (5%) factors are now of importance. However, they are not as important for settlers as they are for leavers: 19% of the households which are going to leave wants this because of housing factors other than residence size, and 13% wants it because of neighbourhood perception, which mainly entails the lack of safety and social networks. For settlers from inside the agglomeration, tenure type plays an important role, as it did in earlier years. Indeed, a change in ownership status has since long been found an important motive for intra-urban mobility (see paragraph 4.3).

**Table 4.4 Motives Mentioned by Settlers in the Zona in 1999 and 2010, by Origin (%)**

	1999			2010		
	El Alto	La Paz	Outside Agglomeration	El Alto	La Paz	Outside Agglomeration
Housing	50	57	26	45	23	33.3
Family	15	31	36	25	44	33.3
Economic	35	12	38	30	33	33.3
Totals	52 (100%)	26 (100%)	39 (100%)	101 (100%)	16 (100%)	3 (100%)

*Additional Source: Kranenburg, 2002*

Family relationships have been more important factors for mobility. At present, about 27 per cent of the inhabitants of the Zona live there because of family connections (see table 4.4). They were either born in that house or live with family. Settlers from La Paz more often have family relations as their motive than those from El Alto.

Especially at the start of the 1990s, economic factors were important motives to move to the Zona. This could also be seen in the economic growth in that area during that period of time. Especially renters have come to the Zona for economic reasons. Nowadays, economic reasons have become more important for settlers from La Paz. This is still especially the case for tenants, as opposed to owners. For settlers moving in from another part of El Alto, economic reasons have become a little less important. This can be explained with the fact that land is becoming more and more valuable in the Zona, which means it will cost more. Many households will therefore choose to live somewhere else, because for Alteños, an important economic reason to move somewhere is a low land price (Durán Chuquimia, 2010). Their economic situation can force a household into making short-term decisions instead of long-term ones.

Between settlers and stayers, a significant difference exists in income level (appendix 1.6). Settlers have a higher income (on average, 523 bolivianos) than stayers (on average, 437 bolivianos) per month.

### 4.3 Tenure

For home owners, their house is a great asset which will give them economic collateral. This is the reason why tenure is so important: without owning a house, it is harder to get a loan or to have economic stability in El Alto (Durán Chuquimia et al., 2007). In the past, a change in ownership status (tenure type) was an important motive to move to the Zona. It is an important explanatory factor of intra-urban mobility (in this case meaning the movement within the agglomeration of La Paz and El Alto). In the 1990s, the most important change in tenure type was from living for free with family (e.g. parents) to renting a home. Today, about 14% went from living for free with their parents or otherwise to (semi)renting their current home (see Table 4.5a and b). About 55% came from either a rental house or one with an antichretic or a mixed contract and now live in one as well. For most of these (semi)tenants, the current residence is probably not an end stage (see Box 4.1). Next to no-one (less than 1%) went from owning their previous residence to owning their current one. This means, settlers who own their residence in the Zona are new owners, and therefore owning a house has played a role in their moving to their current house. The fact that 64% of the stayers and 13% of the settlers have ownership of their house means that ownership is usually for a longer time, as is described in the literature (Randall et al., 2008). The settlers who now own a house will most probably become stayers.

**Table 4.5a Previous and Current Tenure of Settlers, 2010**

Tenure Change	N	%	Tenure Change – sub	N	%
<i>Owner → owner</i>	1	<1			
<i>(Semi)tenant* → owner</i>	5	5	<i>Tenant* → owner</i>	2	40
<i>Free → owner</i>	10	9			
<i>Owner → (semi)tenant*</i>	4	4	<i>Owner → tenant*</i>	3	75
<i>(Semi)tenant → (semi)tenant*</i>	60	55	<i>Tenant* → Tenant*</i>	47	78
			<i>(Semi)tenant* → Tenant*</i>	5	8
			<i>Tenant* → (semi)tenant*</i>	4	7
<i>Free → (semi)tenant*</i>	19	17	<i>Free → tenant*</i>	15	79
<i>Other → (semi)tenant*</i>	2	2	<i>Other → tenant*</i>	2	100
<i>Owner → free</i>	1	<1			
<i>(Semi)tenant* → free</i>	2	2	<i>Tenant* → free</i>	2	100
<i>Free → free</i>	4	4			
<i>Other → free</i>	1	<1			
Total	109	100			

\*“(Semi)tenant” means either a tenant or a household which has an antichretic or a mixed contract. “Tenant” means purely a tenant.

**Table 4.5b Previous and Current Tenure of Stayers, 2010**

Tenure Change	N	%
<i>Owner → owner</i>	4	7
<i>Tenant* → owner</i>	9	15
<i>Tenant → Tenant*</i>	26	44
<i>Free → tenant*</i>	4	7
<i>Tenant* → free</i>	5	8
<i>Free → free</i>	10	17
<i>Other → other</i>	1	2
Total	59	100

\* "Tenant" means purely a tenant, not a household with an antichretic or a mixed contract.

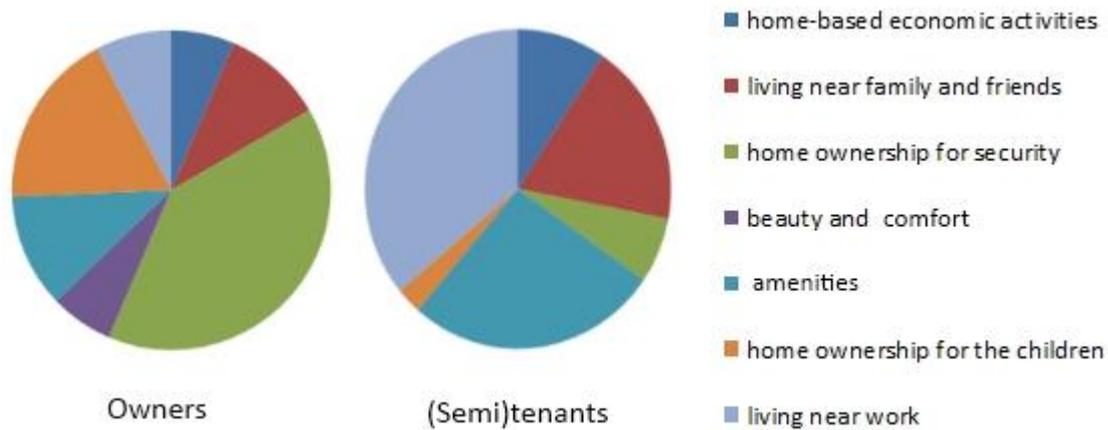
Furthermore, striking is the high percentage of stayers who are moving tenants. Of the 51% renting stayers, 86% (44% of the stayers) moved to their rental home from another rental home. This has to do with the tenure transition which is progressing in the Zona. It can also be seen in the fact that 75% of the settling households (semi)rents their house (64% rents, 10% has an antichretic contract, and 1% has a mixed contract), and 30% of the staying households does so. In 2005, fieldwork done by students of Utrecht University demonstrated that in that year, 74% of the settlers and 51% of the stayers was a (semi)tenant. Stayers therefore (semi)rent less and less. On the other hand, the percentage (semi)tenants who are settlers is rising. In 2005, 34% of the (semi)tenants was a settler, and in 2010 this is 64%. The rising percentage of settlers in the group of (semi)tenants shows a tenure transition: since (semi)tenants now tend to be settlers instead of stayers, (semi)rental homes know a higher mobility rate than before. This means, the Zona has since 2005 been consolidated into an even more central neighbourhood (Durán Chuquimia et al., 2007). As the function of the Zona kept changing, tenure changed along with it.

Tenure type can be related to income. Many studies have concluded that owners and renters differ significantly as to the socio-economic grouping they belong to. First of all, owners tend to be more affluent than renters, sometimes because of higher male incomes, but more often because other family members in owner households have a larger contribution to the housing costs. In Latin America, though, this pattern has been less distinctive (Gilbert, 1993). As renting houses has become more important in La Paz and El Alto (Kranenburg, 2002), this does not necessarily apply to this agglomeration anymore. Earlier evidence exists that new owners in Latin American cities may be poorer than renters in terms of income per capita (Gilbert, 1993). In the Zona, home owners do not have a significantly higher income than (semi)tenants (see table 4.6; appendix 1.7). Between home owners and tenants, there is no significant difference either (see appendix 1.8). A lower income can be observed for tenants than for home owners, but the difference is not significant. Settling owners, being owners who moved to their current residence less than five years ago, do not at all have a lower income than tenants, as has been the case in other Latin American cities (see appendix 1.9).

**Table 4.6 Yearly Income per Household Member of Owners and Tenants, Per Household, 2010**

Tenure	Income PPP	Total
<i>Home Owners</i>	\$2,067	N = 172
<i>(Semi)tenants</i>	\$2,016	N = 112
<i>Tenants</i>	\$1,846	N = 96
<i>Total of Owners and (Semi)tenants</i>	\$2,047	N = 284

As explained in chapter 1, households with a different type of tenure tend to have different housing priorities (Turner, 1968). Because of this, locals were asked what their housing priority was (see appendix 4). Differences occurring between (semi)renters and owners may be more noticeable than those between settlers and stayers, as settlers may have settled with the intention to stay and stayers may plan to move away. Therefore, whereas the households can be divided into settlers and stayers to understand patterns and motives, a division between owners and (semi)tenants is more suitable to compare housing priorities.



**Figure 4.2 Housing Priorities of Owners and (Semi)Tenants in the Zona, 2010**

In figure 4.2, a comparison has been made between the housing priorities of home owners and (semi)tenants. There is a very strong relationship<sup>1</sup> between ownership and housing priorities (see appendix 1.10). A clear difference can be noted in housing priorities between home owners and (semi)tenants. Whereas owners find the security of ownership an important priority for their house, for (semi)tenants it is the location which is important. Some (semi)tenants do want to have the security of ownership, and will therefore seek to get it. But beauty and luxury are no priority for them at all. Furthermore, they find the availability of services more important than home owners. This is in line with interviews held with Jaime Durán Chuquimía (2010) and a few locals (see box 4.1).

Therefore, the type of tenure a residence has is of great importance to their decision-making, and vice versa. Home owners find security the most important housing priority, and (semi)tenants find proximity to work and the availability of services much more important. This will in turn result in differences in mobility and housing patterns between the two groups, which will again create differences in priorities, as it has done before. Indeed, 19% of the households which want to move out of their current residence, want this to gain ownership of a residence. Of these people, most want to move out of the Zona, yet stay in El Alto. This means, households who do not currently own a house, mostly want to establish this ownership outside the Zona, in the periphery of El Alto where more houses are available for purchase (Durán Chuquimía et al., 2007; Clavije Alave, 2010).

<sup>1</sup> This relationship is probable, see appendix 1.10

## Box 4.1 Housing Priorities

Ms. Julia Tapia Quispe lives in Zona Los Andes. She was born in El Alto in a part which is called Chacaltaya and belongs to western Zona 16 de Julio. Like many other inhabitants of the research area, she is part of the second generation of migrants. Her parents were both born in a village named Taracua in the province of Ingavi. When they got married almost fifty years ago, they moved to El Alto, to the house in which Julia was born, to build a better life for themselves. They built a house of adobe on a vacant parcel, which had almost none of the services currently available in the neighbourhood.

It was into this situation that Julia was born. When she was four years old, the family needed more space, and so they moved to the house Ms. Tapia currently lives in (figure 4.3). There, she has lived for 39 years now. At first she was happy. But eight years ago, disaster struck. Her husband went to Argentina to find work, and he disappeared. Julia has no idea whether he is alive or dead, whether he had an accident or ran off with another woman. But she is strong and she lives on. Her dream is to have a house of her own. She now lives with her brothers and sisters on the parcel her father left them when he died. They have regular fights about everything and anything. She wants to have her own parcel and her own house. However, without the presence of her husband she does not have the money for this, and so she is forced to stay.

Ms. Tapia's will to leave is so strong that when I ask her what would be the one thing she would change in her house if she could, she answers that she does not want to change anything, she just wants to leave and buy her own house. It would be in El Alto, because that is all she knows. Or maybe it would be in La Paz, but further away her thoughts do not go. That is also because she has developed friendships with her neighbours and maintains good contacts with them. She wants a house of her own, but she wants to stay close to her loved ones.



Figure 4.3 Ms. Tapia Quispe's Front Door

The house Ms. Tapia dreams of is one which has lots of space for her seven children. It has all the services, like her current residence has now, only nicer and cleaner. Living is the main purpose of her dream house. It will not need to have a space to perform economic activities except the craft off which she lives. It does not have to be very close to the market either, because she can sell her products in the streets as well. This is one of the aspects in which Ms. Tapia, as inhabitant of Villa Los Andes, is different from inhabitants of Zona 16 de Julio, who have economic activities as their most important reason for having a house there. For Ms. Tapia, owning her own property for her children and improving her house are the most important.

Not for René Zapana, however. He lives in the same block, but appears to be more of a bridge-header/consolidator. With his 27 years, he is still a young man. He was born in La Paz, in Max Paredes, which is northwest of the city centre. Two years ago, he moved to his current residence, where he lives with his girlfriend. This caused some problems in the family, because they wanted him to stay with them, but slowly they are starting to accept his move away. He and his girlfriend have a child together, of whom he is very protective.

René has no plans to leave the neighbourhood, as he is content with living so close to work. He moved to this house because it was close to work. He is a mechanic who is employed by another man. His job is stable, so he intends to keep doing this for the upcoming years. He would, however, like to move, because he would like to own a house. Home ownership is definitely in the plans, as this gives security for them and for their child. When asked the question what is more important; education, health care, or home ownership, his definite answer is home ownership, though education follows immediately after that. He would most like to build a home for his girlfriend and his little boy, but sees no opportunity for this, as he needs to stay in the Zona for his work. That is why he is thinking about renting a nicer place than they occupy right now. One that has more services and looks nicer. René tells me that home owners do not care so much about servicing as tenants do, and therefore landlords can be sloppy in providing it, as is the case with his current landlord. This is a major reason for them to want to move. Maybe they will try to get an antichretic contract somewhere. That would make the house a more permanent home. Otherwise, they can be tenants for a while and maybe buy a house somewhere in a few years, dependent on where he will work then. René's thoughts are set on El Alto. Outside of it, he sees no life. La Paz is too expensive, and other cities seem like the end of the world to him. The boundaries of El Alto are the boundaries of his life.

Both for Ms. Tapia and for René Zapana, owning a house is more important than education or health care. For both of them, El Alto is the world they live in. Yet, there is such a difference in perception. Ms. Tapia wants to own a house of her own because she is unhappy here. Her priority is owning a home to give to her children. René wants to live near his work. He is much younger and in a different stage of his life. He is a consolidator, whereas Ms. Tapia is a status seeker forced into the position of a consolidator. Both René and Ms. Tapia want to own their own house. Yet, for René this is a hope for the future, whereas for Ms. Tapia, it is one which is already fading away.

#### 4.4 Concluding Remarks

All in all, mobility patterns to the Zona have changed in recent years. Compared to the 1990s, turnover rate has decreased strongly. Rural-urban migration hardly contributes to the growth of the Zona at all anymore. Instead, inter-urban and, more especially, intra-urban mobility have become important. Current trend is that more households move within the Zona than before, more households move into the Zona from the other neighbourhoods of El Alto, and less families move in from La Paz. As the turnover rate has dropped, natural growth has become the most important contributor to the expansion of the city.

Important motives for moving to the Zona have been residential circumstances, economic factors, and family relationships, depending on life stage and, most especially, the type of tenure. Neighbourhood status has been less important than other motives, as was the case in earlier years. Other residential factors are more important, though overall, the perceptions of residence and neighbourhood are not particularly important motives at all. One of the few reasons households find the Zona is a good one to live in is the location it has, which is economically favourable. This is an economic reason and not a residential one. Housing now is the most important factor for households moving in from El Alto, and family for the decreasing number of people moving in from La Paz.

Both in the group of settlers and in that of stayers, most inhabitants of the Zona who (semi)rent a house also moved in from a (semi)rental home. A lower percentage of settlers who have ownership

of their residence came from a (semi)rental home than before. Along with the consolidation of the Zona, tenure changed even in recent years. Settlers increasingly (semi)rent a home.

The type of tenure has an important impact on decision-making, and vice versa. Whereas home owners find the security of ownership the most important housing priority, (semi)tenants find proximity to economic possibilities and the availability of services more important. However, home owners are not more affluent than tenants, nor is the opposite the case. Tenure is an important reason for (semi)tenants to move away from the current residence. For a change in tenure, mostly the outskirts of El Alto are chosen as dwelling place.

## Chapter 5 Housing Situation and Strategies

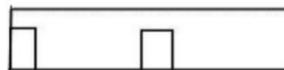
Because their house constitutes the largest part of households' expenses, it is important that it is up to standard: both to the official standard of UN Habitat and to that of the inhabitants. In this chapter, partial question 4 will be answered: What are current trends in housing situation and perception? After discussing this, partial question 5 is addressed: What are current housing strategies of Zona households?

### 5.1 Housing Conditions

As described in chapter 2, through the years the housing designs changed in El Alto. Residences became more and more urban. Yet, throughout the Zona, still housing with only a ground floor is dominant. Next to this, much of the housing still looks rural. In figure 5.1a and b, the two types of design have been compared in Los Andes. The rural design has one floor and is made of adobe. This design is in a later stage of being rural (see figure 2.2). The urban design is of a later stage, during which brick floors were either built on the adobe ground floor or on the ground after demolishing the adobe house. The former is the most commonly used method (Kranenburg, 2002; Mendez M., 2010).



Floor Plan

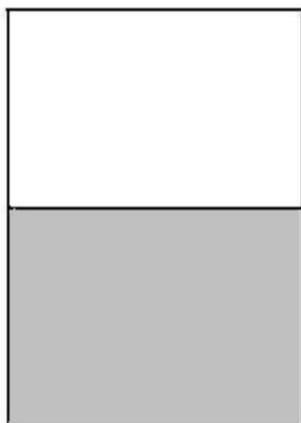


Schematics

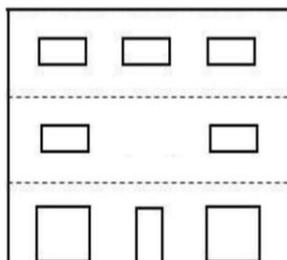


The Building

Figure 5.1a Example of Rural Design



Floor Plan



Schematics



The Building

Figure 5.1b Example of Urban Design

In the Zona, almost every house has a wall around it and a patio inside that wall (see figure 5.2). The patio is an important part of life in El Alto (Durán Chuquimia, 2010). It is where people spend most of their time when they are not away from home. In the Zona, patios are larger than in the rest of El Alto, because most houses were built for commercial purposes, either home-based economic activities or storage (Acarapi, 2010). On average, patios blanket the highest percentage of parcels in Los Andes and the lowest percentage in Ballivian. However, the differentiation within the neighbourhoods is so great that this does not mean a difference exists between the three neighbourhoods (see appendix 1.11). The average size of patios in the Zona is 35% of the parcels. With that, they make up a large part of the parcels on which people live. Next to the difference between a rural and urban design, also differences exist between houses which are purely residential and those which have an economic purpose as well. The houses built with an economic as well as a residential purpose have large rolling shutters in the walls of the ground floor, as this is the floor used when the residence also has an economic purpose. The emerging architecture of El Alto improves existing housing (Cárdenas et al., 2010). It can be seen at some places in the Zona, though its occurrence is not widespread there yet.

Four of the five indicators UN Habitat (2006) has stated for shelter deprivation, being a lack of durable housing, a lack of sufficient living space, a lack of access to improved drinking water, a lack of access to improved sanitation, and a lack of tenure security, are at least partially met, meaning part of the Zona population is deprived of sufficient shelter in one or more aspects.

A lack of durable housing, defined by the floors being inadequate, is the first of the five indicators of shelter deprivation. In the Zona, most houses do not have a dirt floor (see table 5.1). 5% of the households in 16 de Julio live on a dirt floor. In Ballivian and Los Andes, this is 9% and 12%, respectively. This means, in 16 de Julio, one in every twenty buildings has a dirt floor. In Ballivian, this is one in every ten, and in Los Andes, this is one in every eight buildings. The difference between 16 de Julio and the other two neighbourhoods is significant: a weak relationship exists between neighbourhood and whether the household lives on a dirt floor (see appendix 1.12). It is unknown how many houses have solid foundations. However, this may not present an important problem, as the ground on the Altiplano is solid.

**Table 5.1 Building Materials Per Neighbourhood, Per Parcel, 2010**

	<b>Materials</b>	<b>16 de Julio</b>	<b>Ballivian</b>	<b>Los Andes</b>	<b>Zona</b>
<i>Floor</i>	Dirt Floor	5%	9%	12%	8%
	Bricks	4%	6%	2%	4%
	Wood	36%	34%	33%	34%
	Concrete	55%	51%	52%	53%
	Other	0%	0%	1%	1%
<i>Walls ground floor</i>	Adobe (With Façade)	28% (15%)	44% (16%)	45% (24%)	37% (18%)
	Bricks (With Façade)	72% (44%)	56% (16%)	55% (22%)	63% (30%)
<i>Walls first floor</i>	Adobe (With Façade)	13% (7%)	25% (17%)	24% (9%)	19% (10%)
	Bricks (With Façade)	87% (45%)	75% (27%)	76% (29%)	81% (35%)
<i>Roof Material</i>	Corrugated Iron	93%	79%	92%	89%
	Clay Tiles	5%	9%	4%	6%
	Concrete Flagstones	2%	10%	2%	4%
	Hardboard	0%	2%	2%	1%

In 16 de Julio, the buildings are made of significantly different material than in the other two neighbourhoods. This is a measure for the degree of poverty, as brick buildings provide a healthier living environment (Durán Chuquimia, 2008). There is a strong relationship between the neighbourhood in which the parcel is situated and the wall materials the ground floor has (see

appendix 1.13). In 16 de Julio, almost three quarters of the buildings have a ground floor made out of bricks. 61% of those (44% of the total number of parcels) even have bricks with a façade which protects it from leakage. In both Ballivian and in Los Andes, only just over half of the buildings are constructed out of bricks.

This means, the first indicator for shelter deprivation is met for about one in every ten houses (UN Habitat, 2006). Furthermore, housing quality is even more questionable when using a wider definition. Roof and wall materials are not part of the official indicator, but because this is only the case because information on them is often lacking, we can use the information we have to gain a better understanding of the quality and durability of housing, which is often sub-standard in the Zona. Roofs are mostly made of corrugated iron, and many houses are still made of adobe, which may cause health problems. Furthermore, houses often do not comply with building codes (Durán Chuquimia, 2010; Mendez M., 2010).

Difference between Los Andes and Ballivian is that in Los Andes, a higher percentage of the households (62% versus 53% in Ballivian) does live in a building made out of bricks, though the same percentage of parcels has brick buildings. Apparently, brick buildings have more inhabitants per square meter ground floor in Los Andes than in Ballivian. This is confirmed by a statistical test, which shows a significant difference exists between Los Andes and Ballivian regarding the number of inhabitants per square meter brick building (see appendix 1.14). In fact, when researching further, it becomes clear that also, between 16 de Julio and Los Andes, a significant difference exists (see appendix 1.15). Los Andes therefore has a significantly higher population density of brick buildings (about double that of the other neighbourhoods), which either means the buildings are higher or the room each person has is smaller. Considering the fact that Los Andes is becoming an economically significant neighbourhood like 16 de Julio (Durán Chuquimia, 2010), and the neighbourhood does indeed have much highrise, both explanations are possible.

**Table 5.2 Population Densities Per Neighbourhood, 2010**

	16 de Julio	Ballivian	Los Andes	Zona
<i>Population Density (inhabitants per km<sup>2</sup>)</i>	34,300	28,200	36,000	32,000
<i>Households with ≥3 People to a Bedroom</i>	29%	26%	37%	30%
<i>Number of People Per Bedroom, Per Household</i>	Mean: 2.2 25P: 1.5 75P: 3.0	Mean: 2.1 25P: 1.0 75P: 3.0	Mean: 2.4 25P: 1.5 75P: 3.0	Mean: 2.2 25P: 1.5 75P: 3.0

Overall, the population density of the Zona is 32,000 inhabitants per square kilometre. Compared to the population density of La Paz, which is 6275 inhabitants per square kilometre, it is very high (CIA, 2010a). This can be explained by the fact that it does not have rich areas like La Paz does, where the population density is very low. Compared to the city centre of La Paz, the population density is probably about the same. Next to this, in the Zona, households live cramped together in small houses, sometimes ten in a house of ten square meters. On average, there are less than 3 household members per bedroom. 75% of the households lives in a house with 3 or less household members per bedroom. In table 5.2 can be seen that about one in every three households experiences crowding, which occurs when there are three or more household members per bedroom. In Los Andes, this is more often the case than in the other two neighbourhoods. The crowding is explainable by the fact that for many, living in the Zona is all about the location. El Alto is the city of the poor, who therefore do not have much money to pay for space (see box 5.1). Therefore, families do move to an economically favourable location, but because these locations are expensive, they live cramped together. All in all, the second indicator for shelter deprivation is met for every third Zona household (UN Habitat, 2006).

As the Zona became more consolidated, different services were installed (Kranenburg, 2002): electricity, natural gas, liquid gas, running water, sewers, showers and baths, toilets, and kitchens. In 1992, 83% of the Zona households had electricity at their disposal, and 86% had running water. By now, almost 100% of the households has electricity, 97% has running water. Especially sewerage has been at the focus of attention, with a rise from 33% in 1992 to 95% in 2010. 94% of the Zona's households now have a separate toilet, and 95% have a separate kitchen. Having a separate kitchen in private use, in common use, or not having one at all, is moderately related to whether the inhabitants are settlers or stayers (see appendix 1.16). Stayers more often have a separate kitchen than settlers. This is logical, because stayers have had more opportunities to enhance their housing circumstances, especially since a higher percentage of stayers has ownership of the residence. For the other services, the differences appear between 16 de Julio, Ballivian and Los Andes, except for toilets. Regarding to electricity and running water, a strong relationship exists with the neighbourhood the household inhabits. Regarding to natural and liquid gas, sewers and shower or bath tub, that relationship is moderate (see appendix 1.17).

**Table 5.3 Servicing Per Neighbourhood, Per Household, 2010**

	Type of Use	16 de Julio	Ballivian	Los Andes	Zona	
<i>Electricity</i>	Private use	62%	57%	33%	52%	Strong Relationship
	Common use	37%	43%	66%	48%	
	Total	99%	100%	99%	100%	
<i>Running Water</i>	Private use	42%	46%	23%	36%	Strong Relationship
	Common use	55%	51%	76%	61%	
	Total	96%	96%	99%	97%	
<i>Natural Gas</i>	Private use	46%	36%	28%	38%	Moderate Relationship
	Common use	20%	24%	24%	22%	
	Total	66%	60%	52%	60%	
<i>Liquid Gas</i>	Private use	49%	52%	61%	54%	Moderate Relationship
	Common use	32%	24%	18%	25%	
	Total	81%	76%	79%	79%	
<i>Sewers</i>	Total	97%	89%	99%	95%	Moderate Relationship
<i>Shower/Bath</i>	Private use	37%	38%	28%	35%	
	Common use	44%	34%	41%	40%	
	Total	82%	72%	69%	75%	
<i>Toilet</i>	Private use	45%	56%	49%	49%	No Significant Relationship
	Common use	48%	39%	46%	46%	
	Total	97%	95%	95%	95%	
<i>Kitchen</i>	Private use	66%	62%	65%	64%	No Significant Relationship
	Common use	30%	31%	28%	30%	
	Total	96%	93%	93%	94%	

As can be seen in table 5.3, differences exist in servicing between the three neighbourhoods. Electricity and running water are mostly available for common use in Los Andes. In 16 de Julio and Ballivian, they are available for private use to a higher degree. Ballivian is best serviced with electricity, though in the other neighbourhoods it is only less than 1% of the households which does not have it. Though common use is prevalent in Los Andes, the neighbourhood does have the highest total percentage of households which have running water. 16 de Julio has the most servicing in natural gas. The differences are not very large, though. Regarding showers or baths, the differences are much greater. In Los Andes and Ballivian, a higher percentage of households does

not have a shower or bath compared to the households of 16 de Julio. 5% of the Zona households does not have a toilet, and 6% does not have a separate kitchen.

When comparing the access to services in the Zona to the access to these services in other urban areas, it becomes clear that in the Zona, an above-average percentage of households has access to running water, sewerage, and electricity. In 2008, 95% of the households of La Paz had access to running water, and 98% to electricity. 34% of all urban households in Bolivia had access to improved sanitation that year, and 78% of the households in La Paz did. Especially the access to improved sanitation is better in the Zona than in La Paz, and even more than in urban Bolivia overall (UN Habitat, 2009).

A difference exists between quantity and quality. Much of the servicing available is not entirely functional. For example, though most households have running water, in many cases it is not very well potable. Furthermore, power cuts occur (Acarapi, 2010; Durán Chuquimía, 2010). Therefore, drinking water and sanitation are largely available, but the water does not have a very high quality, and often it is not available for private use. However, improved sanitation is mostly available. This means the third shelter deprivation indicator is partly met, though to a lesser extent than in urban Bolivia overall, and the fourth indicator is not met (UN Habitat, 2006).

The fifth shelter deprivation indicator is a lack of tenure security. This is not an issue in the Zona, since it has been consolidating for decades. The government does not evict households which do not have legal ownership papers. Instead, a law is being written to grant them legal ownership (Mendez M., 2010). Therefore, there is a perception of tenure security, which is enough not to have a lack of security (Gilbert, 2002).

In table 5.4a, the present share of shelter deprivation is given. For the lack of durable housing, a lack of permanent floors are counted. Adobe walls are not counted, to be able to make better comparisons to the data of UN Habitat. A lack of foundations is not counted either, as the ground on the Altiplano is solid. For a lack of sufficient living space, 3 or more household members per bedroom is counted. For a lack of access to improved drinking water, only the households without any access to running water are counted. For a lack of access to improved sanitation, the households without any access to sewerage are counted. A lack of security is not counted, because there is none in the Zona; leastwise, not according to the definition Gilbert (2002) gives. These are compared to the numbers published for Bolivian slums by UN Habitat (2009).

In the table, it can be noted that lack of durable housing and lack of sufficient living space are the main shelter deprivations in the Zona. In Ballivian, housing is least durable, yet a higher percentage has sufficient living space, meaning the neighbourhood knows the least crowding. When looking at table 5.4b, which states the distribution of households by shelter deprivation, it becomes clear that the share of households with shelter deprivation is lower than is average in Bolivia. Furthermore, the percentage of slum households with no more than one shelter deprivation is higher than in Bolivia overall. This difference can be explained by two things. First of all, deviations may occur in measurement. The outcomes of this research may be lower than those of UN Habitat. For example, it is unknown whether the buildings in the Zona have foundations. This may or may not matter, because the ground on the Altiplano is solid. Also, the quality of the water was not measured, causing this factor to be overlooked in the statistics. Another explanation for the deviation is that the Zona is situated in a location which is largely serviced, as opposed to peripheral neighbourhoods and the countryside. It is therefore to be expected that it will have a lower percentage of slum households.

To be able to say more about the deviations in measurement, a comparison is made with the percentages which occur if the presence of adobe walls is included in the factor of lack of durable housing (which we will call the thicker definition of lack of durable housing). These are the percentages shown between brackets in table 5.4b. They show much higher percentages, whereas with the percentages when working with a thinner definition of durable housing are much lower than those of Bolivia. From this, we can conclude that the total share of slum households is about the same as that in Bolivia as a whole, meaning the distribution of good and bad housing is about the same as that of all urban and rural housing in Bolivia combined. Housing may, therefore, be better than that in the countryside, but worse than that in urban areas. Furthermore, the share of households coping with one shelter deprivation is higher in the Zona than is average in Bolivia, since both with the thinner and the thicker definition of lack of durable housing, these percentages were higher.

**Table 5.4a Shelter Deprivation Prevalence, 2010**

	<b>Lack of Durable Housing</b>	<b>Lack of Sufficient Living Space</b>	<b>Lack of Access to Drinking Water</b>	<b>Lack of Access to Sanitation</b>	<b>Lack of Tenure Security</b>
<i>16 de Julio</i>	57%	39%	4%	3%	0%
<i>Ballivian</i>	60%	26%	4%	11%	0%
<i>Los Andes</i>	53%	37%	1%	1%	0%
<i>Zona</i>	57%	31%	3%	5%	0%

**Table 5.4b Distribution of Households by Shelter Deprivation, Zona 2010, Bolivia 2008 (& thick definition)**

	<b>Slum Households</b>	<b>Households with One Deprivation</b>	<b>Households with Two Deprivations</b>	<b>Households with Three Deprivations</b>	<b>Households with Four Deprivations</b>
<i>16 de Julio</i>	35% (51%)	34.5% (35%)	0.5% (15%)	0% (1%)	0%
<i>Ballivian</i>	41% (63%)	37% (40%)	4% (22%)	0% (1%)	0%
<i>Los Andes</i>	42% (61%)	38% (49%)	3.5% (11.5%)	0.5% (0.5%)	0%
<i>Zona</i>	39% (57%)	35% (41%)	3.5% (15.5%)	0.5% (0.5%)	0%
<i>Bolivia</i>	50%	29%	14%	6%	1%

*Additional Source: UN Habitat, 2009*

## Box 5.1 Satisfied With What Little They Possess

The patio which can be seen in figure 5.2 belongs to Mr. Leon Alanoca Mamani. He lives in a small house in Ballivian with six other people. Mr. Alanoca Mamani was born in Achacachi, a rural village in the province of Amasuyos, a long time ago. He is around 65 years old and is one of the first generation of Alteños. He does not speak Spanish very well, which means his son has to help him with the interview. When he was fifteen or sixteen years old, he moved from the countryside to La Paz. There, he rented a room which to him was very unsatisfactory. It was too small and too expensive, and badly located within the city. Yet, he had no money and hence no other choice but to live “down below”, as he calls it, for four or five years. Then, he got married and moved to a rental home up the road from his current residence. They lived there for about ten or fifteen years, after which they could buy their current parcel in 1973. They could not afford much, because land was already expensive for poor people. But they thought it was a good location, and so they bought a vacant lot and built their house on it (see figure 5.3). Then, the children came.



Figure 5.2 Patio

Still, the housing costs are higher than Mr. Alanoca Mamani would like them to be. But they have always stayed in Ballivian, because the land rose in value more quickly than in other parts of the city. As the neighbourhood consolidated, the house was slowly serviced with electricity, running water, and sewers. Later, gas pipes were laid. At first, he says all the services are present.



Figure 5.3 Mr. Alanoca Mamani and His Son

However, when asked what he thinks of the services, he says power cuts occur and the water is not potable, next to the fact that the street is not paved. Yet, he does not seem to care much about the fact that the servicing is dodgy or that they have a dirt floor. And even if he did, it would not matter. He has no intention to move. He has lived here for forty years and has built up a professional network for the crafts he does. He is the owner of the house and wants to leave it to his children. He wants them to have a life and would do anything to make that possible for them. He has worked very hard to establish what he has, and feels contented even though he does not like the fact that the servicing is not very good. He is happy, because he has services, which is not the case in other parts of El Alto. He is happy, because he is the owner of a house which he can pass on to his children. He has little, but he is satisfied with what he has.

## 5.2 Perceptions

According to Randall et al. (2008), the perception of their quality of life is linked to both neighbourhood stability and to residential mobility. The level of intra-urban mobility is related to the level of attachment have to the place they live in. The more people are attached to the place they live, the less they are inclined to move.

Therefore, it is important to research the perceptions people have of their residence and of the area they live in, in order to be more able to predict how residential mobility will evolve in the future. This information can be used to adapt institutions if necessary, and to set up programs which will provide the kind of housing people need. Furthermore, it is important to investigate this subject in order to be able to possibly enhance situations according to the people's wishes, to enhance neighbourhood stability.

Through to a western eye, the housing situation in the Zona is not up to standard at all, Zona inhabitants are pretty satisfied with it. As can be seen in figure 5.4, a strong relationship exists between the neighbourhood the respondents live in and satisfaction with the safety of the neighbourhood and social networks (see also appendix 1.18). In Los Andes and 16 de Julio, heads of household feel less safe than in Ballivian, though in 16 de Julio, the largest group of people is positive about safety. In Los Andes, social networks are less satisfactory to the inhabitants than in the other two neighbourhoods.

The relationship between neighbourhood and satisfaction with residence size, with location and with neighbourhood beauty is moderate. Inhabitants of 16 de Julio and Los Andes tend to be pretty happy with the location of their home. A very large proportion of Ballivian inhabitants is at least partly satisfied with the size of their residence. Inhabitants of Los Andes are least satisfied with how the neighbourhood looks, and those of 16 de Julio are the most satisfied with this.

In general, Zona inhabitants are most satisfied with the location, size, and general state of their home, as well as with the public services available. Least satisfaction exists with neighbourhood safety and social networks. Safety is an issue in 16 de Julio and Los Andes. In fact, there is a strong relationship between neighbourhood and feeling safe: in Ballivian, heads of households feel safer than in the other two neighbourhoods (see appendix 1.19 and box 5.2).

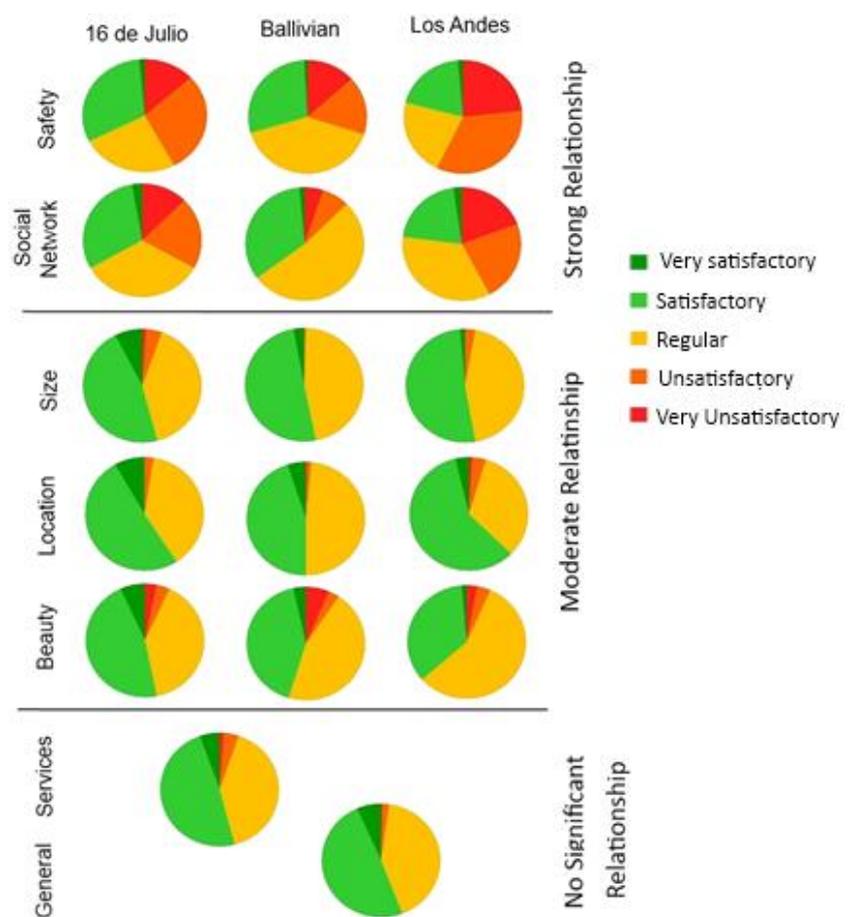


Figure 5.4 Perceptions Per Neighbourhood, 2010

### Box 5.2 Neighbourhood Safety

Though Mr. Alanoca Mamani, who lives in Ballivian, is dissatisfied with the services provided, he does feel safe in the neighbourhood. This is not the case for everyone. Nivia Velasquez, who lives in Los Andes, tells me the streets are not safe. Especially on Fridays, when the men tend to get drunk, a lot of fights and other problems occur. Ms. Tapia Quispe from box 4.1 tells me the same thing. On Friday afternoons, she does not dare walk through 16 de Julio, though often she needs to be there for economic purposes. Four years ago, she was assaulted by three aggressive drinkers. She has been afraid to walk the streets on Fridays ever since, and is now always accompanied by her son.

Though partial contentment is widely spread about some of the residential attributes, dissatisfaction with the neighbourhood is more widespread than that with the residence. In figure 5.5, a comparison is shown regarding the perception of the first residence respondents inhabited in the agglomeration of La Paz and El Alto, and the current residence. Again, neighbourhood safety and social networks gain the lowest scores. Apparently, people are dissatisfied with these issues in more cases than occur regarding the other perception categories. The situation regarding safety and social networks is more often worse than the other perception aspects. For the rest, almost half of the respondents are at least partly more satisfied than before. Most people feel the same about their

first and their current residence, though between 10% and 15% find one or more aspects of their home or neighbourhood worse than was the case when they lived in their first residence within the agglomeration.

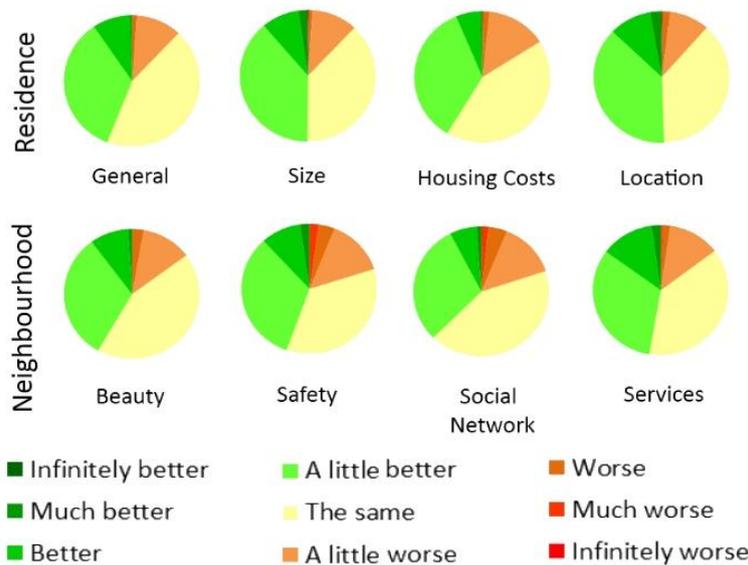


Figure 5.5 Comparison of Satisfaction Between First and Current Residence

### 5.3 Improvement

As described in chapter 1, if a household wants to improve their housing situation, it has two choices: the family can either incrementally build or move. In the Zona, 79% of the households want to improve their housing situation: 3% wants to move, 61% wants to incrementally build, and 15% wants either or both.

In the past year, 12% of the Zona households have improved their current residence by expanding or improving the quality. Because 19% of the Zona households moved into their current residence in the past five years, the same number of households moved away from their residence in the Zona. This means, in the past five years, turnover rate was 4% per year. Currently, 0.5% of the Zona households is going to move and 10% is going to either move or renovate. Since the turnover rate has been decreasing in recent years because of the furthering neighbourhood consolidation, it is to be expected it will not rise or fall much in the next five years, meaning not everyone who says they are going to move is actually going to do so. Current trend is that incremental construction has become more important than residential mobility.

Families which are going to move, mostly (63%) want to do so within El Alto (see figure 5.6a). 19% wants to move out of the agglomeration of La Paz and El Alto. Households which who are going to renovate, mostly (66%) want to build extra rooms or an extra floor (see figure 5.6b). Home improvement is important for Alteños, as their house gives them status. Therefore, it is important enough to take out a loan for. 17% of all loans taken out in the past five years have been spent on incremental construction, and 11% on buying a parcel or a house. Loans are mostly used to start a business (32%) or buy working tools (21%), and not for housing. However, we cannot be certain of those numbers, since many people do not tell strangers whether they have taken out a loan, out of fear the person they are talking to has come to ask the money back (Vargas Ticona, 2010). For a case study on how a household comes to a decision to improve, see box D.1.



Figure 5.6a Planned Movements of Improving Zona Households, 2010

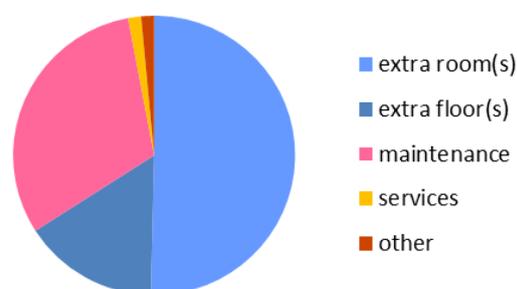


Figure 5.6b Planned Renovations of Improving Zona Households, 2010

Yet, 44% of the households who want to incrementally build their house is unable to do so (see table 5.5). Reasons for that are mainly a lack of ownership (52%) and a lack of money (24%). 17% of the households who want to move is unable to do so. Furthermore, 30% of the households who want to either move or renovate, cannot do either. Reasons for this are lack of ownership (46%), lack of funds (45%), and lack of time (9%). People cannot renovate a house that is not theirs, even though they certainly would want to. If there is no money available, it is impossible to renovate. And if everyone has to work very hard, there is no time to paint the house or build an extra room. This confirms what has already been said in the literature on residential mobility and housing: the poor can only make constrained residential choices, and socio-economic status influences the residential choices households can make (Dieleman, 2001; Durán Chuquimia et al., 2007; Randall et al., 2008). There is no significant relationship between income and the possibility to move within the next six months (see appendix 1.20), though according to Randall et al. (2008), this could be expected. This is explainable by the fact that income in the Zona is so low that even households with the highest income are constrained to such an extent that all households have about the same residential mobility opportunities.

**Table 5.5 Percentages of Households Wanting Improvement and Realising it**

Wish to Incrementally Build	61%	Going to Incrementally Build	34%
Wish to Move	3%	Going to Move	2%
Wish to Do Either or Both	15%	Going to Move and/or Incrementally Build	11%

Next to socio-economic status, the context of the Zona may also cause difficulties for households with a wish to move. The lowering turnover rate (see chapter 4) causes a decrease in moving opportunities, because less residences will be available on the housing market (Dieleman, 2001). Furthermore, the lower number of available residences probably means house prices have risen. When correcting the purchase prices of the residences for inflation (see appendix 1.21), the prices residence of the same value would have is obtained. These prices are compared to the actual value respondents say their residence has. Outcome is that half the residences which were bought after the year 1990, have increased in value with more than 50%. This means, the houses which were purchased after 1990 have generally known a strong increase in price in a much shorter time. This is in line with the decrease in turnover rate causing a larger difference between demand and supply. On top of this, 16% of the households who bought their current residence after 1990 found their residence decreasing in value. This either signifies a turbulent housing market or bad home economics, which would both need changing. However, because of the low response in this matter, there is no certainty as to whether this is an actual housing trend or not.

The rise in house prices may have been due to investments made into the residences. However, this is not the case. Monthly housing costs are around 500 bolivianos for most home owners. Rent prices are between 100 and 200 bolivianos a month. This means owning a home has much higher monthly housing costs than renting one. However, most of the residences which saw an increase in value did not incrementally build their house in the past year, nor are their monthly housing costs higher. This means, it is a true rise in housing value, because the value of the houses did not rise only because much was invested in it.

In the end, 32% of all Zona families are left in a housing situation they are dissatisfied with enough to want to renovate or move, yet without being able to do anything about it. This has a negative impact on development, as housing often gets priority above education and health care (Durán Chuquimia et al., 2007). The number of 32% is lower than the 39%-57% between which lies the percentage of households living with shelter deprivation. This means, the households have lower housing standards than UN Habitat.

## 5.4 Concluding Remarks

Housing conditions leave much to be desired. The five indicators UN Habitat has stated for shelter deprivation, being a lack of durable housing, a lack of sufficient living space, a lack of access to improved drinking water, a lack of access to improved sanitation, and a lack of tenure security, are at least partially met, meaning part of the Zona population is deprived of sufficient shelter. Crowding and a below-average housing standard are the most important shelter deprivation factors. 16 de Julio has the best housing circumstances, because it is the least poor. Los Andes has the lowest housing standard, which can be explained by the fact that it is the poorest neighbourhood, although economic activities are starting to come up there. Overall, shelter deprivation occurs less in the Zona than is average in Bolivia.

Though partial contentment is widely spread about some of the residential attributes, dissatisfaction with the neighbourhood is more widespread than dissatisfaction with the residence. In this respect, safety and social networks are the main concerns of Zona inhabitants. For the rest, most families feel the same about their first and their current residence, though between 10% and 15% find one or more aspects of their home or neighbourhood worse than was the case when they lived in their first residence within the agglomeration.

Most Zona households have incremental construction as their housing strategy, as opposed to moving house. About one third of the families wanting improvement would either renovate or move house, or do both. Many households wanting improvement cannot realise it, because of a lack of ownership, a lack of funds, or not being able to find a new residence. Loans are mainly used for business, and only for housing in almost one third of the cases. Housing prices have gone up because of the lowering turnover rate and the further development of the area into economically favourable land.

After everyone who wants to improve and is able to has either moved or renovated, still almost 1 in every 3 families inhabiting the Zona will be in a housing situation they are dissatisfied with enough to want to renovate or move. Next to this, not everyone who says they are going to move will actually move. The Zona has a less low housing standard than is average for Bolivia. These things form a measure for the overall development of the Zona. Housing often gets priority over education and health care, and if a third of the Zona households has no opportunity to be in a housing situation they prefer, they certainly will not pay attention to these other important elements of development, as becomes clear from the disproportionately high contribution housing has to human development in the Zona. In the next part of the thesis, attention will be paid to what public, private and civil society organisations do to improve the housing situation.



**Part 4**

**Policies  
and  
Interventions**

## Chapter 6 Policies and Interventions

Propaganda in favour of the incumbent government can be seen throughout the cities of La Paz and El Alto. All effort is made to gain popular trust. Researches done by state officials vary in results and are often either exaggerated or understated for the same purpose (Durán Chuquimia et al., 2007). For example, statistics stating the number of residences realised include those residences which the inhabitants had to build themselves. In reality, the number of residences actually realised by the government were much lower than stated. It is time to have a look at what public interventions have reached, and what influence civil society has had on the housing situation in El Alto and the Zona. Partial questions 6 and 7 will be answered: What housing policies does the Bolivian government have, and what interventions does it employ? And: What influence does civil society have on the housing situation in El Alto?

### 6.1 Public Policies

With regard to the housing of the poor in El Alto, the government (i.e. the Ministry of Public Works, Services and Housing, and as part of this, the Vice-Ministry of Housing and Planning) has had changing attitudes, the most important one being to choose in favour of self-help housing instead of evicting land squatters. The “new State”, which exists since 1985 and aims to be neoliberal, has come up with a national housing plan in order to ameliorate the housing situation of, among others, El Alto. In combination the dollarisation of the housing costs, which gave rise to escalating problems between owners and tenants, thus causing a decrease of rental housing, three organisations were called into being. The first was the Instituto de Vivienda Social (IVS), which was destined to advance public works, the second was the Fondo Social de Emergencia (FSE), for realisation of technical tasks and housing plans, and the third was the Fondo Nacional de Vivienda (FONVI), which served to manage the financial arrangements of the execution of the housing plans. The FSE was called into being mainly to counteract social consequences of the drastic economic measures taken since 1985, like unemployment. This gave rise to a promotion of self-help housing (Durán Chuquimia et al., 2007; Mendez M., 2010).

#### 6.1.1 Plan Nacional de Vivienda Popular

The projects carried out by the combination of the IVS, FSE, and FONVI, were not satisfactory, however. Many people did not understand what the exact costs of the construction were, and considered their house paid for when they had built it themselves. Many were not satisfied with the servicing or the materials, which were often faulty. Because of the complaints, the Plan Nacional de Vivienda Popular (PNVP) was called into life as part of the Plan Nacional de Desarrollo (PND). During the 1990s, the aim was to build 80,000 homes for about 350,000 people. Next to the FONVI, FONVIS was called into life: Fondo Nacional de Vivienda Social. This meant, social housing became a focus of the Vice-Ministry of Housing and Planning. The initiative aimed to include the poorest. These were mostly sites-and-services projects, for which people could get a loan from the FONVIS.

However, still the results were not as had been the aim (Arispe Camacho, 2010; Mendez M., 2010). Evo Morales, who became president in 2006, installed a new housing policy, not leaving housing completely to the private sector anymore. As part of the new National Plan for Housing, the Programa Vivienda Social y Solidaria was initiated.

## 6.1.2 Programa de Vivienda Social y Solidaria

Purposes of the Programa de Vivienda Social y Solidaria (PVS) are:

- to establish and consolidate mechanisms facilitating access to a dignified residence;
- to prioritise households with an income below the poverty line;
- to generate employment by means of self-help construction;
- to attend to the residential need of labourers (Vice-Ministerio de Vivienda y Urbanismo, 2010).

To apply for the PVS, one needs a photocopy of their identity card, a declaration of non-ownership of a house, payslips, and electricity or water bills. Next to this, documents need to be notarised, which costs money. Applicants are not allowed to be in debt. A choice needs to be made as to whether a parcel will be bought, on which the house will be constructed by means of self-help, or a house will be bought. Mostly, only readily built houses are available. To be able to buy a house or a parcel, different kinds of legal papers are needed. Construction of a residence costs around US \$8,000, though officially, people have the possibility adapt the design to their own wishes, which means prices may vary. In practice, though, this does not happen much; produced residences are mostly not constructed by means of incremental self-help housing (see figure 6.1). The costs of every type of construction or renovating action is specified by the Vice-Ministry. Officially, the Vice-Ministry strives for participatory urban planning, especially by means of the neighbourhood councils (Mendez M., Vice-Ministerio de Vivienda y Urbanismo, 2008). In reality, participation is minimal (Durán Chuquimia, 2010; Acarapi, 2010).

Once the application is accepted, employers save 2% of their employees' loan in a housing fund. Of this money, in total usually around US \$20,000 labourers can buy a residence after 20 years of saving (Mendez M., 2010). This is more than the earlier mentioned US \$8,000, because roads have to be built, servicing has to be realised, land has to be bought, and labour needs to be paid. The money people invest is only used for the land and the house itself, not for the procedures. Funding of the PVS is done by bilateral and multilateral aid as well as mandatory contributions by municipalities and prefectures (Vice-Ministerio de Vivienda y Urbanismo, 2010).



Mercedario



Hugo Chavez



El Vergel

**Figure 6.1 PVS Projects**

Source: Andrade, 2010

Twenty-eight projects are carried out under the title PVS (see table 6.1 and figure 6.1). While applying these different projects, irregularities have occurred between 2006 and 2008, especially in Zona Cristal. The government is still resolving the issues and disagreements. One of the tools they applied for this is the Unidad de Transparencia mentioned in chapter 2. Another has been the instalment of a regularisation committee, which revises all processes (Mendez M., 2010).

**Table 6.1 PVS Residences in La Paz and El Alto**

Area of El Alto	Neighbourhood	Number of Houses
Zona Periferica 4: Armonía	Entel	250
Zona Sur 3: ABCD	Vergel	250
El Alto Sur 1: Adela	Mercedario	100 & 200 in progress
	El Salvador	90 in progress
El Alto Sur 4: La Merced	Cristal	625
	Hugo Chavez	344
	Senkata	625
Total		2194 & 290 in progress

*Source: Andrade, 2010*

The Unidad de Titulación of FONVI/FONVIS works to give people ownership papers of the houses constructed by means of government projects. The money not invested in the residence is given back to the home owners. In 2010, this amounted to 450 Bolivianos per home owners (Arispe Camacho, 2010). Financing is being done with the help of private banks, mainly Banco Unión. This means, the bank is a stakeholder in the project. Because banks are private institutions, they aim to profit by everything they do. The use of this bank by the government therefore means Banco Unión is a stakeholder in government housing projects. At present, a law is being written which John Turner since long proposed: one which gives squatters ownership to the land they inhabit. Home owners are not yet given legal ownership.

In neighbourhoods where the state has done interventions, the relationship between adequate housing and ISDH is higher than in those the state has not intervened in. This means, state intervention has indeed meant improvement of the housing situation in those parts (Durán Chuquimia, 2007). Questions can be raised, however, as to how effective and how extensive these interventions are, and how much impact they have. The majority of the neighbourhoods of El Alto still have the same ISDH after state intervention, though in some cases progress has been made. Many housing which is installed by the PVS lack basic servicing (Acarapi, 2010). Next to this, these projects have still mainly been effective for the more affluent population and not the poorest. So far, the Programme for Social Housing and Solidarity does not reach its purposes.

Three problems annul the effects of public housing policies in El Alto. The first is the incapacity of the national economy to create the necessary amount of goods and services necessary for social housing. Next to this, the incapacity to purchase these same goods and services at prices the state considers to be reasonable for the poor population is an issue. The third problem is the inefficient organisation of the housing market, aggravated by the omnipresent inefficiency and bureaucracy of institutional organisation (Durán Chuquimia et al., 2007). To this day, these problems exist. The government is unable to straighten the discrepancy between their policies and the housing needs of the poor. Policies pass by the informal market almost completely. Still, the more affluent people are the only ones being reached, and the poorest have to fend for themselves. The ones entering the programme receive unsatisfactory housing: the sites-and-services projects are mainly only sites projects, and the possibilities for self-help housing are minimal, since the houses are mostly already built, making them more expensive (Acarapi, 2010). Though serious efforts have been made, the

government has been unable to reach the truly poor. It has only had about 40 years of experience in the field of housing and planning. All this means institutional strengthening is necessary.

### **6.1.3 Aided Self-Help Housing**

Though the PVS does reach some of the poor, the programme is only effective for people who labour in the formal market. El Alto's informal economy is largely ignored by the programme, though many, if not most, of its residents are active in it. Also, the differentiated assisted self-help approach advocated by Balchin & Stewart (2001), Lizarralde (2011), and Bredenoord & Van Lindert (2010) has been recognised by the Bolivian government, yet its application has not been realised. The price of the housing provided is approximately US \$20,000, instead of varying between US \$1,000 and US \$15,000 as proposed by Bredenoord and Van Lindert (2010). Self-help formal housing is also something the government advocates. Officially, within the PVS, self-help construction is possible and even preferable, and basic as well as additional assistance is offered. However, in practice, the assistance provided is minimal, and self-help formal housing hardly occurs (Acarapi, 2010; Durán Chuquimia, 2010). The government aims to employ differentiated policies, yet has thus far failed in actually doing so. In the past, a neighbourhood upgrading programme was employed, which was the original ground for this research. However, this was a one-time activity.

The Vice-Ministry of Housing and Planning does endeavour to teach self-building inhabitants of El Alto to construct their residence in an urban design instead of a rural one. To this end, a manual for self-help construction was written, along with a document which states technical requirements of housing (Direcciones de Vivienda, 2007). These manuals can be found only on the internet though. As it is a large document, the poorest will not be able to print it. Accessibility to manuals and to the time to read it presents a problem. Next to this, it may be hard for people to understand the manuals.

In practice, the government does not pay much attention to self-help housing, though in official documents, its importance is stressed (Villegas Quiroga, 2006; Kinn Franco et al., 2007). Officially, aided self-help housing is part of the PVS, and some initiatives for incremental construction exist. For example, if a household has a dirt floor, it can apply for instalment of a cement floor with the PVS, a flyer says. This will make the durability of housing comply at least partly with the first UN Habitat (2006) shelter deprivation indicator. It costs between US \$6 and \$25, depending on the design (Vice-Ministerio de Vivienda y Urbanismo, 2008). To apply for this, people need to have ownership papers. These, many people do not have. Next to this, only the more affluent people with an education can understand the procedures and actually receive a concrete floor (Durán Chuquimia, 2010). The strict requirements for application mean not everyone can apply. Especially the demand of not being in debt, which also counts for the healthy floor project, is a very hard one to meet for the poorest. This is a realistic requirement, though, as incremental construction should only occur at times when households indeed have the financial possibilities for it (Bredenoord & Van Lindert, 2010; Lizarralde, 2011). Otherwise, the families will only fall into debt even further.

## **6.2 Civil Society**

In El Alto, civil society is as important as the government, of not more so. Social capital plays an important role for housing conditions, as Kan (2006), states. Family relations are of great importance for residential mobility and housing. In El Alto, different organisations exist which belong to the civil society and interact with the public sector.

### 6.2.1 Neighbourhood Councils

Each neighbourhood has its own neighbourhood council (*junta de vecinos*). In the Zona, six councils are active: three in 16 de Julio, two in Ballivian, and one in Los Andes. Each council has its own chairman. Furthermore, each block in the concerning neighbourhood has its own leader (*jefe de manzano*). Neighbourhood councils are very important for the interaction of local people with the government (Acarapi, 2010; Durán Chuquimia, 2010). Convening neighbours can offer plans to the municipality or a ministry. For example, if a neighbourhood council decides it would like to improve the neighbourhood by paving the road, it can make a plan for financial contribution of each family. Representatives of the council then go to the municipality to ask permission or to get help in realising the plan. Also, representatives of neighbourhood councils can get together and make a lobby to the government. This way, locals can unite themselves and influence the policy-making process. The neighbourhood councils are a bridge between the locals and the public sector. Because of the importance of these councils, it is a very honourable job to be council chairman or block leader. People who have a prominent position in the neighbourhood council also have a strong social position.

### 6.2.2 RED Hábitat and FUNDAPROVI

The urban and rural habitat project and research organisation RED Hábitat started its activities in 1993 with a Project of Improvement of Housing (PMV: Proyecto de Mejoramiento de Vivienda), which ran until the year 2000. This project consisted of handing out microcredits for home improvement or the legalisation of ownership. Near the end of the year 2000, the organisation FUNDAPROVI was founded, which took over this work, and RED Hábitat continued with the other projects it had set up.

RED Hábitat has several programmes: Human Right to Housing, Water and Climate Change, Environmental Management, Risks and Climate Change, and the Urban Programme. By means of these projects, the organisation aims to make life in El Alto economically and environmentally sustainable. The programme Human Right to Housing deals with the participatory construction and management of public laws and policies with regard to the human right to housing without prejudice. It aims to apply enforceability and social control in state management at all levels, and to open up space for Latin American interchange considering the human right to housing, in order to define action strategies at a regional scale.

In the past years, the organisation has proposed law changes considering solidarity financing and technical assistance offered by the state. Also, a proposition was made to decentralise housing projects, so that not the national state, but the municipality will be responsible for housing projects. At this time, it is still the national government which concerns itself with housing. However, technical assistance is provided by means of the PVS, and solidarity financing is being employed by means of the same programme (RED Hábitat, 2010).

Special interest is being paid by RED Hábitat to the situation of women. Next to this, institutional strengthening has been happening at the governmental and municipal organisations. Raising awareness and lobbying for the local people is what this organisation does (Acarapi, 2010).

The most important housing issue is how to finance it. Because of the involvement of private banks and the interest they ask, costs multiply. Many Zona inhabitants have such a loan, though they do not want to admit it to strangers out of fear that person is coming to ask for it back. FUNDAPROVI (FUNDACIÓN PRO Vivienda), however, is a non-profit organisation, which means people can get microcredits without the risk of multiplying debts. 60% of FUNDAPROVI's clients is a Zona inhabitant.

In 16 de Julio, about 80 households have a loan with FUNDAPROVI, and in Los Andes, about 40 (Vargas Ticona, 2010). Only home owners can get a loan, which has to be used for home improvement. The organisation makes sure beneficiaries will be able to pay back the loan, before it will give them one. Not everyone is therefore applicable. The organisation does not hand out money for free, but does not ask for interest either.

### 6.2.3 Other Initiatives

Incidentally, housing projects with local initiative are carried out. Churches and schools in La Paz and El Alto at times assemble a group of people to do construction work in different parts of El Alto. They bring materials and help locals build a new room, paint their house, or construct a cement floor, for example. These initiatives are mainly brick-and-mortar activities, which are often not sustainable. However, the poor do receive help in their housing situation through these projects. Other local initiatives entail, for example, the instalment of internet in different neighbourhoods in the south of El Alto. It is hoped that through access to information, locals will be able to make educated choices (Durán Chuquimia, 2010).

## **6.4 Concluding Remarks**

Different public housing programmes have been installed and have ended because the poor could not be reached. In the past, neighbourhood upgrading took place, but this is now completely left to the neighbourhood councils. At this time, small sites-and-services projects are being carried out which aim to reach the poorest, but only partly succeed in doing so. The housing quality of these projects leaves much to be desired, self-help housing is hardly possible because of the standardised housing which is constructed in advance, and services are often lacking. Next to this, people who labour in the informal economy are not reached. Civil society tries to intervene in the interaction between the different stakeholders. Progress is being made, but it is slow. Institutions need to be strengthened, in order for a more efficient and effective interplay between roles to be possible. As long as incremental housing is not incorporated in the policies, most Alteños will not be reached.



# **Part 5**

# **Discussion and Conclusion**

## Discussion

### D.1 Household Decision Making

The potential of the residence itself in relation to household characteristics as well as neighbourhood factors indeed influence residential mobility to and within the Zona, as Dieleman (2001) states.

In accordance with Dieleman (2001) and Randall et al. (2008), a change in marital status has indeed been a motive for a number of Zona inhabitants to move to their current residence. Also, the need to be independent plays a role. The three life stages of bridge-headers, consolidators, and status seekers, as Turner (1968) and Klak & Holtzclaw (1993) have defined them, have in the past occurred in the Zona, and resulted in according neighbourhood functions, as this and previous research (Kranenburg, 2002) makes clear. The life cycle people are in does indeed influence residential mobility, as it is stated as a motive to move. Next to this, the function of the Zona within the agglomeration of La Paz and El Alto has changed from a peripheral one, its inhabitants being mainly consolidators and status seekers, to a central one, with bridge-header inhabitants as well as consolidators. Status seekers can be found in the area as well if they are home owners. Tenants who become status seekers tend to move to the outskirts of El Alto, where land is available as well as cheaper. Home owners sometimes move to the outskirts as well, because selling their central plot and buying one in the periphery of the city will leave them with capital.

As Kan (2006) and Randall et al. (2008) state, family relationships and social capital are indeed important for residential mobility. This can already be seen in the fact that during the urbanisation phase, people from the same rural towns formed their own neighbourhoods in El Alto. In accordance with Kranenburg (2002), family is a motive for residential development.

The number of rooms has turned out to be an important residential mobility factor, as it is connected to one of the five shelter deprivation indicators UN Habitat (2006) uses to measure housing quality in developing countries. However, residence size is becoming a less important motive to move for Zona households. Households suffering crowding do have a higher incentive to move, which is in accordance with Dieleman (2001) and Randall et al. (2008).

The money which needs to be spent on housing every month indeed has an influence on residential choices, as Dieleman (2001) and Randall et al. (2008) state. This is related to income, which indeed turns out to have an impact on residential mobility. The low level of income poses constraints. Each time a family has the financial opportunity, it will improve their housing situation (Bredenoord & Van Lindert, 2010).

Employment does indeed play a role in residential mobility, as Dieleman (2001) and Randall et al. (2008) state. People come to the Zona in search of employment, meaning they will find a formal job or move around on the informal commercial market.

Of importance for residential mobility in developing countries is the availability of services (Randall et al., 2008). This is a difference with mobility in western countries, as servicing is mostly available there. The question whether servicing is available in certain areas indeed influences residential mobility, as servicing is an important housing priority, especially for (semi)tenants. As stated in chapter 5, many of the servicing in the Zona does not function properly. More research is necessary into the quality of the services provided. Also, the availability of Internet, telephone and television could be added to the questionnaire.

The type of tenure is one of the most important factors, in accordance with what has become clear from multiple secondary sources. A change in ownership status is indeed a reason for residential mobility. As Turner (1968) and Mangin & Turner (1968) have stated, households with a different type of tenure indeed have different housing priorities. Tenure type is indeed related to the life cycle people are in, as Klak & Holtzclaw (1993), Randall et al. (2008), and Gilbert (1993) have stated. Home owners turn out to have less of an incentive to move, as could be expected (Kranenburg, 2002). Home owners are not more affluent than tenants or semitenants. This could be expected, though according to Gilbert (1993), this has been less distinctive in Latin American cities. Indeed, in accordance with the latter, in the Zona, home owners do not have a significantly higher income than tenants or semitenants. The trend of new home owners even having a lower income than tenants, as has been the case in other Latin American cities (Gilbert, 1993), is not present in the Zona.

The perceptions Zona inhabitants have of their safety and social networks in the neighbourhood do play a role in their household decision making. However, it is not the status of the neighbourhood which plays a role, but the economic function the Zona has. Thus, a difference can be noted with Dieleman (2001). This is in accordance with Kranenburg (2002).

Proximity to work has turned out to be a very important factor in the Zona, in accordance to Dieleman (2001) and Randall et al. (2008). As it is a commercial neighbourhood, it attracts employment. The frequency of public transport was not explicitly mentioned as a motive for residential mobility. However, indirectly, it was mentioned when the central location of the Zona was mentioned, and the ease by which it is reachable.

### D.1.1 Constrained Choices, Differences Between Groups, and Context

What has already been said in the literature on residential mobility and housing, is confirmed: the poor can only make constrained residential choices, and socio-economic status influences the residential choices households can make (Dieleman, 2001; Durán Chuquimia et al., 2007; Randall et al., 2008). Within the Zona, there is no significant relationship between income and the possibility to move within the next six months, though according to Randall et al. (2008), this could be expected. This is explainable by the fact that overall, income in the Zona is so low that even households with the highest income are constrained to such an extent that all households have about the same residential mobility opportunities. The theory of constrained choices is confirmed by the fact that one third of the households is unable to improve their housing situation, albeit wanting to. The decision not to move or not to renovate is indeed often brought about by a lack of funding or time, like the Randall et al. (2008) state, which means choices are constrained (Dieleman, 2001; Hooimeijer et al., 1996). Next to this, the unavailability of housing does indeed constrain mobility choices, as Dieleman (2001) states. The general housing shortage poses a constraint, meaning many households cannot find residence to move to. This is related to their socio-economic status: within their own possibilities, no housing is available (Durán Chuquimia, 2007&2010; Acarapi, 2010).

In accordance with Kranenburg (2002), indeed differences exist between settlers and stayers. Settlers have significantly higher income than stayers. Settlers more often moved to their current residence from within the Zona or within El Alto, which shows intra-urban mobility is increasingly becoming important. The size of the residence is less important for settlers than for stayers.

In El Alto, the international and national state of the housing market do not play a role. This difference with Dieleman (2001) is explainable by the fact that residential mobility theories tend to be mostly western. They need to be adapted to the institutional context of developing countries, and in this case, of Latin American developing countries, to prevent institutional monocropping (Portes, 2006). The context of the housing market in El Alto is mainly a local one, on which the

national government has an influence, since housing policies have not been decentralised. The role of neighbourhood councils in inclusive urban planning is very important (Wakeley, 2000). This would be an interesting field of study.

## **D.2 Housing Quality and Incremental Housing**

In the case of El Alto, and perhaps that of other Latin American cities, the existence of a housing deficit plays an important role, as the literature states (Balchin & Stewart, 2001; Bredenoord & Van Lindert, 2010; Landman & Napier, 2010; Joshi & Khan, 2010; Lizarralde, 2010).

When comparing the shelter deprivation indicators of UN Habitat (2006) to the housing norms as stated by the Direcciones de Vivienda (2007), it becomes clear that the technical norms as stated by the Bolivian government are an expanded form of the shelter deprivation indicators. Much resemblance exists, but the technical norms are more extensive.

Multiple shelter deprivation elements used by UN Habitat (2006) as an analytical tool, are connected to factors influencing residential mobility. Lack of living space connects to the number of rooms, lack of potable water connects to servicing with taps, and lack of improved sanitation is connected to servicing with sewerage.

Chapter 5 asks the question why some residences bought after 1990 have decreased in value and whether this is an actual trend. If it would be, and the reason for it is bad home economics, this means Zona inhabitants need education in this to prevent this from happening in the future. Their house is their greatest asset (Durán Chuquimia, 2010), and so households need to increase its value to be economically secure. Another reason could be that the housing market is turbulent, perhaps because of the recent changes in residential mobility patterns. This too would need alteration in order to offer Zona inhabitants more economic security. This would therefore be an interesting research topic.

Incremental housing is indeed the most important housing strategy in El Alto. In a developing country like Bolivia, the housing market is largely informal (Morris et al., 2008). This is a difference with the general housing and mobility theory as described in the literature, which is mostly western. Permits are not sold, and the housing market is much harder to control. What El Alto needs is policy incorporating the informal economy. To this end, housing models need to be created which suit the informality of the housing market. This is in accordance with Bredenoord & Van Lindert (2010), Balchin & Stewart (2001), Joshi & Khan (2010), Landman & Napier (2010), and Lizarralde (2010). A differentiated approach is officially being embraced by the Ministry of Public Works, Services, and Housing. Though its application is lacking, the importance of pro-poor housing policies is recognised. Inclusive strategies are being employed in El Alto, by means of the neighbourhood councils. Next to this, inquiries can be made as to government policies. The worth of inclusive planning is being recognised, in accordance to Wakeley (2000).

## **D.3 Concluding Remarks**

All in all, no important differences were found with the literature provided, which means the conceptual model does not need revising. Box D.1 gives an example of how the different concepts mentioned in the literature play a role in the decision making process of an individual household. It has become clear that in El Alto, residential motives created the housing market, and the housing market in turn influenced residential mobility. The housing market being drawn around the residential mobility model, as Dieleman (2001) proposes, is a realistic approach, because once a housing market has been established, it influences residential mobility much more than vice versa.

In the case of El Alto, and perhaps that of other Latin American cities, the existence of a housing deficit plays an important role, meaning the housing market itself needs alteration by specially designed policies. Right now, the government is not included in the conceptual model, which is correct, because the government does not have much influence on the actual housing market. Yet, maybe it should, because the housing market as it is does not satisfy the housing needs of the poor.

### Box D.1 The Road to a Dream

Let us take a look at the conceptual model once again. We see how constrained choices are made. Each term represents a part of real life for Alteños. Mrs. Mamani\* came to the Zona because of factors influencing residential mobility. When she entered a new life stage, she entered a new household stage at the same time: she got married. To be independent, she and her husband looked for a house in a neighbourhood which had economic opportunities. The Zona was not the only place they looked; other areas of El Alto seemed attractive as well, mainly villa Dolores. However, when her husband found a job inside the Zona, they decided to move there. Employment was what made her come to the Zona. Also, the possibility to rent a home instead of buying one was attractive to the young couple, since they had no savings.

At present, Mrs. Mamani and her husband live on the second floor. Their walls are made of brick, and they have a corrugated iron roof. All servicing is available: electricity, running water, and sewerage. The only thing they do not have is a shower. The size of the residence is alright as well. Still, the overall housing quality is deemed low by this lady, and she and her family would like to go somewhere else. This is because currently, Mrs. Mamani's residence shows leakages. It is mainly for reasons of health that she wishes to move, though the unsafe neighbourhood circumstances also play a role. However, she and her family have no place to go. Many places seem attractive to go to, but they have to make constrained choices because of their poverty. They have to make priorities, and they are clearly in the area of housing, and not in the field of education. Health care will only become important if they will be unable to move. Therefore, they are searching diligently for a home which will suit their needs. They have had to take the decision not to move a few times also because the turnover rate has decreased in recent years. If they had ownership of the house, they would have wanted to renovate. However, they would have had to make the decision not to renovate, because they do not have the funds or the time. They could have taken out a loan, but they already are in debt with a private bank, and they cannot take time off work anyway: there would be no more food on the table if they did that.

Because no rental housing is available for this family, they have nowhere to go. They cannot find affordable rental housing, which means they are forced into a status quo. The government does not provide them with a rental housing programme. The bank needs its money back. They have no idea whether there is anywhere else to turn. Their lack of education means their poverty cannot be lifted. When the children are bigger, perhaps they can work after school, and Mrs. Mamani herself will have more time to work as well. Their dream of a healthy house in a safe neighbourhood is currently only that: a dream. They have a long way to go before they will be able to realise it.

\* fictitious name for privacy reasons

## Conclusion

El Alto has developed from a peripheral neighbourhood of La Paz into a city of its own. It is inhabited by people of all life stages. Its inhabitants are mainly Aymara, segregated from the Hispanic ruling class, though the administration of president Evo Morales tries to ameliorate this situation. The housing market of El Alto, which is mainly informally organised, has evolved from a rural to an urban one, and has seen a tenure transition as neighbourhood functions within the metropolitan system changed.

Income lies around 5,300 bolivianos per year, which is about PPP \$1,860 per year. Inequality in income level is highest in Ballivian, thus giving rise to greater differences in housing quality. Unemployment is around 4% in the Zona, which is lower than the unemployment rate in Bolivia. Most jobs are in commerce, manual labour, and handcrafts. Because much of the labour takes place on the informal market, many people are self-employed. Employment is mostly permanent, as opposed to temporary and occasional.

As in most of the rest of El Alto, housing conditions in the Zona have a high contribution to development. Therefore, they need to be constantly monitored and researched. This brings us to the main question of this research: *What are current trends in the housing and residential mobility situation of Zona 16 de Julio, El Alto, and what current policies and interventions are employed to ameliorate the housing situation?* A concise answer to that question concludes this dissertation.

Mobility patterns to the Zona have kept changing in recent years. Compared to the 1990s, turnover rate has decreased strongly. Natural growth has become the most important contributor to the expansion of the city. Rural-urban migration hardly contributes to the growth of the Zona at all anymore. Instead, urban-urban migration has become important, especially within El Alto and the Zona itself.

Important motives for moving to the Zona have been residential circumstances, economic factors, and family relationships, like before, depending on life stage and type of tenure. Housing now is the most important factor for households moving in from El Alto, and family for the decreasing number of households moving in from La Paz. Along with the consolidation of the Zona, tenure changed again in recent years. Settlers increasingly (semi)rent a home.

The type of tenure has an important impact on decision-making, and vice versa. Whereas home owners find the security of ownership the most important housing priority, (semi)tenants find proximity to economic possibilities and the availability of services more important. Tenure is also an important reason for (semi)tenants to move away from the current residence. For a change in tenure, mostly the outskirts of El Alto are chosen as dwelling place.

Housing conditions leave much to be desired. The five indicators UN Habitat has stated for shelter deprivation, being a lack of durable housing, a lack of sufficient living space, a lack of access to improved drinking water, a lack of access to improved sanitation, and a lack of tenure security, are at least partially met, meaning part of the Zona population is deprived of sufficient shelter. Crowding and a below-average housing standard are the most important shelter deprivation factors. 16 de Julio has the best housing circumstances, because it is the least poor. Los Andes has the lowest housing standard, which can be explained by the fact that it is the poorest neighbourhood, although economic activities are starting to come up there. Overall, shelter deprivation occurs less in the Zona than is average in Bolivia.

Though partial contentment is widely spread about some of the residential attributes, dissatisfaction with the neighbourhood is more widespread than dissatisfaction with the residence. In this respect, safety and social networks are the main concerns of Zona inhabitants. For the rest, most families feel the same about their first and their current residence, though between 10% and 15% find one or more aspects of their home or neighbourhood worse than was the case when they lived in their first residence within the agglomeration.

Most Zona households have incremental construction as their housing strategy, as opposed to moving house. About one third of the families wanting improvement would either renovate or move house, or do both. Many households wanting improvement cannot realise it, because of a lack of ownership, a lack of funds, or not being able to find a new residence. Loans are mainly used for business, and only for housing in almost one third of the cases. Housing prices have gone up because of the lowering turnover rate and the further development of the area into economically favourable land.

Many households wanting improvement cannot realise their wish, because of a lack of ownership, a lack of funds, or not being able to find a new residence. After everyone who wants to improve and is able to has either moved or renovated, still almost 1 in every 3 families inhabiting the Zona will be in a housing situation they are dissatisfied with enough to want to renovate or move. This is a measure for the overall development of the Zona. Housing often gets priority over education and health care, and if a third of the Zona households has no opportunity to be in a housing situation they prefer, they certainly will not pay much attention to these other important elements of development, as becomes clear from the disproportionately high contribution housing has to human development in the Zona. Because housing is intertwined with other factors of development, overall development will also contribute to a higher housing standard, and vice versa.

Different public housing programmes have been installed and have ended because the poor could not be reached. In the past, neighbourhood upgrading took place, but this is now completely left to the neighbourhood councils. At this time, small sites-and-services projects are being carried out which aim to reach the poorest, but only partly succeed in doing so. The housing quality of these projects leaves much to be desired, self-help housing is hardly possible because of the standardised housing which is constructed in advance, and services are often lacking. Next to this, people who labour in the informal economy are not reached. Civil society tries to intervene in the interaction between the different stakeholders. Progress is being made, but it is slow. Institutions need to be strengthened, in order for a more efficient and effective interplay between roles to be possible. As long as incremental housing is not incorporated in the policies, most Alteños will not be reached.

The informal economy is the level on which most Alteños move. Decisions are not based on formal policies, and often have nothing to do with them, because the policies do not thoroughly incorporate differentiated incremental housing. In the end, the inhabitants themselves are the ones creating the housing market and residential mobility patterns in the Zona. They will have to keep realising their own dreams, as the government has thus far hardly been able to cope.

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## Interview List

### Interviews With Organisations and Experts

1. *Lic. José Omar Mendez M.*  
Responsable Nacional Enlace Social del PVS, Vice-Ministry of Housing and Planning  
Reference: Mendez M., 2010
2. *Dr. Edilberto Arispe Camacho*  
Director General Ejecutivo, Unidad de Titulación del Fondo Nacional de Vivienda.  
Reference: Arispe Camacho, 2010
3. *Lic. Fernando Clavije Alave,*  
Director Ordenamiento Territorial, Catastro y Administración Urbana, Gobierno Municipal de El Alto. Reference: Clavije Alave, 2010
4. *Juana Acarapi*  
Asistente Técnico del Programa Urbana, RED Hábitat  
Reference: Acarapi, 2010

5. *Rosméry Vargas Ticona*,  
Jefe Agencia, FUNDAPROVI (Fundacion Pro Vivienda)  
Reference: Vargas Ticona, 2010
6. *Lic. Jaime Durán Chuquimía*,  
El Alto expert with PIEB (Programa de Investigación Estratégica en Bolivia).  
Reference: Durán Chuquimía, 2010

## **Interviews With Zona Inhabitants**

1. *Anonymous Lady*  
Manzano 012
2. *Mr. Leon Alanoca Mamani*  
Manzano 061.008
3. *Anonymous Gentleman*  
Manzano 061
4. *Anonymous Gentleman*  
Manzano 100
5. *Mr. René Zapana*  
Manzano 137.010
6. *Ms. Elena Corneja de Apaza*  
Manzano 125.067
7. *Ms. Julia Tapia Quispe*  
Manzano 125.079
8. *Ms. Nivia Velasquez*  
Manzano 125.065
9. *Anonymous Lady*  
Manzano 137
10. *Ms. Wendy Laoricona*  
Manzano 137

# Appendices

## Appendix 1 SPSS Computations

### A1.1 Chi-Square Test Between 16 de Julio, Ballivian and Los Andes for Marital Status of Heads of Household, 2010

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* A significant relationship exists between neighbourhood and the marital status of the heads of household.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23,236 <sup>a</sup>	8	,003
Likelihood Ratio	24,772	8	,002
Linear-by-Linear Association	,002	1	,966
N of Valid Cases	692		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 6,90.

### A1.2 Chi-Square Test Between 16 de Julio, Ballivian and Los Andes for Income Per Household Member, 2010

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* A significant relationship exists between neighbourhood and income per household member.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41,125 <sup>a</sup>	6	,000
Likelihood Ratio	40,708	6	,000
Linear-by-Linear Association	2,445	1	,118
N of Valid Cases	1432		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 102,33.

### A1.3 Chi-Square Test Between 16 de Julio, Ballivian and Los Andes for Employment Position

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* A significant relationship exists between neighbourhood and employment position.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30,028 <sup>a</sup>	8	,000
Likelihood Ratio	32,247	8	,000
Linear-by-Linear Association	1,822	1	,177
N of Valid Cases	1160		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 9,54.

### A1.4 Chi-Square Test Between 16 de Julio, Ballivian and Los Andes for Employment Stability

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05.

*Conclusion:* No significant relationship exists between neighbourhood and employment stability.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,745 <sup>a</sup>	4	,782
Likelihood Ratio	1,759	4	,780
Linear-by-Linear Association	,092	1	,762
N of Valid Cases	1147		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 32,01.

### **A1.5 Chi-Square Test For 16 de Julio, Ballivian and Los Andes Regarding Motives to Move to the Current Residence, 2010**

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05.

*Conclusion:* No significant difference exists between 16 de Julio, Ballivian and Los Andes regarding motives to move to the current residence.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22,438 <sup>a</sup>	14	,070
Likelihood Ratio	22,695	14	,065
Linear-by-Linear Association	,129	1	,720
N of Valid Cases	945		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13,41.

### **A1.6 Compare Means Between Settlers and Stayers for Income Per Person, Per Household, 2010**

H<sub>0</sub>: The population means are equal.

H<sub>A</sub>: A significant difference exists between the population means.

F has a value which is higher than 1. This means there is much more difference in income between the groups than within them. The chance of such a value of F if H<sub>0</sub> is true is below 0.05. Therefore, H<sub>0</sub> is rejected.

*Conclusion:* There is a significant difference in income between settlers and stayers.

			Sum of Squares	df	Mean Square	F	Sig.
inc_tot_pp * Settler or stayer?	Between	(Combined)	665043,127	1	665043,127	4,648	,032
	Groups	Within Groups	5,680E7	397	143069,028		
		Total	5,746E7	398			

### A1.7 Independent Samples T-Test Between Owners and (Semi)Tenants Regarding Yearly Income

$H_0$  for Levene's test: The variances of the samples are equal.

$H_A$ : The variances of the samples are not equal.

$H_0$  is not rejected, because the significance is above 0.05.

*Conclusion*: The variances of the samples are equal.

$H_0$ : There is no significant difference between the group means.

$H_A$ : A significant difference exists between the group means.

$H_0$  is not rejected, because the significance is above 0.05.

*Conclusion*: No significant difference exists between owners and (semi)tenants regarding yearly income per household member.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Yearly income per household member in PPP \$	Equal variances assumed	,453	,502	,252	282	,801	50,47003	199,92964	343,07386	444,01392
	Equal variances not assumed			,249	227,667	,803	50,47003	202,33738	348,22335	449,16341

### A1.8 Independent Samples T-Test Between Owners and Tenants Regarding Yearly Income

H<sub>0</sub> for Levene’s test: The variances of the samples are equal.

H<sub>A</sub>: The variances of the samples are not equal.

H<sub>0</sub> is not rejected, because the significance is above 0.05.

*Conclusion:* The variances of the samples are equal.

H<sub>0</sub>: There is no significant difference between the group means.

H<sub>A</sub>: A significant difference exists between the group means.

H<sub>0</sub> is not rejected, because the significance is above 0.05.

*Conclusion:* No significant difference exists between owners and tenants regarding yearly income per household member.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Yearly income per household member in PPP \$	Equal variances assumed	,863	,354	1,163	266	,246	220,77063	189,90620	-153,13993	594,68119
	Equal variances not assumed			1,248	238,692	,213	220,77063	176,95231	-127,81698	569,35824

### A1.9 Independent Samples T-Test Between New Owners and Tenants Regarding Yearly Income

H<sub>0</sub> for Levene’s test: The variances of the samples are equal.

H<sub>A</sub>: The variances of the samples are not equal.

H<sub>0</sub> is not rejected, because the significance is above 0.05.

*Conclusion:* The variances of the samples are equal.

H<sub>0</sub>: There is no significant difference between the group means.

H<sub>A</sub>: A significant difference exists between the group means.

H<sub>0</sub> is not rejected, because the significance is above 0.05.

*Conclusion:* No significant difference exists between new owners and tenants regarding yearly income per household member.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Yearly income per household member in PPP \$	Equal variances assumed	1,207	,273	1,130	181	,260	262,42366	232,19899	195,74141	-720,58873
	Equal variances not assumed			1,109	148,326	,269	262,42366	236,57710	205,07321	-729,92053

### A1.10 Chi-Square and Cramer's V Test on the Relationship Between Housing Priorities and Tenure, 2010

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

Two cells have expected count less than 5. This means, the tests are not reliable. If the tests were to be taken into account anyway, H<sub>0</sub> would be rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There probably is a very strong relationship between tenure and housing priorities.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56,849 <sup>a</sup>	7	,000
Likelihood Ratio	62,076	7	,000
Linear-by-Linear Association	3,473	1	,062

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56,849 <sup>a</sup>	7	,000
Likelihood Ratio	62,076	7	,000
Linear-by-Linear Association	3,473	1	,062
N of Valid Cases	553		

a. 2 cells (12,5%) have expected count less than 5. The minimum expected count is 2,13.

	Value	Approx. Sig.
Nominal by Nominal Phi	,321	,000
Cramer's V	,321	,000
N of Valid Cases	553	

### A1.11 One-Way Anova between 16 de Julio, Ballivian and Los Andes for Patio Size as Percentage of Terrain Size, 2010

H<sub>0</sub>: The population means are equal.

H<sub>A</sub>: A significant difference exists between the population means.

F has a value of around 1, which means the differences in income are mostly within the samples, and not between them. The chance of such a value of F if H<sub>0</sub> is true is above 0.05. Therefore, H<sub>0</sub> is not rejected.

*Conclusion:* There is no significant difference in patio size between 16 de Julio, Ballivian and Los Andes, and if there would be, the difference would be within the neighbourhoods instead of between them.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41,137	71	,579	,855	,774
Within Groups	122,049	180	,678		
Total	163,187	251			

### A1.12 Chi-Square and Phi Test for 16 de Julio and Ballivian/Los Andes Regarding Ground Floor Material, Per Household, 2010

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the significance is below 0.05.

*Conclusion:* A significant relationship exists between the location of the terrain and floor materials. Considering the value of Phi, this is a weak relationship.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4,839 <sup>a</sup>	1	,028	,029	,019
Continuity Correction <sup>b</sup>	4,124	1	,042		
Likelihood Ratio	5,182	1	,023		
Fisher's Exact Test					
Linear-by-Linear Association	4,831	1	,028		
N of Valid Cases	636				

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 15,51.

b. Computed only for a 2x2 table

	Value	Approx. Sig.
Nominal by Nominal Phi	,087	,028
Cramer's V	,087	,028
N of Valid Cases	636	

### **A1.13 Chi-Square and Cramer's V Test for 16 de Julio, Ballivian and Los Andes regarding Ground Floor Wall Materials, Per Terrain, 2010**

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the significance is below 0.05.

*Conclusion:* A significant relationship exists between the location of the terrain and ground floor wall materials.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34,947 <sup>a</sup>	6	,000
Likelihood Ratio	34,897	6	,000
Linear-by-Linear Association	15,109	1	,000
N of Valid Cases	402		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 21,06.

Cramér's V has a value of 0.208, which makes clear the correlation between neighbourhood and ground floor wall material is strong.

	Value	Approx. Sig.
Nominal by Nominal Phi	,295	,000
Cramer's V	,208	,000
N of Valid Cases	402	

### A1.14 Independent Samples T-Test between Ballivian and Los Andes for Number of Inhabitants per m<sup>2</sup> Brick Building, 2010

H<sub>0</sub> for Levene's test: The variances of the samples are equal.

H<sub>A</sub>: The variances of the samples are not equal.

H<sub>0</sub> is rejected, because the significance is below 0.05.

*Conclusion:* The variances of the samples are not equal.

H<sub>0</sub>: There is no significant difference between the group means.

H<sub>A</sub>: A significant difference exists between the group means.

H<sub>0</sub> is rejected, because the significance is below 0.05.

*Conclusion:* A significant difference exists between Ballivian and Los Andes regarding the mean number of inhabitants of brick buildings per square meter.

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	11,492	,002	-2,668	34	,012	-,03854	,01445	-,06790	-,00918
Equal variances not assumed			-2,391	18,505	,028	-,03854	,01612	-,07234	-,00474

### A1.15 One-Way Anova and Bonferroni Test for Number of Inhabitants per m<sup>2</sup> Brick Building, Between Zona Neighbourhoods, 2010

H<sub>0</sub>: The population means are equal.

H<sub>A</sub>: A significant difference exists between the population means.

F has a value above 1, which means the differences in income are mostly between the samples, and not within them. The chance of such a value of F if H<sub>0</sub> is true is below 0.05. Therefore, H<sub>0</sub> is rejected.

*Conclusion:* There is a significant difference in the number of brick building inhabitants per m<sup>2</sup> of building between 16 de Julio, Ballivian and Los Andes.

Because of this, a post-hoc test can be executed: the Bonferroni test was done. From this, we can conclude that only between 16 de Julio and Los Andes, as well as between Ballivian and Los Andes, a significant difference exists (significance <0.05).

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,016	2	,008	5,363	,008
Within Groups	,070	48	,001		
Total	,085	50			

(I) Part of Zona where current residence is located	(J) Part of Zona where current residence is located	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
16 de Julio	Ballivian	,00054	,01287	1,000	-,0314	,0325
	Los Andes	-,03801*	,01390	,026	-,0725	-,0035
Ballivian	16 de Julio	-,00054	,01287	1,000	-,0325	,0314
	Los Andes	-,03854*	,01287	,013	-,0705	-,0066
Los Andes	16 de Julio	,03801*	,01390	,026	,0035	,0725
	Ballivian	,03854*	,01287	,013	,0066	,0705

\*. The mean difference is significant at the 0.05 level.

### A1.16 Chi-Square and Cramer's V Tests For Settling or Staying and Being Serviced, 2010

#### Electricity

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05. Next to this, 4 cells have expected count less than 5, which means the test would not have been conclusive had H<sub>0</sub> been rejected.

*Conclusion:* There is no significant relationship between having electricity or not and being a settler or a stayer.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,712 <sup>a</sup>	3	,870
Likelihood Ratio	1,038	3	,792
Linear-by-Linear Association	,254	1	,614
N of Valid Cases	703		

a. 4 cells (50,0%) have expected count less than 5. The minimum expected count is ,35.

#### Natural Gas

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

$H_0$  is not rejected, because the chance of such a chi-square value if  $H_0$  is true is above 0.05. Next to this, 2 cells have expected count less than 5, which means the test would not have been conclusive had  $H_0$  been rejected.

*Conclusion:* There is no significant relationship between having natural gas or not and being a settler or a stayer.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5,433 <sup>a</sup>	3	,143
Likelihood Ratio	5,808	3	,121
Linear-by-Linear Association	3,559	1	,059
N of Valid Cases	604		

a. 2 cells (25,0%) have expected count less than 5. The minimum expected count is ,38.

#### Liquid Gas

$H_0$ : There is no significant relationship between the samples.

$H_A$ : A significant relationship exists between the samples.

$H_0$  is not rejected, because the chance of such a chi-square value if  $H_0$  is true is above 0.05. Next to this, 2 cells have expected count less than 5, which means the test would not have been conclusive had  $H_0$  been rejected.

*Conclusion:* There is no significant relationship between having liquid gas or not and being a settler or a stayer.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,587 <sup>a</sup>	3	,460
Likelihood Ratio	2,899	3	,407
Linear-by-Linear Association	,350	1	,554
N of Valid Cases	677		

a. 2 cells (25,0%) have expected count less than 5. The minimum expected count is ,35.

#### Running Water

$H_0$ : There is no significant relationship between the samples.

$H_A$ : A significant relationship exists between the samples.

$H_0$  is not rejected, because the chance of such a chi-square value if  $H_0$  is true is above 0.05. Next to this, 2 cells have expected count less than 5, which means the test would not have been conclusive had  $H_0$  been rejected.

*Conclusion:* There is no significant relationship between having running water or not and being a settler or a stayer.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,337 <sup>a</sup>	3	,227
Likelihood Ratio	4,528	3	,210
Linear-by-Linear Association	,496	1	,481
N of Valid Cases	648		

a. 2 cells (25,0%) have expected count less than 5. The minimum expected count is ,37.

### Sewers

$H_0$ : There is no significant relationship between the samples.

$H_A$ : A significant relationship exists between the samples.

$H_0$  is not rejected, because the chance of such a chi-square value if  $H_0$  is true is above 0.05. Next to this, 4 cells have expected count less than 5, which means the test would not have been conclusive had  $H_0$  been rejected.

*Conclusion:* There is no significant relationship between being serviced with sewers or not and being a settler or a stayer.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,849 <sup>a</sup>	3	,604
Likelihood Ratio	2,097	3	,553
Linear-by-Linear Association	,543	1	,461
N of Valid Cases	659		

a. 4 cells (50,0%) have expected count less than 5. The minimum expected count is ,35.

### Shower or Bath Tub

$H_0$ : There is no significant relationship between the samples.

$H_A$ : A significant relationship exists between the samples.

$H_0$  is not rejected, because the chance of such a chi-square value if  $H_0$  is true is above 0.05.

*Conclusion:* There is no significant relationship between having a shower or not and being a settler or a stayer.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5,301 <sup>a</sup>	2	,071
Likelihood Ratio	5,375	2	,068
Linear-by-Linear Association	5,203	1	,023
N of Valid Cases	684		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 60,25.

### Toilet

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05.

*Conclusion:* There is no significant relationship between having a toilet or not and being a settler or a stayer.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,586 <sup>a</sup>	2	,746
Likelihood Ratio	,601	2	,741
Linear-by-Linear Association	,347	1	,556
N of Valid Cases	652		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 11,99.

### Kitchen

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* A significant relationship exists between being a settler or a stayer and having a separate kitchen in private use, having one in common use, or not having one at all. The value of Cramér's V is 0.106, which means it is a moderate relationship.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,729 <sup>a</sup>	2	,021
Likelihood Ratio	7,700	2	,021
Linear-by-Linear Association	7,627	1	,006
N of Valid Cases	694		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 15,01.

	Value	Approx. Sig.
Nominal by Nominal Phi	,106	,021
Cramer's V	,106	,021
N of Valid Cases	694	

### A1.17 Chi-Square and Cramer's V Tests For 16 de Julio, Ballivian and Los Andes Regarding Servicing, 2010

#### Electricity

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There is a significant relationship between having electricity or not and the neighbourhood which the respondent inhabits. However, 6 cells have expected count less than 5, which means the test is not conclusive. The value of Cramér's V makes clear this relationship is probably strong.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47,533 <sup>a</sup>	6	,000
Likelihood Ratio	49,237	6	,000
Linear-by-Linear Association	35,704	1	,000
N of Valid Cases	704		

a. 6 cells (50,0%) have expected count less than 5. The minimum expected count is ,29.

	Value	Approx. Sig.
Nominal by Nominal Phi	,260	,000
Cramer's V	,184	,000
N of Valid Cases	704	

### Natural Gas

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05. However, 3 cells have expected count less than 5, which means the test is not conclusive.

*Conclusion:* There is a significant relationship between having natural gas or not and the neighbourhood which the respondent inhabits. The value of Cramér's V makes clear this is probably a moderate relationship.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18,088 <sup>a</sup>	6	,006
Likelihood Ratio	18,535	6	,005
Linear-by-Linear Association	2,112	1	,146
N of Valid Cases	605		

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is ,25.

	Value	Approx. Sig.
Nominal by Nominal Phi	,173	,006
Cramer's V	,122	,006
N of Valid Cases	605	

### Liquid Gas

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There is a significant relationship between having liquid gas or not and the neighbourhood which the respondent inhabits. However, 3 cells have expected count less than 5,

which means the test is not conclusive. The value of Cramér's V makes clear there probably is a moderate relationship.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,440 <sup>a</sup>	6	,025
Likelihood Ratio	14,910	6	,021
Linear-by-Linear Association	6,807	1	,009
N of Valid Cases	678		

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is ,28.

	Value	Approx. Sig.
Nominal by Nominal Phi	,146	,025
Cramer's V	,103	,025
N of Valid Cases	678	

#### Running Water

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There is a significant relationship between having running water or not and the neighbourhood which the respondent inhabits. However, 4 cells have expected count less than 5, which means the test is not conclusive. The value of Cramér's V makes clear this probably is a strong relationship.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33,965 <sup>a</sup>	6	,000
Likelihood Ratio	35,610	6	,000
Linear-by-Linear Association	18,646	1	,000
N of Valid Cases	649		

a. 4 cells (33,3%) have expected count less than 5. The minimum expected count is ,25.

	Value	Approx. Sig.
Nominal by Nominal Phi	,229	,000
Cramer's V	,162	,000
N of Valid Cases	649	

### Sewers

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There is a significant relationship between being serviced with sewers or not and the neighbourhood which the respondent inhabits. However, 6 cells have expected count less than 5, which means the test is not conclusive. The value of Cramér's V makes clear this probably is a moderate relationship.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26,690 <sup>a</sup>	6	,000
Likelihood Ratio	25,778	6	,000
Linear-by-Linear Association	,011	1	,918
N of Valid Cases	660		

a. 6 cells (50,0%) have expected count less than 5. The minimum expected count is ,29.

	Value	Approx. Sig.
Nominal by Nominal Phi	,201	,000
Cramer's V	,142	,000
N of Valid Cases	660	

### Shower or Bath Tub

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There is significant relationship between having a shower or not and the neighbourhood which the respondent inhabits. The value of Cramér's V makes clear this is a moderate relationship.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15,626 <sup>a</sup>	4	,004
Likelihood Ratio	16,155	4	,003
Linear-by-Linear Association	4,898	1	,027
N of Valid Cases	685		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 49,47.

	Value	Approx. Sig.
Nominal by Nominal Phi	,151	,004
Cramer's V	,107	,004
N of Valid Cases	685	

### Toilet

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05.

*Conclusion:* There is no significant relationship between having a toilet or not and the neighbourhood which the respondent inhabits.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,951 <sup>a</sup>	4	,138
Likelihood Ratio	7,078	4	,132
Linear-by-Linear Association	,201	1	,654
N of Valid Cases	653		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 9,94.

### Kitchen

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

$H_0$  is not rejected, because the chance of such a chi-square value if  $H_0$  is true is above 0.05.

*Conclusion:* There is no significant relationship between the neighbourhood which the respondent inhabits and having or using a separate kitchen.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3,158 <sup>a</sup>	4	,532
Likelihood Ratio	3,263	4	,515
Linear-by-Linear Association	,975	1	,323
N of Valid Cases	695		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 12,03.

## A1.18 Chi-Square and Cramer's V Tests for Satisfaction Per Neighbourhood

### Residence Size

$H_0$ : There is no significant relationship between the samples.

$H_A$ : A significant relationship exists between the samples.

$H_0$  is rejected, because the chance of such a chi-square value if  $H_0$  is true is below 0.05. However, 3 cells have expected count less than 5, which means the test is not conclusive.

*Conclusion:* There probably is a significant relationship between neighbourhood and satisfaction with residence size. The value of Cramér's V makes clear the relationship probably is moderate.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24,271 <sup>a</sup>	8	,002
Likelihood Ratio	27,205	8	,001
Linear-by-Linear Association	,388	1	,533
N of Valid Cases	698		

a. 3 cells (20,0%) have expected count less than 5. The minimum expected count is ,87.

	Value	Approx. Sig.
Nominal by Nominal Phi	,186	,002
Cramer's V	,132	,002
N of Valid Cases	698	

### Housing Costs

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05. Next to this, 3 cells have expected count less than 5, which means the test would not have been conclusive had H<sub>0</sub> been rejected.

*Conclusion:* There is no significant relationship between neighbourhood and satisfaction with housing costs.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14,887 <sup>a</sup>	8	,061
Likelihood Ratio	15,911	8	,044
Linear-by-Linear Association	2,238	1	,135
N of Valid Cases	697		

a. 3 cells (20,0%) have expected count less than 5. The minimum expected count is 1,44.

### Location

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05. However, 6 cells have expected count less than 5, which means the test is not conclusive.

*Conclusion:* There probably is a significant relationship between neighbourhood and satisfaction with location. The value of Cramér's V makes clear this relationship probably is moderate.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18,260 <sup>a</sup>	8	,019
Likelihood Ratio	19,583	8	,012
Linear-by-Linear Association	,729	1	,393
N of Valid Cases	696		

a. 3 cells (20,0%) have expected count less than 5. The minimum expected count is 1,17.

	Value	Approx. Sig.
Nominal by Nominal Phi	,162	,019
Cramer's V	,115	,019
N of Valid Cases	696	

#### Residence in General

$H_0$ : There is no significant relationship between the samples.

$H_A$ : A significant relationship exists between the samples.

$H_0$  is not rejected, because the chance of such a chi-square value if  $H_0$  is true is above 0.05. Next to this, 6 cells have expected count less than 5, which means the test would not have been conclusive had  $H_0$  been rejected.

*Conclusion:* There is no significant relationship between neighbourhood and satisfaction with the residence in general.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13,599 <sup>a</sup>	8	,093
Likelihood Ratio	14,004	8	,082
Linear-by-Linear Association	2,348	1	,125
N of Valid Cases	691		

a. 6 cells (40,0%) have expected count less than 5. The minimum expected count is ,87.

### Beauty of Neighbourhood

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There is a significant relationship between neighbourhood and satisfaction with the beauty of the neighbourhood. The value of Cramér's V makes clear this relationship is moderate.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24,533 <sup>a</sup>	8	,002
Likelihood Ratio	24,750	8	,002
Linear-by-Linear Association	9,347	1	,002
N of Valid Cases	697		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 6,99.

	Value	Approx. Sig.
Nominal by Nominal Phi	,188	,002
Cramer's V	,133	,002
N of Valid Cases	697	

### Safety of Neighbourhood

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05. However, 3 cells have expected count less than 5, which means the test is not completely conclusive.

*Conclusion:* There probably is a significant relationship between neighbourhood and satisfaction with the safety of the neighbourhood. The value of Cramér's V makes clear this relationship probably is strong.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42,162 <sup>a</sup>	8	,000
Likelihood Ratio	42,129	8	,000
Linear-by-Linear Association	12,717	1	,000
N of Valid Cases	698		

a. 3 cells (20,0%) have expected count less than 5. The minimum expected count is 2,62.

	Value	Approx. Sig.
Nominal by Nominal Phi	,246	,000
Cramer's V	,174	,000
N of Valid Cases	698	

### Social Networks

$H_0$ : There is no significant relationship between the samples.

$H_A$ : A significant relationship exists between the samples.

$H_0$  is rejected, because the chance of such a chi-square value if  $H_0$  is true is below 0.05. However, 2 cells have expected count less than 5, which means the test is not completely conclusive.

*Conclusion*: There probably is a significant relationship between neighbourhood and satisfaction with social networks. The value of Cramér's V makes clear this relationship probably is strong.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	52,535 <sup>a</sup>	8	,000
Likelihood Ratio	56,486	8	,000
Linear-by-Linear Association	6,257	1	,012
N of Valid Cases	690		

a. 2 cells (13,3%) have expected count less than 5. The minimum expected count is 4,61.

	Value	Approx. Sig.
Nominal by Nominal Phi	,276	,000
Cramer's V	,195	,000
N of Valid Cases	690	

### Public Services

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05. Next to this, 3 cells have expected count less than 5, which means the test would not have been conclusive had H<sub>0</sub> been rejected.

*Conclusion:* There is no significant relationship between neighbourhood and satisfaction with public services.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10,257 <sup>a</sup>	8	,247
Likelihood Ratio	10,083	8	,259
Linear-by-Linear Association	5,938	1	,015
N of Valid Cases	697		

a. 3 cells (20,0%) have expected count less than 5. The minimum expected count is 2,32.

### **A1.19 Chi-Square Test For Relationship Between Neighbourhood and Satisfaction with Safety, 2010**

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is below 0.05.

*Conclusion:* There is a significant relationship between neighbourhood and satisfaction with social networks. The value of Cramér's V makes clear this relationship is strong.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42,162 <sup>a</sup>	8	,000
Likelihood Ratio	42,129	8	,000
Linear-by-Linear Association	12,717	1	,000
N of Valid Cases	698		

a. 3 cells (20,0%) have expected count less than 5. The minimum expected count is 2,62.

	Value	Approx. Sig.
Nominal by Nominal Phi	,246	,000
Cramer's V	,174	,000
N of Valid Cases	698	

### A1.20 Chi-Square Test for Relationship Between Income and Possibility to Move in the Next Six Months, 2010

H<sub>0</sub>: There is no significant relationship between the samples.

H<sub>A</sub>: A significant relationship exists between the samples.

H<sub>0</sub> is not rejected, because the chance of such a chi-square value if H<sub>0</sub> is true is above 0.05.

*Conclusion:* There is no significant relationship between income and the possibility to move within the next six months.

Count		yearly income per hh member, bolivianos, categories				
		0 - 2,800	2,801 - 4,200	4,201 - 6,800	6,801 - 36,000	Total
Possibility that respondents moves within 6 months	No	63	78	67	75	283
	Yes	9	9	11	16	45
	Total	72	87	78	91	328

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,084 <sup>a</sup>	3	,555
Likelihood Ratio	2,074	3	,557
Linear-by-Linear Association	1,396	1	,237
N of Valid Cases	328		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9,88.

### A1.21 Correction of Dollar Prices for Inflation Rates

For each year of purchase, house prices were corrected for the inflation rate. The outcome is the value the residence would have in 2010 had no value been added to it. Calculations on added value were made by comparing the price at which the respondent would now sell their house with the value the house would have had no value been added to it. If the price at which the respondent would now sell the house is higher than the inflation-corrected price at purchase, value has been added to it. If the current sell price is lower than the inflation-corrected price at purchase, the value has decreased. Added value was calculated in percentages. Because all this could only be done for the respondents who gave a purchase price in dollars, not many cases could be calculated (see table).

Count		curr_boughtwhen_yeargroup		
		before 1990	1990 or later	Total
pricediff_rel_cat2	Decrease between 10 and 50%	2	2	4
	No change of >10%	0	3	3
	Increase between 10 and 50%	2	11	13
	Increase of >50%	7	15	22
	Total	11	31	42

## Appendix 2 Neighbourhoods of La Paz and El Alto

Area	Neighbourhoods
<i>1 Max Paredes</i>	Said Ousicancha Rincon La Portada Sector Triangular Antofagasta La Portada Alto Santiago de Munaypata Munaypata Marscal Santa Cruz Koa Koa Chualluma Bartolina Sisa La Lengüeta Hoyada 23 de Marzo Barrio Lindo 9 de Abril Faro Murillo Chamoco Chico Villa Nueva Potosí El Tejar Villa Victoria Pura Pura Chijini Alto Chijini
<i>2 Centro</i>	14 de Septiembre Los Andes Gran Poder Alto San Pedro Tacagua San Pedro El Rosario San Sebastian Zona Norte Casco Urbano Central
<i>3 Cotahuma</i>	Sopocachi Sopocachi Bajo Kantutani Cancha Figaro San Jorge Hinchupalla Tembladerani Obispo Bosque Villa Ernesto Torrez Alto Tacagua Bajo Tejada

	Rosa Inquillo Tupac Amaru San Juan Cotahuma Kenani Pata Huari Kunca Norte Alto Pasankeri Sur Lurituni Las Lomas Inca Llojeta Llojeta Llojeta El Vergel Llojeta El Rosal Llojeta Bajo El Dorado Rosario
<i>4 Zona Periferica 1: Zona Norte</i>	Zona Norte Villa de la Cruz Chacacollo Viscachani Challapampa Tacachi German Busch Vino Tinto 18 de Mayo Kamirpata Achachicala Alto Plan Autopista
<i>5 Zona Periferica 2: Miraflores</i>	Santa Barbara Miraflores Bajo Miraflores Villa Pabon Villa Lazareto 27 de Mayo Santa Rosa Grande Ferroviario Confecionistas Villa Fatima Las Delicias Cupilupaca Cupilupaca Norte Santa Rosa 5 Dedos Santa Rosa Tijji Santiago de La Caya Sector III Rosasani "A" Marcelo Quroca Santa Cruz Alto Las Delicias Rossasani La Merced La Merced Sector B Universal Tex

	Alto La Merced Condorini 3 de Mayo Quisharani 16 de Julio Hogares Fatima El Rosal Villa El Carmen Sector Fabril Señor de Exaltación Kalahuyo Ballivian Chuquiaguillo
<i>6 Zona Periferica 3: San Antonio</i>	Luquichapi Sector Llanos Guindal Villa San Antonio Forno San Bolivar Mcal. Santa Cruz Escobar Uria San Jose Aibbo Valle Hermoso Villa Copacabana Viscachani Pacasa San Simon Union San Jose Union Huaychani Rosal Norte Kochapampa
<i>7 Zona Periferica 4: Armonia</i>	Taza Los Leones Cuarto Centenario Bajo San Isidro Villa Armonia Mejillones Villa Litoral San Isidro San Juan Kupini Valle de las Flores Covico Villa Salome Entel Pampahasi Pampahasi Alto Graficos Tihuanaku Cosmos

	Utama Primavera
<i>8 Zona Sur 1: Obrajes</i>	Obrajes Alto Obrajes Huanu Huanuni Bella Vista Condominio San Alberto Ventilla Alto Seguencoma Bajo Seguencoma Urb. Las Retamas Reyes Carvajal Virgen de Copacabana Cramadal
<i>9 Zona Sur 2: Calacoto</i>	Calacoto Los Jardineros La Rinconada Los Sauces San Miguel Los Pinos Alquisama A Serranias de Calacoto El Periodista Urb. S. Pariamo Los Olivos Cota Cota Achumani Koani Meseta Achumani El Porvenir Briko Las Kantutas Club Aleman Madres Concercionistas
<i>10 Zona Sur 3: ABCD</i>	Alto Irpavi Irpavi Bajo Sector Judiciales Las Nieves Urb. Los Claveles Zona C 23 de Marzo Zona D Ciudadela Stronguista Zona B Anexo A Bolonia Sector A Urbella Urbella Pena Azul Pena Azul Reubicados

	Caliri Urbella El Vergel Irpavi II
<i>11 Zona Sur 4: Las Flores</i>	Pamir Pampa Condores Lakota La Barqueta Francia Huacollo Leonardo Poma Lomas Del Sur Violetas Las Flores Jardin Alto Achumani Meseta Este Los Rosales Jurenko Kellimani Huayllani Humapalca
<i>12 Zona Sur 5: Las Rosas</i>	Chasquipampa Kokeni Santa Fe de Khessini Las Rosas
<i>13 Mallasa</i>	Mallasa Valle de la Luna Aranuez Vecinos de Aranjuez Urb. Nazareno Providencia Mallasilla Valle de Aranjuez Amor de Dios
<i>14 El Alto Norte 1: Alto Lima</i>	Zona Alto Lima Zona Alto Rincon Portada Zona Alto Munaypata Zona Cusicancha Zona la Portada Zona Huayna Potosí Villa Tupac Katari Villa Remedios Santa Rosa de Lima Zona German Busch Zona San Jose
<i>15 16 de Julio</i>	Villa 16 de Julio Villa Ballivian Villa Los Andes
<i>16 El Alto Norte 2: Rio Seco</i>	Villa Esperanza Villa Tunari Villa Loreto Zona Rio Seco

	<p>Zona Brasil  Zona Franz Tamayo  Zona Estrella de Belen  Zona Pedro Domingo Murillo  Zona Bautista Saavedra  Zona Puerto Camacho  San Jose de Yunguyo  Zona Villa Ingenio  Villa Cooperativa  Zona Palestina  Zona Mariscal Sucre  Zona Tahuantinsuyo  Villa Mejillones  Viviendas</p>
<i>17 El Alto Sur 1: Adela</i>	<p>Villa Adela  Villa 1 de Mayo  Urbanización Fonvis  Urbanización Cosmos  Urbanización Villa Marcelina  Zona San Luis  Urbanización Illampu  Urbanización Natividad  Urbanización Camacho  Urbanización San Salvador  Urbanización Santa Lucia  Urbanización Jesus de Nazareth  Urbanización Las Rosas  San Eugenio  Urbanización Gran Poder  Juan Azurduy de Padilla  Urbanización Bautista Saavedra  San Felipe de Seke  Kiswaras  Mercedario  Amig Chaco</p>
<i>18 El Alto Sur 2: Bolivar</i>	<p>Villa Bolivar  Santiago II  Zona Complemento Rosas  Pacajes  Villa Alemania  Nuevos Horizontes  Cupilupaca  Eduardo Avaroa  El Kenko  Luis Espinal</p>
<i>19 El Alto Sur 3: Dolores</i>	<p>Villa Dolores  Zona 12 de Octubre  Zona Santiago Primero  Zona Villa Tejada  Ciudad Satelite</p>

<i>20 El Alto Sur 4: La Merced</i>	<p>Villa Exaltación  Zona Alpacoma  Tejada Rectangular  Rosas Pampa  Santa Rosa</p> <hr/> <p>Villa La Merced  Urbanización San Juan  Urbanización Mercedes  Urbanización San Martin  Urbanización Nuevo Amanecer  Urbanización Tilata Magisterio  Urbanización Urkupiña  Urbanización Mariscal Santa Cruz  Urbanización Nueva Tilata  Oro Negro  Hugo Chavez  Urbanización San Cristobal  Urbanización Pucarani  Urbanización Florida  Urbanización ... de Noviembre  Urbanización Senkata  Urbanización Chijimarka  Urbanización San Francisco  Urbanización Juancito Pinto  Urbanización Virgen de Urkupiña  Urbanización San Jorge  Urbanización Atipiris Zona Japari  Zona Calvario  Zona Bolivar  Zona Sojsaña  Zona Muluyo</p>
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## Appendix 3 The Questionnaire

Número de encuesta (*no llene!*): ..... Fecha: .....  
 Calle: ..... Manzano: .....  
 Número de la casa: ..... Código de la casa: ..... Entrevistador: .....

**INFORMACIÓN: X = la persona no quiere responder    N = la pregunta no corresponde**

¿Cuántas familias viven en este lote? .....

Hogar	Número de encuesta (no llene!)	Nombres y apellidos de los jefes/as y sus esposas/os → anota con quién ha hablado (con *)	Número de los miembros en el hogar
1			
2			
3			
4			
5			
6			
Total de los habitantes en este lote			

¿Quién es el dueño del lote? (*Ponga la dirección completa*)

Nombre: ..... Dirección: .....

**Responda a estas preguntas al final de la encuesta con el primer hogar del lote!**

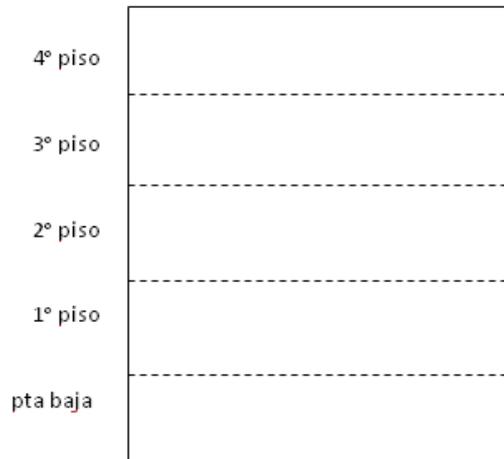
¿Qué tamaño tiene el lote? ..... m<sup>2</sup>

¿Cuánto sitio está edificado? ..... m<sup>2</sup>

*Dibuje el lote desde arriba, anote el número de pisos de cada vivienda.*



*Dibuje la fachada de la casa (incluidos los pisos y las puertas)*



**NÚMERO DEL HOGAR: .....**

A. Nombre	B. Relación/ Parentesco	C. Sexo	D. Edad	E. Lugar de nacimiento	F. Estado civil	G. Grado de Instrucción	H. Año	I. Condición de actividad	J. Ocupación principal
Ponga los nombres de los miembros por orden de relación	1 jefe del hogar 2 esposa(o)/ concubino(a) 3 hijo(a) 4 hermano(a) 5 padre/madre 6 otro pariente 7 empleado(a) 8 otro no pariente	1 m 2 f		1 esta casa 2 esta zona 3 El Alto (nombre zona) 4 La Paz (nombre villa) 5 otra parte (esp.)	1 soltero(a) 2 casado(a) 3 concubino(a) 4 viudo(a) 5 divorciado(a)/ separado(a)	1 ninguno 2 alfabetización 3 básico/ primaria 4 intermedio/ primaria superior 5 medio/ secundaria 6 técnico 7 normal 8 superior/ universidad	Último año en que tenía educación	1 trabaja actualmente 2 desocupado 3 ayuda familiar 4 ama de casa (no remunerado) 5 labores de casa (enumerado) 6 ama de casa y trabaja 7 sólo estudia 8 estudia y trabaja 9 estudia y ayuda 10 jubilario/rentista 11 otro (esp.)	¿Qué ocupación tiene usted? (En el caso de decir que no trabaja, ponga *)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									

K. Rama de actividad	L. Categoría de ocupación	M. Estabilidad del trabajo	N. Número de trabajadores	O. Lugar de trabajo ¿Donde se realiza el trabajo?	P. Horas	Q. Tipo de ingreso	R. Otras actividades	S. Ingresos
1	1 obrero/ empleado	1 permanente	¿Cuántas personas trabajan en esa empresa/ negocio (incluido a Usted)?	1 esta casa/ patio	¿Cuántas horas por semana y cuántos días por semana se dedica a esa actividad? 1 = # de horas 2 = # de días	1 fijo	¿Realiza usted cualquiera otra actividad para obtener ingresos? 1 = no 2 = sí, ¿Cuál?	<b>(llene al final de la encuesta!)</b> Apunte los ingresos por mes de cada miembro del hogar en Bs./\$
2	2 jornalero	2 temporal		2 esta villa	1 2	2 eventual		
3	3 cuenta propia	3 ocasional/ eventual		3 El Alto (nombre zona)	1 2	3 a destajo/ a comisión		
4	4 patrón			4 La Paz (nombre villa)	1 2	4 jornal		
5	5 otro (esp.)			5 Otra parte (esp.)	1 2	5 obra		
6					1 2	6 otro		
7					1 2			
8					1 2			
9					1 2			
10					1 2			
11					1 2			
<b>Total de los ingresos</b>								

1. ¿Este último año, usted u otro(s) miembro(s) del hogar, han participado en alguna organización barrial? (por ejemplo junta de vecinos, club de madres o parroquia)  
 No  Sí, llene el esquema (una fila para cada función)

A. Nombre	B. Tipo de organización	C. Función	D. Tiempo
Ponga los nombres de los miembros	1 junta de vecinos 2 club de madres 3 grupo de mujeres 4 asociación de padres de familia 5 asociación deportiva 6 organización política 7 parroquia 8 otro, esp.....	¿Qué función realiza en la organización?	¿Aproximadamente cuántos horas por semana se dedica a la organización?

2. ¿Usted es miembro de alguna organización económica? (por ejemplo asociación de gremiales o sindicato)  
 No  Sí, ponga nombre y dirección.....
3. ¿Durante los últimos cinco años, ha obtenido alguna vez un préstamo?  
 No, pase a la pregunta 7  Sí, año(s):.....
4. ¿Quién le concedió el préstamo?  
 Banco privado: (nombre).....  
 Prestamista  
 Amigos o parientes  
 Gobierno  
 Otro, esp.....
5. a. ¿Cuál fue el monto del préstamo? Bs./\$ .....  
 b. ¿Por cuánto tiempo obtuvo el préstamo? ..... meses
6. ¿En qué invirtió el préstamo que obtuvo?  
 Mejoramiento de la vivienda  
 Comprar vivienda, casa o lote  
 Poner algún negocio  
 Comprar herramientas de trabajo  
 Otro, esp. ....

## PARTE 1 ACTIVIDADES ECONÓMICAS DENTRO DEL LOTE

### PREGUNTAS AL JEFE O ESPOSA(O) DEL HOGAR

Hablado con: .....

7. ¿Tiene usted alguna actividad que le genere recursos económicos en la casa?  
 No, pase a la pregunta 9  
 Sí  Producción, cual.....  
 Comercio, cual.....  
 Servicios, cual.....

8. ¿Porque está haciendo esta actividad?.....
9. ¿En el pasado, tenía alguna actividad que le generaba recursos económicos en la casa?  
 0 No, *pase a la pregunta 11*  
 0 Sí 0 Producción, cual.....  
 0 Comercio, cual.....  
 0 Servicios, cual.....
10. ¿Porque lo ha terminado esta actividad?.....

11. Llene el esquema con las respuestas de las preguntas 7 y 9, si no hace ninguna actividad económica en la casa, pase a la pregunta 28

A. Tipo de actividad(es)	B. Tiempo	C. Lugar	D. ¿Quién es responsable de esta actividad?	E. Tiempo	F. Número de ayudantes	G. ¿Quiénes ayudan?	H. ¿Quién tiene la experiencia y/o la mayor habilidad?	I. ¿Está registrado?
	¿Por cuánto tiempo esta realizando o realizaba esta actividad? <i>Ponga el tiempo en meses!</i>	1 en una habitación/planta especial para la actividad 2 dentro otras habitaciones 3 en el patio 4 en la vía pública 5 otro, esp.....	1 jefe del hogar 2 esposa(o)/concubina(o) 3 hijo(a) 4 hermano(a) 5 padre/madre 6 otro pariente 7 otro, esp.....	¿Cuántos horas por semana y cuántos días <u>por semana</u> se dedica esta persona a esa actividad? 1=horas 2=días	¿Cuántas personas trabajan/ayudan en esta actividad?	1 jefe del hogar 2 esposo(a) 3 hijo(a) 4 hermano(a) 5 padre/madre 6 empleado(a) 7 otro pariente 8 otro, esp.....	1 jefe del hogar 2 esposa(o)/concubina(o) 3 hijo(a) 4 hermano(a) 5 padre/madre 6 otro pariente 7 otro, esp.....	1 Sí, patente 2 Sí, impuestos 3 No
				1 2				
				1 2				
				1 2				
				1 2				
				1 2				

12. Llene el esquema con las respuestas de las preguntas 7 y 9

Tipo de actividades)	J. Inversión por primera vez	K. Tipo de inversión	L. Inversión del último año	M. Tipo de inversión	N. ¿Qué equipamiento usa usted para realizar la actividad?	O. ¿Cuánto le costó el equipamiento el último año?	P. ¿Quién administra?	Q. Ingreso por mes
Repita de A.	Ponga la cantidad del dinero en Bs./\$	1 Propio ahorros 2 Préstamo de la familia o amigos 3 préstamo de un banco 4 préstamo de una institución de micro crédito	Ponga la cantidad del dinero en Bs./\$	1 propios ahorros 2 préstamo de la familia 3 préstamo de un banco 4 préstamo de una institución de micro crédito	1 mobiliario 2 frigorífico/ congelador 3 maquinas (p.e. lavadora) 4 herramientas 5 otros, esp.....	Ponga la cantidad en Bs./\$	1 jefe del hogar 2 esposa(o)/ concubina(o) 3 hijo(a) 4 hermano(a) 5 padre/madre 6 otro pariente 7 otro, esp.....	Ponga el ingreso por mes en Bs./\$

PREGUNTAS SOBRE TODAS LAS ACTIVIDADES ECONOMICAS EN LA CASA

13. ¿Existen algunos factores que estimulen hacer esta(s) actividad(es)?

0 No  
0 Sí, cuales.....

14. ¿Existen algunos factores que dificulten hacer esta(s) actividad(es)?

0 No  
0 Sí, cuales.....

15. ¿Ha tenido usted algunos problemas en su actividad económica en el último año?

0 No, *pase a la pregunta 17*  
0 Sí, cuales.....

16. ¿Cómo ha solucionado los problemas? .....
17. ¿Qué tan importante es esta actividad para su calidad de vida?  
 muy alta  alta  media  baja  no importante
18. ¿Qué hace con los ingresos? .....
19. ¿Hay cosas que no podría pagar si no tendría esta actividad?  
 No  Sí, cuales.....
20. ¿Qué tan importante son los ingresos de esta actividad en relación a otros ingresos?  
 muy alta  alta  media  baja  no importante
21. ¿Cómo califica su situación financiera actual en relación a la actividad que hacía en el pasado?  
 mejor  lo mismo  peor

**RESPONDE A LAS PROXIMAS SUPOCIONES SOBRE LA ACTIVIDAD ECONÓMICA**

22. El barrio es importante para mi actividad económica.  
 estoy de acuerdo(a)  no estoy de acuerdo(a)
23. Los vecinos del barrio me ayudan a realizar la actividad económica.  
 estoy de acuerdo(a)  no estoy de acuerdo(a)
24. Los vecinos del barrio son mis clientes más importantes.  
 estoy de acuerdo(a)  no estoy de acuerdo(a)
25. Los vecinos del barrio me tienen envidia por tener una actividad económica.  
 estoy de acuerdo(a)  no estoy de acuerdo(a)
26. Tengo competencia con otras personas en el barrio que tienen la misma actividad.  
 estoy de acuerdo(a)  no estoy de acuerdo(a)
27. Tengo un mejor status en el barrio porque tengo mi actividad económica.  
 estoy de acuerdo(a)  no estoy de acuerdo(a)

**PREGUNTAS AL DUEÑO DE LA PROPIEDAD**

Hablado con:.....

28. ¿Alquila usted (u otra(s) persona(s) del hogar) un espacio dentro de la casa?  
 No, pase a la pregunta 30  Sí, pase a la pregunta 29
29. ¿Porqué está alquilando un lugar? .....  
 ..... (llene el esquema 32)
30. ¿Si no, lo hizo en el pasado?  
 No, pase a la pregunta 42  Sí, pase a la pregunta 31
31. ¿Porque lo ha terminado? .....  
 ..... (llene el esquema 32)



43. ¿En qué año vino usted a La Paz o El Alto?  
 0 Nació en La Paz, *pase a la pregunta 45*  
 0 Nació en El Alto, *pase a la pregunta 45*  
 0 En el año ....., *pase a la pregunta 44*

44. ¿Cuando usted vino, su primera vivienda era en La Paz o en El Alto?

0 En La Paz →	¿En qué lugar estaba su vivienda <b>antes de venir</b> a La Paz? País: ..... Provincia: ..... Ciudad/Pueblo: ..... Villa/Zona: ..... Año de moverse a El Alto: .....
0 En El Alto →	¿En qué lugar estaba su vivienda <b>antes de venir</b> a El Alto? País: ..... Provincia: ..... Ciudad/Pueblo: ..... Villa/Zona: .....

	Número	Año de primera mudanza
45. ¿Cuántas veces se ha trasladado de casa dentro de La Paz?		
46. ¿Cuántas veces se ha trasladado de casa dentro de El Alto?		
47. ¿Cuántas veces se ha trasladado de casa dentro de las zonas 16 de Julio, Ballivian y Los Andes?		

48. ¿En qué año vino usted a vivir en esta casa?  
 0 Siempre ha vivido aquí, *pase a la pregunta 71*  
 0 En el año ....., *pase a la pregunta 49*

### **PRIMERA VIVIENDA DENTRO LA PAZ/EL ALTO**

49. ¿Dónde se ubicaba su primera vivienda en La Paz/El Alto?  
 0 Esta zona: calle .....  
 0 El Alto: villa/zona .....  
 0 La Paz: villa/zona.....
50. ¿En qué año se ha mudado a su primera vivienda dentro La Paz/El Alto? En el año .....
51. ¿Por qué se había establecido allí?  
 Motivo 1 .....  
 Motivo 2 .....
52. ¿Cuál era la tenencia en su primera vivienda en La Paz/El Alto?  
 0 Dueño, *pase a la pregunta 53*  
 0 Inquilino, alquiler Bs./\$ ..... por mes, *pase a la pregunta 54*  
 0 Contrato mixto, Bs./\$ ....., *pase a la pregunta 54*  
 0 Contrato anticrético, Bs./\$ ....., *pase a la pregunta 54*  
 0 Vivía gratuitamente, como ....., *pase a la pregunta 54*

53. Si era el dueño de su primera vivienda en La Paz/El ALTO:
- a. ¿Como lo obtuvo usted?                    0 terreno vacio                    0 terreno con edificación
  - b. ¿Cuándo lo obtuvo?                    En el año .....
  - c. ¿De quién?                    .....
  - d. ¿Cuántos m<sup>2</sup>?                    .....
  - e. ¿A qué precio lo compro?                    Bs./\$ .....
  - f. ¿A qué precio lo vendió?                    Bs./\$ .....
  - g. ¿Su título estaba en trámite?                    0 No                    0 Sí
  - h. ¿Cuánto eran sus gastos por mes                    Bs./\$ .....
54. ¿Cuántas planta(s)/piso(s) ocupaba el hogar en su primera vivienda en La Paz/El Alto? .....
55. a ¿Cuántos cuartos tenía su primera vivienda en La Paz/El Alto, sin el baño ni la cocina?  
.... cuartos
- b De estos cuartos, ¿cuántos usaba usted solamente para dormir? .... dormitorios
- c ¿Cuál era la superficie de su primero terreno? .....m<sup>2</sup>
- d ¿Cuál era la superficie de todos los pisos construidos de su primera vivienda? ..... m<sup>2</sup>

56. ¿En su primera vivienda en La Paz/El Alto, usted disponía de....

	Sí, uso privado	Sí, uso común	No
Energía eléctrica	0	0	0
Gas natural	0	0	0
Gas liquado	0	0	0
Agua corriente	0	0	0
Alcantarillado público		0	0
Ducha o tina de baño	0	0	0
Letrina	0	0	0
Baño (excusado)	0	0	0
Cuarto <b>especial para la cocina</b>	0	0	0

57. ¿Porqué se fue de esa casa?.....
58. ¿Se sentía satisfecho con su **primera vivienda** en La Paz/El Alto?  
1=pesimo, 2=malo, 3=regular, 4=bueno, 5=excelente

Tamaño de la vivienda	1 2 3 4 5
Gastos de vivienda por mes	1 2 3 4 5
Localización (per ejemplo distancia a trabajo, educación, tiendas, red social)	1 2 3 4 5
Satisfacción en general	1 2 3 4 5

59. ¿Se sentía satisfecho con su **primera zona** en La Paz/El Alto?  
1=pesimo, 2=malo, 3=regular, 4=bueno, 5=excelente

Belleza	1 2 3 4 5
Seguridad	1 2 3 4 5
Organizaciones sociales	1 2 3 4 5
Facilidades de servicios publicos	1 2 3 4 5
Localización (en relación con toda la ciudad)	1 2 3 4 5

## VIVIENDA ANTERIOR

Su vivienda anterior era su primera vivienda dentro La Paz/El Alto? 0 no, *pase a 60*      0 Si, *pase a 71*

60. ¿Dónde se ubicaba su vivienda anterior?

- 0 Esta zona: calle .....
- 0 El Alto: villa/zona .....
- 0 La Paz: villa/zona.....
- 0 Otro lugar: Ciudad.....

61. ¿En qué año se ha mudado a su vivienda anterior en La Paz/El Alto? En el año .....

62. ¿Por qué se había establecido allí?

- Motivo 1 .....
- Motivo 2 .....

63. ¿Cuál era la tenencia en su vivienda anterior?

- 0 Dueño, *pase a la pregunta 64*
- 0 Inquilino, alquiler Bs./\$ ..... por mes, *pase a la pregunta 65*
- 0 Contrato mixto, Bs./\$ ....., *pase a la pregunta 65*
- 0 Contrato anticrético, Bs./\$ ....., *pase a la pregunta 65*
- 0 Vivía gratuitamente, como ....., *pase a la pregunta 65*

64. Si era el dueño de su vivienda anterior:

- a. ¿Como lo obtuvo usted?                      0 terreno vacío                      0 terreno con edificación
- b. ¿Cuándo lo obtuvo?                              En el año .....
- c. ¿De quién?    .....
- d. ¿Cuántos m<sup>2</sup>?    .....
- e. ¿A qué precio lo compro?                      Bs./\$ .....
- f. ¿A qué precio lo vendió?                      Bs./\$ .....
- g. ¿Su título estaba en trámite?                      0 No                                      0 Sí
- h. ¿Cuánto eran sus gastos por mes?                      Bs./\$ .....

65. ¿Cuántas planta(s)/piso(s) ocupaba el hogar en su vivienda anterior? .....

66. a ¿Cuántos cuartos tenía su vivienda anterior, sin contar el cuarto de baño ni la cocina? ....

b De estos cuartos, ¿cuántos usaba usted solamente para dormir? .... dormitorios

c ¿Cuál era la superficie de su terreno anterior? .....m<sup>2</sup>

d ¿Cuál era la superficie de todos los pisos construidos de su vivienda anterior? ..... m<sup>2</sup>

67. ¿En su vivienda anterior, usted disponía de....

	Sí, uso privado	Sí, uso común	No
Energía eléctrica	0	0	0
Gas natural	0	0	0
Gas liquado	0	0	0
Agua corriente	0	0	0
Alcantarillado público		0	0
Ducha o tina de baño	0	0	0
Letrina	0	0	0
Baño (excusado)	0	0	0
Cuarto <b>especial para la cocina</b>	0	0	0

68. ¿Porqué se fue de esa casa? .....

69. ¿Se sentía satisfecho con su **vivienda anterior**?  
1=pésimo, 2=malo, 3=regular, 4=bueno, 5=excelente

Tamaño de la vivienda	1	2	3	4	5
Gastos de vivienda por mes	1	2	3	4	5
Localización (per ejemplo distancia a trabajo, educación, tiendas, red social)	1	2	3	4	5
Satisfacción en general	1	2	3	4	5

70. ¿Se sentía satisfecho con su **zona anterior**?  
1=pésimo, 2=malo, 3=regular, 4=bueno, 5=excelente

Belleza	1	2	3	4	5
Seguridad	1	2	3	4	5
Organizaciones sociales	1	2	3	4	5
Facilidades de servicios públicos	1	2	3	4	5
Localización (en relación de toda la ciudad)	1	2	3	4	5

### **VIVIENDA ACTUAL**

71. ¿Porqué se ha establecido aquí?  
Motivo 1 .....  
Motivo 2 .....

72. ¿Cuál es la tenencia?  
0 Dueño,  
    ¿Su título está en trámite?      0 No              0 Si  
    ¿Cuánto son sus gastos por mes? Bs./\$ .....  
0 Inquilino, alquiler Bs.\$ ..... por mes  
0 Contrato mixto, Bs..\$ .....  
0 Contrato anticrético, Bs./\$ .....  
0 Vivía gratuitamente, como .....

73. ¿Quién construyó esta casa?  
0 Usted mismo  
0 El dueño actual  
0 El dueño anterior  
0 Un contratista privado  
0 Otro:.....  
0 No sabe

74. ¿Quien le ayudó con la mudanza a su vivienda actual? (*Especifique!*).....

75. ¿Cuántas planta(s)/piso(s) ocupa el hogar? .....

76. a ¿Cuántos cuartos tiene su vivienda, sin contar el cuarto de baño ni la cocina? .... cuartos  
b De estos cuartos, ¿cuántos usa solamente para dormir? .... Dormitorios  
c ¿Cuál es la superficie de su terreno? ..... m<sup>2</sup>  
d ¿Qué es la superficie de todos los pisos construidos de vivienda? ..... m<sup>2</sup>

77. ¿En su vivienda, usted dispone de....

	Sí, uso privado	Sí, uso común	No
Energía eléctrica	0	0	0
Gas natural	0	0	0
Gas liquado	0	0	0
Agua corriente	0	0	0
Alcantarillado público		0	0
Ducha o tina de baño	0	0	0
Letrina	0	0	0
Baño (excusado)	0	0	0
Cuarto <b>especial para la cocina</b>	0	0	0

78. ¿Cuáles son los materiales de construcción predominantes en la vivienda?

<u>Techos</u>		<u>Paredes exteriores</u>					<u>Pisos (incl. planta baja)</u>						
		<i>Piso</i>					<i>Piso</i>						
		pb	1	2	3	4	pb	1	2	3	4		
Calamina	0	Adobe	0	0	0	0	0	Tierra	0	0	0	0	0
Teja/cerámica	0	Adobe con fachada	0	0	0	0	0	Ladrillo	0	0	0	0	0
Losa de hormigón	0	Ladrillo	0	0	0	0	0	Madera	0	0	0	0	0
Duralit	0	Ladrillo con fachada	0	0	0	0	0	Cemento	0	0	0	0	0
Otro, esp. ....		Otro, esp.....	0	0	0	0	0	Otro, esp	0	0	0	0	0
								.....					

79. ¿Este año, ha ampliado y/o mejorado usted su vivienda?

- 0 No, ¿Porque? .....
- 0 Sí, ¿Qué tipo de mejoramiento y/o ampliación se ha realizado?.....
- ¿Porqué ha mejorado o ampliado su vivienda?.....

80. ¿Tiene usted planes para mejorar o ampliar su vivienda?

- 0 No, ¿Porqué?.....
- 0 Sí, ¿Qué tipo de mejoramiento o ampliación?.....
- ¿Porqué ha pensado mejorar o ampliar su vivienda?.....

81. ¿A usted le gustaría trasladarse de casa?

- 0 No
- 0 Sí

<b>Si querría trasladarse de casa</b> ¿Porqué?..... .....	
¿Adónde?	0 Esta zona: calle..... 0 El Alto: Villa/Zona..... 0 La Paz: Villa/Zona..... 0 Fuera: Departamento ..... Provincia..... Ciudad/Pueblo.....
¿Se va a trasladar en realidad?	0 No, ¿Porque?..... 0 Sí, ¿Porque?.....
¿Sería posible que usted se traslada en estos seis meses?	0 No, ¿Porque?..... 0 Sí

<b>Si no querría trasladarse de casa</b> ¿Porqué?..... .....	
¿Sería posible que usted se traslada en estos seis meses?	0 No, ¿Porqué?..... 0 Sí
¿Se va a trasladar contra su voluntad?	0 No 0 Sí, ¿Porqué?.....

82. ¿Se siente satisfecho con su **vivienda actual**?  
1=pésimo, 2=malo, 3=regular, 4=bueno, 5=excelente

Tamaño del a vivienda	1 2 3 4 5
Gastos de vivienda por mes	1 2 3 4 5
Localización (per ejemplo distancia a trabajo, educación, tiendas, red social)	1 2 3 4 5
Satisfacción en general	1 2 3 4 5

83. ¿Se siente satisfecho con su **zona actual**?  
1=pésimo, 2=malo, 3=regular, 4=bueno, 5=excelente

Belleza	1 2 3 4 5
Seguridad	1 2 3 4 5
Organizaciones sociales	1 2 3 4 5
Facilidades de servicios públicos	1 2 3 4 5
Localización (en relación de toda la ciudad)	1 2 3 4 5

84. Sabe usted dónde vive ahora la familia que ocupaba anteriormente esta casa?

0 No      Nombre .....

0 Sí:      Nombre .....

            Calle y número .....

            Lugar de referencia .....

            Ciudad/pueblo .....

            Provincia .....

**PREGUNTAS AL DUEÑO DE LA PROPIETARIA ACTUAL**

Hablado con:.....

(Solamente haga las preguntas si está hablando con el dueño o si puede encontrar el dueño.)

85. a. ¿Cómo lo obtuvo?      0 terreno vacio                      0 terreno con edificación
- b. ¿Cuándo lo obtuvo?      En el año .....
- c. ¿De quién?                      .....
- d. ¿Cuántos m<sup>2</sup>?                      .....
- e. A qué precio?                      Bs./\$ .....

86. En el **último año**, ¿su terreno ha sido fraccionado?

0 No

0 Sí      ¿Cuándo? En el año.....

            ¿A quién lo ha vendido o sedido? .....

            ¿Cuántos m<sup>2</sup>? .....

            ¿A qué precio? Bs./\$ .....

87. ¿Cuánto pediría por su casa en este momento? Bs./\$ .....



## Appendix 4 The Priority Question

¿Qué es el más importante para su casa?



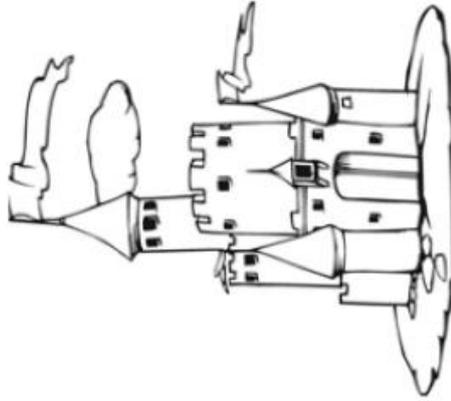
1. hacer actividades económicas en su casa



2. vivir en un lugar donde sus amigos y familia viven



3. tener propiedad → seguridad



4. belleza o lujo



5. vivir en un lugar que tiene servicios



6. tener una casa propia para sus hijos



7. tener una casa cerca a su trabajo