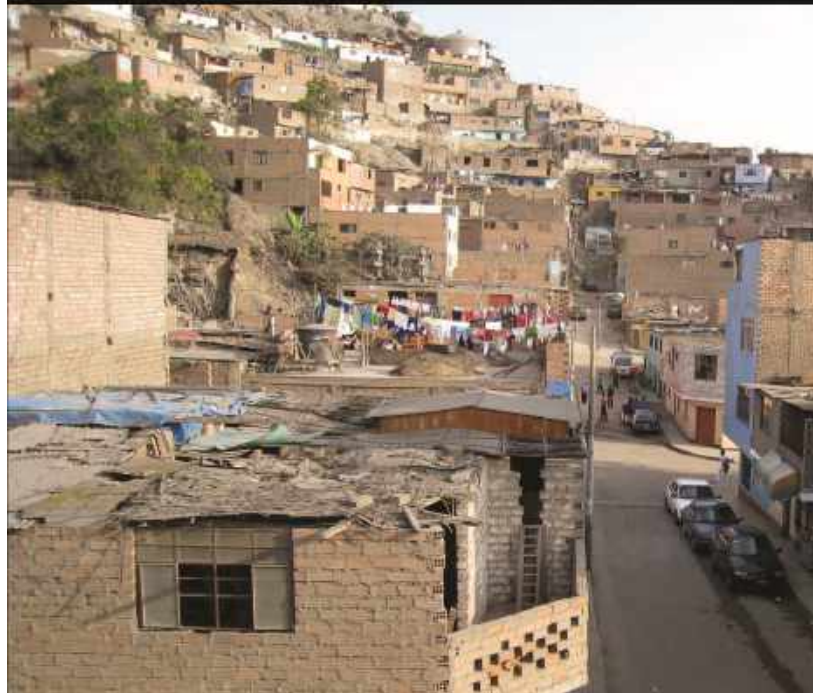
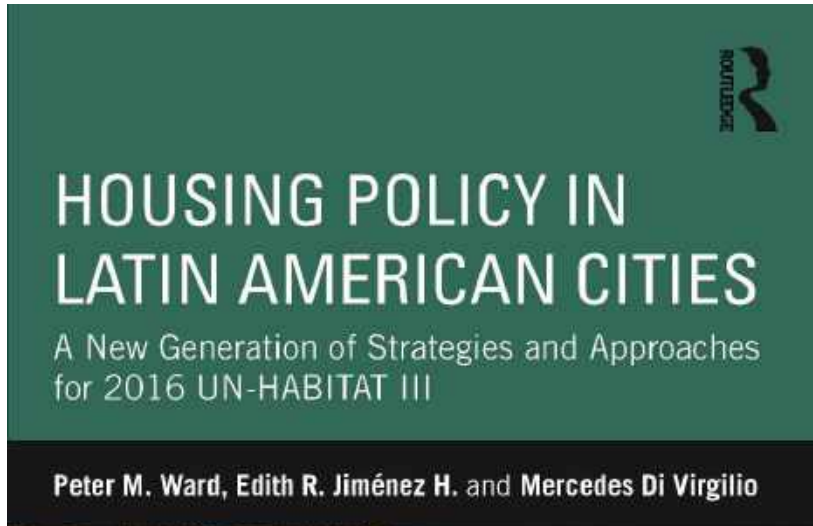


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Políticas de vivienda en ciudades latinoamericanas. Una nueva generación de estrategias y enfoques para 2016 ONU-Hábitat III

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Angélica Camargo*

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Hacia la década de 1960, la rápida urbanización en las regiones en desarrollo en América Latina, África y Asia, fue marcada por la expansión de asentamientos con población de bajos ingresos y que se desarrollaron informalmente. Para los años 2000 estos asentamientos constituyen usualmente entre el 20 y el 60 por ciento del área ocupada de las áreas metropolitanas y grandes ciudades. Además de las actividades de la red Latin American Housing Network (LAHN www.lahn.utexas.org), ha habido mínima atención directa a la enorme extensión de asentamientos informales formados hace 20 y hasta 40 años que hoy forman parte del anillo intermedio de las ciudades. En el marco de un proyecto coordinado y colaborativo de investigación, los autores y colaboradores ofrecen una perspectiva original en cuanto a los retos de densificación y rehabilitación que encaran actualmente los asentamientos irregulares en las ciudades latinoamericanas.

Investigadores, profesionales y expertos en temas de vivienda, política habitacional, investigadores en temas sociales, estudios comparados, desarrollo urbano, encontrarán este texto altamente significativo.

This PDF contains the pre-publication version of the individual city chapter for this particular folder. See the Folder “Introductory Chapter and Bibliography” for background orientation and bibliography relating to this and other chapters.

For a published overview and summary of the spectrum of policies, see Peter M. Ward. 2015 "Housing rehab for consolidated informal settlements: A new policy agenda for 2016 UN-Habitat III", Habitat International, 50, 373-384 (Publications Section of this website)

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Chapter 7.

New Approaches to Intervention in the Informally Settled Areas of Bogotá¹

Angélica Camargo Sierra

Bogotá is a city with a very long and rich history of urban research and intervention. It has developed novel and sophisticated instruments for land management and urban financing – such as the capture of increases in land value, settlement upgrading, monitoring of land uses, and a modern cadastre. Its land use planning through the *Plan de Ordenamiento Territorial* is one of the best and most complete in the country. However, the city continues to grow informally, and the consolidated city is threatened by deterioration of its physical fabric, both in formal as well as informal areas (Camargo and Hurtado, 2012). Thus, a change of focus and approach is required from the one that has traditionally been used to define the problems and address the urban reality of Bogotá.

At first glance the findings presented in this chapter suggest the following: 1) the need for an approach that will take a general perspective of urban dynamics over the last 50 years and will take account of both new settlements (especially) as well as those that are already consolidated; 2) an approach to urban renewal that pays attention to the idea of a “renewal of urban life” as expressed by Lefebvre (1974) in relation to the Right to the City movement; and most of all, 3) an inclusive approach, based upon processes that make the management of the city more democratic, in order to break down patterns of social inequality and spatial segregation.

URBAN GROWTH OF BOGOTÁ AND CONSOLIDATION OF THE INTERMEDIATE RING OF URBANIZATION

A review of Bogotá and the process of its urbanization

Bogotá is the capital city of Colombia, and in 2011 it had a population of 7,467,804 inhabitants. Its urban area covers 38,431 hectares,² with population and housing densities of around 194

¹ The research presented in this chapter was conducted by el Grupo de Investigación en Gestión Urbana, as part of la Maestría en Gestión Urbana at la Universidad Piloto of Colombia. The researchers taking part were: Leonel Miranda Ruiz, Claudia Rodriguez, Sergio Rodriguez Jerez and Julian Ruiz.

² According to *el Plan de Ordenamiento de Bogotá*. Figure included in the bases of the development plan for Bogotá 2012-2016.

inhabitants per hectare, and 53.5 dwellings per hectare, respectively. These densities vary considerably across the city making it highly segregated spatially.

The process of urbanization in Bogotá during the second half of the twentieth century may be summarized as having taken place in two stages. The first continued up until the mid-1970s, and is characterized by the formation of a “densitometric gradient running out to the edge from the center, both in terms of population and in terms of activity and employment” (De Mattos, quoted by Cuervo, 2012, p.65), and includes the earlier peripheries of irregular settlements at the beginning of their process of consolidation. The second stage of urban growth saw a more fragmented process of urbanization, although informal occupation of the land continued to develop at the edges of the city (Borsdorf, 2003). At this time Bogotá experienced at least three separate dynamics concurrently: declining endogenous growth as less people migrated; a process of re-densification within the city limits; and the first phase of metropolitan growth out to neighboring municipalities such as Soacha and Chia, and to a lesser extent to others such as Madrid and Mosquera in the Western zone (Dureau, 2000).

With respect to informal growth in Bogotá, there were two ways of gaining access to land: the first was through invasion. Invasions were collective actions organized in advance to take over public and private land, and many of them were carried out by the Communist Party. Although significant in the 1950s and 1960s, the areas invaded amounted to no more than 5% of all land developed informally (Gilbert and Ward, 1985; Torres, 1993). Second, and most important, were illegal subdivisions, where an agent (sometimes the owner of the land or an intermediary), subdivided land and sold it in parcels, without fulfilling urbanization norms and building regulations. In the context of Bogotá these are known colloquially as “pirate urbanizations.” In both cases the production of built space takes place through self-building.

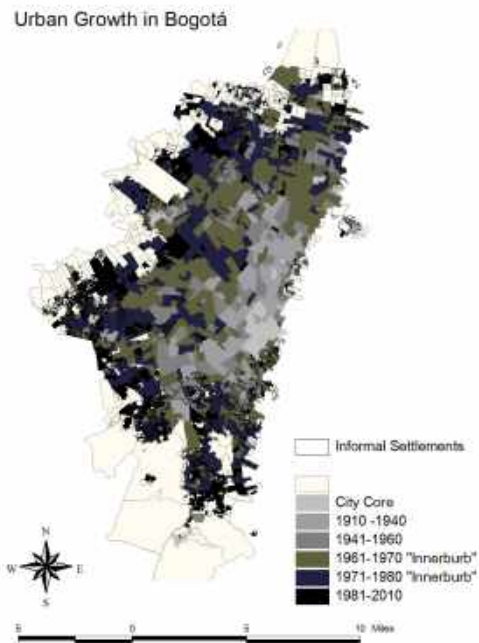


Figure 7.1. Identification of “innerburbs” in Bogotá

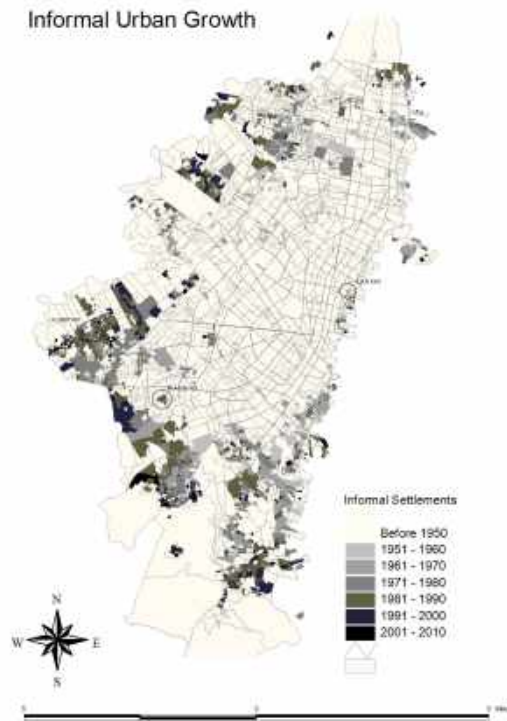


Figure 7.2. Informal urban growth with location of case study settlements

Figure 7.2 shows the location of the informal settlements across the city. Roughly speaking informal growth is contained within the broader process of urban growth but also shows some specific trends in the following three areas: 1) the Eastern zone (alongside the Eastern hills towards the North of the city), created during the 1950s as a result of quarrying, and formed generally through invasion, taking advantage of locations relatively close to the center comprising areas such as Chapinero, Usaquén and San Cristóbal; 2) the Western zone which saw the gradual informal occupation of the interstitial areas between the urbanized parts of adjoining municipalities (Suba, Engátiva, Fontibón and Bosa) and the center of Bogotá; and 3), the Southern zone that emerged from macro tensions of North-South urban expansion of the city (Usme, Rafael Uribe and Ciudad Bolívar). Currently (2013) there are 8,011 hectares of informally urbanized land, accounting for around 25 percent of the urban area of Bogotá.³

With regard to the formal and informal growth of Bogotá, the intermediate ring⁴ of the “innerburbs” can be identified as having formed from the 1960s to the 1970s (see Figure 7.1). During this period, urban growth covered approximately 20,000 hectares (58% of the urbanized land of Bogotá) of which 5,000 hectares were built informally, and this period ultimately generated 62 percent of all the informally urbanized land in Bogotá. About 58 percent of the population of Bogotá lives in this ring, and the population density is quite high – around 212 persons and 60 dwellings per hectare (compared to city averages of 180 persons/ha and 50 dwellings/ha).

Description of the Case Study Settlements

To choose which cases were to be surveyed, a probability sample⁵ was made for all consolidated informal settlements in Bogotá that were thought to have begun before 1985.⁶ The sample unit

³ For a detailed analysis of spatial urban growth, historical information was compiled settlement by settlement from various sources of secondary information (institutional) and of primary information (interviews with community leaders). See Camargo and Hurtado (2013).

⁴ It is important to make the point here that in the case of Bogotá we cannot accurately call the innerburbs a “ring,” as the growth of the city is better described as being made up of half-rings. The complexity of the spatial growth of Bogotá, determined by such things as the incorporation of municipalities that were not yet widely urbanized, and growth intensified along particular axis roads, and mining activities on the periphery. This makes it necessary to use the idea of “rings” loosely within the wider LAHN framework.

⁵ A multi-stage probability sample with a maximum size was employed, having an accuracy of 95% and a margin of error of 5%.

was the lot. We sought to interview the owner of the house, or else his or her spouse, and failing that, one of their adult children. In cases where we were told that the owner did not live on the lot, our questionnaire was applied to the tenants, corresponding to 33 percent of the all the cases.

Settlement	Owners surveyed	Tenants surveyed	Total
La Libertad	35	5	40
Isla del Sol	31	17	48
Juan XXIII	34	3	37
29 others	224	132	356
TOTAL	324	157	481

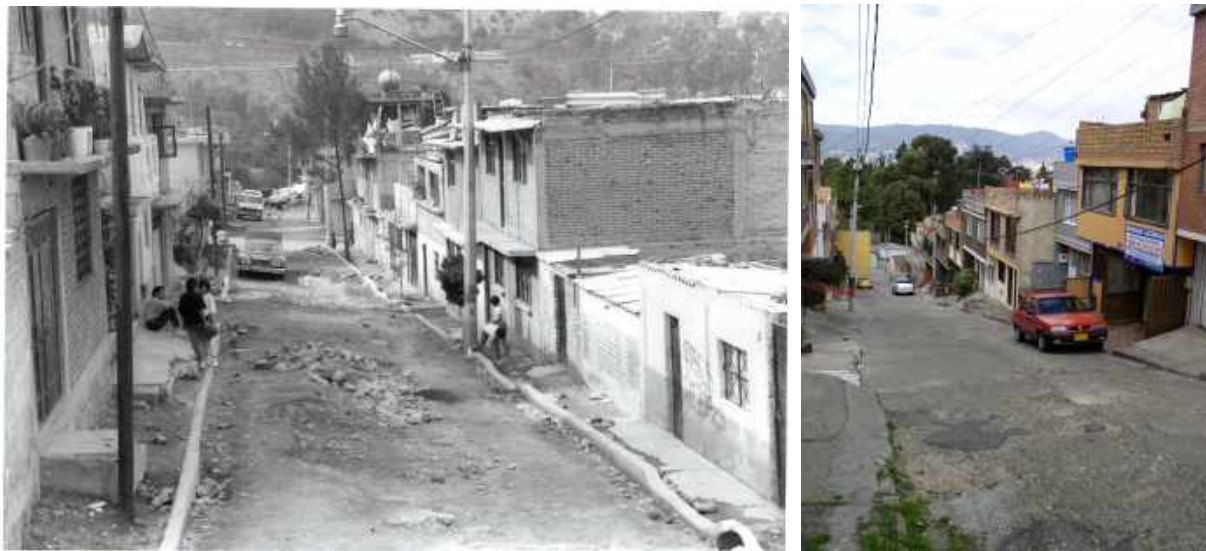
Table 7.1. Questionnaires applied by settlement to owners and tenants

In order to accommodate our sample within the methodology used in other cities in the LAHN project, we chose to restrict the sample to just three consolidated informal settlements, La Libertad, Juan XXIII and Isla del Sol, within a broader sample of some 32 cases. In addition, in Bogotá we were fortunate to have the findings from two previous studies of consolidated settlements and these were used as a preliminary basis for our initial thinking about the LAHN project (Gilbert, 1999 and Ward, 2012). In the more recent of the two studies, a team of researchers returned to three settlements that had formed part of a broad comparative survey conducted in 1978-9 (Gilbert and Ward 1985). It was found that 30 years after the first survey, the great majority (80.6%) were the same families as before (even where one or both of the original couple had died). This clearly suggests that residential mobility is minimal among first generation owners (Ward 2012), a finding that echoes Gilbert’s statement that for householders in the settlement “a home is forever” (Gilbert 1999).

Of course, after 30 years or more the average age of heads of the households was much greater in 2007, while downsizing of the family means that family size had shrunk considerably from the figure registered in 1978-9 (6.37) to 4.27 members. But at the same time the number of households living on the lot had increased from 1.6 to 2.7, mainly due to sharing arrangements

⁶ It was decided, for the sample, to broaden the study to include 1985, having foreseen certain imprecisions that might be made in defining the time that the settlement started, since the usual procedure for choosing a particular year is complicated.

with relatives or tenants. Nearly half the owners interviewed in 2007 had at least one family unit living in rented accommodation on the lot (Ward 2012: 1499-1501). It is also interesting to note that the average value of the properties, estimated by the owners themselves, was the equivalent of US \$23,370, suggesting that the property is an important asset for low-income households. The ageing of the households, and the common expectation held by adult children that they would inherit their parent's property, alerted us to the need to adopt a transgenerational perspective on the production and consumption of self-built houses, and on the prospect and needs of housing rehab and refurbishment in order to satisfy present and future requirements. I will return to this point below.



Photos 7.1 and 7.2 Longitudinal study in Barrio Casa Blanca 1978 (Photo left by Alan Gilbert) and 2008 (Photo right by Peter Ward).

Finally, in line with the LAHN project methodology outlined in Chapter 1, we conducted eight in-depth interviews in Bogotá (one in La Libertad, four in Juan XXIII and three in Isla del Sol), and this allowed us to reconstruct family histories and their relationship to the self-built dwelling environment over time.

General characteristics of the settlements studied

The next table presents the general characteristics of the three settlements within the wider sample of owners and tenants across 32 settlements.

Characteristics	Isla del Sol	Juan XXIII	La libertad	All settlements	
				Tenants	Owners
Area of the settlement (hectares)	18.3	1.69	3.06		
Year of origin of settlement (approx.)	1980	1960	1972		
Year legalized	1994		1997		
Number of lots	1,444	180	159		
Estimated population	5,900	700	1,200		
Average number of persons per lot	4.4	4.1	4.7		4.8
Sq. meters per person on the lot	27.6	9.3	27.4	25.9	28.6
Percentage of lots with 2 or more dwellings	34.5	6.5	20.6	68.1	39.9
Number of (bed)rooms per household	3.5	2.9	2.8	1.9	2
Percentage of extended families	10.3	32.3	9.1	26	19.4
Average age of lot owner or tenant	50.1	51	51.6	36.7	53.9
Average number of years living in the settlement	18	25	13	5,5	20
Average size of the lot	80.9	35.8	96.8	108	114.9
Size of the lot (mean)	72	30	72	72	72

Table 7.2. General characteristics of the settlements

Barrio Juan XXIII is located in a central area (towards the North) of the city, and began as an invasion of land, a large part of which was state owned. Although the difference is not as marked as one finds in the *villas* or *favelas* of Buenos Aires (see Chapter 11) Juan XXIII is somewhat similar with small lots, a sinuous layout and central location. This is quite typical for settlements in the zone of the Northeastern hills of Bogotá. As Table 7.2 shows, the average lot size is smaller than that found in the rest of the city.

Isla del Sol, in spite of being the most recent to form, has the highest population density of these settlements. Located in the Southern zone of the city, it developed through processes of illegal subdivision at the end of the 1970s and beginning of the 1980s. As its name suggests, it is located on a kind of island formed by the river Tunjuelo and has, on repeated occasions, suffered from flooding.

La Libertad in Bosa, is located in the Western zone of the city, and arose in the 1970s also through illegal subdivision. It has a more regular layout than the two other settlements.



Figures 7.3a-c. Case study maps: Isla del Sol, Juan XXIII, and La Libertad

While this chapter focuses almost exclusively on owners, it is important to mention that renting is a very important in Bogotá where a total of 41 percent of all households live in rental accommodation.⁷ Our survey data also show that renters often live in consolidated settlements, usually in rooms sublet by the owners. The data indicate that those renting are generally younger than owners (36 years old on average instead of 54), and that they are at a different stage of the family life course, hence we also see a higher number of single person households among tenants (11% instead of the 2% of owners). In addition, tenants are more affected by housing insecurity because of sharing and overcrowding. The rental market generally operates on an informal basis: in 67 percent of the cases, agreement was established by word of mouth. More detailed results for people renting in Mexico City and in Bogotá may be seen in Chapter 12.

EVOLUTION OF THE DWELLINGS, THE HOUSEHOLDS AND THE LIFE OF THE FAMILIES

General characteristics of the owners

On the basis of the findings obtained from the questionnaire applied in Bogotá we can have an idea of the current profile of the owners of dwellings that began through self-build over 25 years

⁷ Multi-purpose enquiry in Bogotá 2011. Secretaría Distrital de Planeación y DANE.

ago. The average age of the original owners⁸ is 57, while those who came later⁹ are 48 years old on average. We also found that the original owners have spent a large part of their lives in the same dwelling: on average 24 years in the home while in Juan XXIII the average period of residence is 35 years, very close to the figures reported by Ward (2012) in the study mentioned above.

With regard to the characteristics of the families we find that 68 percent of the owners live with their spouse (married or not) and 12.4 percent are widowed. The nuclear family type predominates (74%), with a significant percentage of extended families (22%), rising to 42 percent in settlements such as Juan XXIII.¹⁰ A common situation in these settlements is sharing of the dwelling or the lot, which exists in almost 40 percent of the surveyed cases. For the most part sharing is between relatives of the owner and the owner (56%), and usually includes one of the owner's children (37%), which confirms the likely ongoing use value of the dwelling for a second generation. In less than half of the cases (43.2%) the dwelling is shared with households made up of other families, who are usually renting from the owner of the property, a common phenomenon in Bogotá as we noted earlier. On average there are 1.7 independent dwellings per lot and 1.6 families per dwelling.

In sum, the distinguishing features of the household arrangements most commonly found in the consolidated informal settlements are: an elder owner, nuclear households with an important minority of extended families, high housing densities, dwellings accommodating second and even third generation family members, and significant sharing with tenants.

Land market and ways of gaining access to property

Having a house of one's own in low-income settlements starts in most cases with acquisition through purchase (99%) of a lot on which to build. Most of the original owners were not connected to the previous owner of the land and in general they lived in another settlement of the

⁸ Those who say they built the house themselves, who are 67 percent of all owners.

⁹ Meaning those who say they bought the house already built or nearly built, who make up 33 percent of the owners interviewed.

¹⁰ This may be a product of the more central location, which offers a continuing attraction of proximity to work for low-income residents. Also the small lot sizes make the subdivision of lot space more difficult for a separate household.

same city, usually renting before coming to their present place of residence. While the average lot size was 114 square meters and the modal lot size was much smaller (72),¹¹ in the rather different context of Juan XXIII the average lot size was very small at around 35.7 square meters with a house frontage of barely 3 meters. With regard to ownership of the property, it is important to understand that in Colombia a legal title to the house has to be obtained with formal registered papers (*escrituras*), which must also be registered in the public records office (*Oficina de Instrumentos Públicos*). All other documents such as promissory notes or unregistered titles are not legally valid. The survey found 61 percent of owners to be in this latter situation, although it varied both across zones and between settlements.

Zones	Legal title	Settlements	Legal title
North	56.86%	Juan XXIII	34.38%
West	75.51%	La libertad	71.43%
South	46.46%	Isla del Sol	51.61%
Total	61.23%	Total	53.06%

Table 7.3. Legal title to the property by zone and settlement

Mobility and residential strategies of the owners and their households

According to the figures from the survey of the longer-term owners who arrived at the outset of the settlement formation or sometime thereafter, very few said they had purchased a completed (11%) or nearly completed (21.2%) house. As Table 7.4 shows, nearly 67 percent of the owners who bought a completed house bought less than 10 years ago, supporting the thesis that the real estate market for homes became more active recently and may be more active during the consolidating phase of a settlement's evolution.

¹¹ The common size of the lot is 6 meters wide by 12.

How many years ago did you purchase?	Partially consolidated house		Completed house		Lot with provisional construction		Lot without construction	
	Cases	%	Cases	%	Cases	%	Cases	%
More than 30 years	7	11,1%	2	6,1%	6	30,0%	54	31,2%
Between 20 and 30 years	18	28,6%	4	12,1%	5	25,0%	63	36,4%
Between 20 and 10 years	20	31,7%	5	15,2%	6	30,0%	40	23,1%
Less than 10 years	18	28,6%	22	66,7%	3	15,0%	16	9,2%

Table 7.4. Time dwelling acquired according to type

The situation varies considerably in each settlement, and even in each zone. We have already seen shifting patterns of variables suggesting rather different behavior in the settlements of the Northeastern zone of the city and especially in Juan XXIII. The settlements in these zones also have greater mobility compared to the rest, even though the houses are relatively more expensive.¹² Another aspect associated with residential mobility that stands out in residential strategies in Bogotá is that owners that wish to move often prefer to rent out the home rather than sell it. In the wider (32 *barrio*) sample surveyed, 33 percent of those interviewed were living in rented accommodation where the owner did not live on the property, but it is unclear whether this is because of choice on the part of the owner or constraints upon selling the property at a fair price. Our more detailed in-depth (purposive) interviews allowed us to observe another type of residential mobility that appears to be quite common: that of the exit and reentry of family members (see also Dureau, 2010). It is common for members of the family, especially grown-up offspring, to leave and return as their own family conditions change (through marriages and divorces) or with changes to the economy (in times of economic crisis one important option is to live with one's parents).

¹² Dwellings are relatively more expensive because although by the square meter they are more expensive, the dwellings tend to be smaller, so the total price is less than for a house in a consolidated informal settlement in the Western or Southern zone of the city.

Dwellings as productive spaces

With regard to the economic potential of housing in consolidated settlements, a number of studies have shown the importance of the dwelling as providing a coping strategy in times of poverty, to the extent that it is considered one of the most important resources of poor families (Moser, 2008; Camargo and Hurtado, 2011). In the settlements 25 percent of property owners complemented their incomes with other income sources from the house, and this proportion rises by a further 10 percent in those cases where the reported income is less than one minimum wage. In most cases (62%) this (additional) income is obtained by letting out a part of the property (an apartment, a room or a shop). Only in 11 percent of the cases did the owner rent to members of his or her family.

Current housing market for consolidated dwellings in popular settlements

Some studies suggest that the areas of the first expansions of the city (innerburbs) have recently been showing a process of densification that has helped to energize the informal housing market (Dureau, 2010; Abramo 2008). With regard to turnover of the housing stock, a significant feature from the survey was that one quarter of those interviewed stated that in the course of the year they knew of a neighbor who had sold their property, and the price, though we have the figure for very few cases (40), was around 55 million pesos (US \$28,000). Residents' subjective evaluations of their own properties were not far off the mark, at 60 million pesos (around US \$30,000). This estimate appears to closely reflect the perceived benefits of location, as property values were lower in settlements in the South, and higher in settlements of the North and East of the city. Comparing the numbers with objective data we find the subjective values are overestimates in comparison with the cadastral value (Table 7.5), although this is quite usual since property values that form the tax base are generally somewhat lower than actual market values.

Settlement	Subjective value		Cadastral value 2009		Commercial value approximate*	
	Pesos (COP)	US Dollars	Pesos (COP)	US Dollars	Pesos (COP)	US Dollars
Isla del Sol	59,565,217	30,236	22,606,797	11,476	32,295,424	16,394
Juan XXIII	46,761,905	23,737	18,614,198	9,449	26,591,712	13,498
La Libertad	89,814,815	45,591	24,176,389	12,272	34,537,698	17,532
All settlements	60,536,434	30,729	26,389,335	13,396	37,699,049	19,137

Table 7.5. Subjective and cadastral property values in the settlements

Organization of the family and consolidation of the houses

Growth of the house related to family dynamics

One of the most important elements of the consolidation of housing in low-income settlements has to do with the progressive nature of the building that takes place over long periods of time. While several aspects of the development of the dwelling, as well as the nature of family and residential organization, may be identified from the survey, a more nuanced understanding of house building and the subdivision and organization of space in accordance with the growth of the family can only be fully appreciated through in-depth case studies. An interesting aspect of the development of the houses in these settlements is the close links between the growth of the family, the physical evolution of the property, the nature of family and household changes (marriage, divorce, family growth), and the economy (changing employment opportunities for family members). Household and family changes are likely to be reflected in dwelling adjustments.

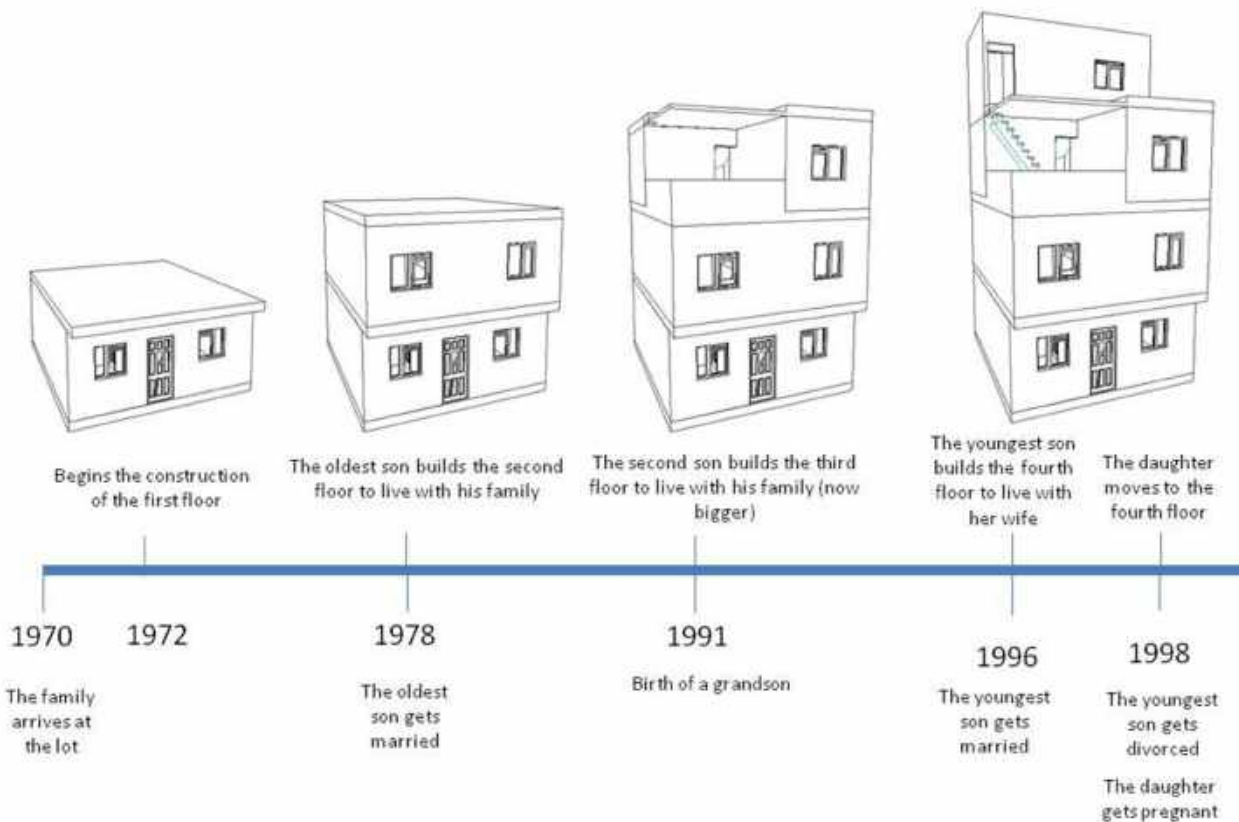


Figure 7.4 Timeline history of a case study household, 1970-1998

In the case of Bogotá the most common type of subdivision is upwards, and in every case those interviewed spoke of building by floors, enabling them to “get rid of the corrugated metal roof.” Generally they intended to consolidate their property by subdividing it very clearly through the addition of new floors as independent apartments. Each floor with its own bathroom, kitchen and bedrooms, would occasionally either be let out to tenants or, as in the case of the family whose timeline is presented in Figure 7.4, it might accommodate the owners’ offspring with their own families; in fact in this case there are 20 people already living in the same house.

This pattern of separate accommodation in the same house is corroborated by the fact that it is very unusual for a family to share a single floor, which generally only happens with very close relatives (e.g. siblings, each with a room of their own). In nearly all cases, those interviewed said

there was independent access to the other floors, and it was quite common to find outside staircases and double doors to safeguard the privacy and independence of the apartments.

Arrangements for inheritance and succession: processes, perspectives, and expectations

As the reader will observe in several chapters in this volume shared accommodation and the prospect that children and grown-up grandchildren may inherit part of the family wealth from their forebears have emerged as an important element in the findings of the LAHN. In the case of Bogotá in particular, and of Colombia in general, the culture of wills and testamentary allocation of assets after death comprises a mixed arrangement that allows the owner to designate heirs to up to a quarter of his or her property (and to up to half when there are no children). However, the largest share of any inheritance is assigned by forced heirship without reference to a will, in accordance with the Colombian Civil Code.

Thus the inheritance of goods after death may be effected with a will or without one, and in the latter case it would be through a process of succession before a judge. When there is no will, the goods are apportioned to heirs in accordance with the order of succession in the Civil Code,¹³ and when there is an unbroken matrimonial association this is settled before the succession process begins and 50 percent of the property is kept by the surviving spouse. However, when the surviving spouse does not have enough resources to pay for living expenses, he or she has the right to a part of the inheritance known as a “marital portion”, and when there are children this is the same amount as that given to each of them, or else, a quarter of the estate for those who do not have any children. Furthermore, in order to safeguard the house where the family resides, Law Number 258 of 1996 establishes the figure of *afectación a vivienda familiar* (appropriation of family residence) which prohibits the seizure, sale or mortgage of the property without the agreement of both spouses.

The importance of analyzing the arrangements made for the inheritance or succession of the property is easily seen when the owners’ age groups are studied: 36.5 percent are over 60 years old, and of these, 28 percent are over 70. Of the total number of owners, 27.8 percent are over

¹³ First in line are the children, who exclude other heirs. Secondly are parents, then siblings and finally the spouse. (Código Civil Colombiano)

50. Among the original owners, the percentage of those who are over 60 rises to 45 percent. Furthermore, 57 percent of the owners with extended families accommodate at least one member of the third generation (a grandchild) in their house.

These ageing families and shared accommodations among close family members underscore why arrangements about inheritance and plans for the future use of the property are so important. Of all those in the wider sample (32 *barrios*), some 60 owners have died and in almost all cases (95%) not left a will. In those cases where the owner is still alive, 90 percent say they do not have a will, though 31 percent of these have left some instructions about the future of the property. Our in-depth interviews confirmed this type of informal arrangement, and the subdivision by floors sometimes adds a little clarity to the future of the property, the ideal in Bogotá being to have as many floors as children:

“From the start we, along with Antonio, shared out the house so each of my children should have a floor: the first floor for the eldest, the second floor for the middle child and the third for the youngest.” (Interview Juan XXIII)

However we also found that in many cases the owners prefer not to think too much about inheritance and succession assignment, preferring to leave their children to sort things out as best they can once they, the parents, are gone.

Principal housing problems in the settlements and in the buildings

Physical problems and problems of deterioration

One of the main physical problems of the houses is the absence of natural light and ventilation. Another is having no back yard (54%) and when there is one it tends to measure around 10 sq. meters. In 36 percent of the cases there are bedrooms with no natural light and these problems are particularly common in Juan XXIII and may have a very significant effect on the health of the inhabitants¹⁴ (Molina, 2012).

¹⁴ A recent study (Londoño & Chaparro, 2011) connecting living conditions to the health of occupants states that the inhabitants of houses without natural lighting have a higher exposure to bacterial diseases, as sunlight is a powerful bactericide.

The structural and architectural problems are more difficult to evaluate. With regard to structure, as verified in the interviews, most of the houses have so called Cyclopiian foundations,¹⁵ which technically support a second floor, although a significant number of dwellings already have three or even four floors without adequate structural supports. In Colombia earthquake regulations require the walls in cases like these undergo a process of close inspection and verification, which is both expensive and complicated. In terms of living spaces, some of the most difficult problems of habitability that these settlements face are those of overcrowding and sharing the home. Less complicated but still important, are problems relating to the plumbing; in many cases pipes need replacing with PVC, and some of the oldest properties have copper pipes that add oxides to the water making it unsafe to drink. There are also common issues related to rainwater removal from the roof and ensuring that the external walls are weatherproofed. Humidity and poor ventilations in bathrooms is also common, and in most cases bathrooms are poorly finished-out.

Rehabilitating the collective areas of settlements is important; the average amount of public space is not more than 2 square meters (Díaz, 2012). Local roads (side streets) are invariably heavily deteriorated and there are problems both of road surfacing and broken sidewalks (Photo 7.3). Moreover, some of these *barrios* are facing very intense pressures of land use change and densification, including the construction of small blocks of apartments (see Photo 7.3).

¹⁵ Cyclopiian foundations are laid by opening trenches under where the outer walls of the house will be built and filling them with stones of various sizes while liquid concrete is poured.



Photo 7.3 Damage and discontinuity of sidewalks in Barrio Casa Blanca (Photo by Peter Ward)

Legal aspects and the need for regularization

As mentioned above, our survey data suggest that only 60 percent of residents claim to have legal property titles, which matches the calculations made by the district administration (*la Administración Distrital*) that found around 35 percent of the properties in informal settlements lacked titles. The majority of these cases involve lots on private land that would require judicial procedures to establish ownership.

With regard to issues of inheritance and succession, neither in the surveys nor in the interviews did we encounter conflicts or problems over succession. However, as explained above, owners are now beginning to reach their twilight years, and if we add this fact to the existing backlog (40%) of irregularity found among titles, then it is possible to anticipate significant problems in the future both for regularization and for clarifying titles held by second generation inheritors.

The in-depth interviews revealed that in the case of the more central settlements located close to high rent areas, real estate pressures have recently led to increased building for rental uses, and private builders are trying to buy people's houses in order to create small housing developments for high-income groups as in the case of Chapinero (which includes Juan XXIII). In one or two cases entire settlements have disappeared. The community has started to mobilize to prevent and persuade owners not to sell their dwellings, not least because the current state of the housing market does not allow them to obtain social housing with the same locational benefits that they presently enjoy.

REHABILITATION STRATEGIES FOR CONSOLIDATED SETTLEMENTS

A look at housing policies in Colombia with attention to irregular settlements

According to Ceballos and Saldarriaga (2008), the history of housing policy in Colombia has passed through five major stages. The first was called “*higienista*” and began in 1918 with policies for the working class, lasting until 1942 when the *Instituto de Crédito Territorial (ICT)* agency was established. The same authors identify an “institutional” phase between 1942 and 1965, when “public action in social housing concentrated on obtaining resources and building organizational capacity.” During this period the construction by the state of housing estates (called *barrios*) for the urban working classes began to be promoted under the aegis of the ICT with resources obtained from the Alliance for Progress. The next stage of “transition” between 1965 and 1972, saw the earliest “slum clearance” projects followed by efforts to improve settlements through upgrading and support for self-building, and these were further consolidated in the next phase 1972 to 1991 (Ceballos and Saldarriaga, 2010: 9).

A final stage of social housing policy began in 1991 with a radical turnaround when Law Number 3 of 1991 was published, and the family housing subsidy (*Subsidio Familiar de Vivienda*) was introduced. This has become the basis of contemporary housing policy. Designed within the framework of neoliberalism, as the state withdrew from directly producing housing it left the provision of social interest housing in Colombia in the hands of the market and the construction industry (Jaramillo and Cuervo, 2009). Public resources were focused through the granting of direct subsidies to meet demand, following an approach promoted by multilateral organizations on the basis of the Chilean experience (Caicedo, 2010). A number of authors have

argued that this policy was incapable of attending to the needs of the poorest members of society (Alfonso, 2012; Caicedo, 2010; Castillo, 2010; Escallón, 2011; Garzón, 2011). The current housing policy favors the financial and building sectors and in the last decade (from 2000) it has been linked especially to massive housing estate construction (*Macroproyectos de Vivienda de Interés Social Nacional*), far out on the periphery of urban areas or beyond. In addressing the policy needs of irregular settlements, urban legislation focuses on incorporating them into the city through public works that provide infrastructure, as well as on programs designed to improve the dwellings and the settlement fabric. Regularization does not, however, include the regularization of property titles.

In order to obtain titles, the juridical procedure basically depends on the type of property on which the settlement is located, and on the possibility of coming to an agreement with the formal owner of the land. Lots located on publicly-owned land, or on land belonging to a public department, are regarded as fiscal goods, and may be titled, without charge, to the person currently in possession as provided for in Law Number 9 of 1989 in Article 58: so long as the current residential use is for social interest housing and the property was occupied before 2001.¹⁶

With regard to improvements within settlements, while there is a national policy,¹⁷ most of these interventions are given over to local authorities. According to figures from the Housing Department (*Secretaría de Hábitat*), the cost of normalizing and regularizing a *barrio* may amount to as much as US \$3,500 per dwelling unit; and the sum of money invested in normalizing settlements from 1997 to 2004 was 1.36 billion pesos (Camargo and Hurtado, forthcoming). These improvements include four basic areas of intervention: 1) integral improvements to the settlement, 2) relocation of households whose dwellings are located in high risk areas or areas of public works, 3) legalization of the settlements, and 4) improvement to dwellings and provision of property titles.

¹⁶ Ley 1001 de 2005.

¹⁷ Documento CONPES 3604 DE MEJORAMIENTO INTEGRAL DE BARRIOS

STRATEGIES AND ACTIONS FOR A NEW FOCUS ON URBAN RENEWAL AND REHABILITATION IN BOGOTÁ

Most of the interventions described above apply to new settlements, whereas below we consider policies for the consolidated informal housing stock. In light of the research findings already presented we offer some priority lines of action drawing upon the general discussion of policy offered in Chapter 2.

Physical rehabilitation of the settlements and their houses

As explained in Chapter 2, housing rehabilitation needs can be differentiated according to the level at which interventions are required: at the macro level (zone and the settlement); at the meso level (house meets the street); or at the micro level (dwelling and lot).

Macro Level

At the macro level, the basic actions to be taken are:

- Improvement of the road network at the local level, both for vehicles and for pedestrians.¹⁸
- Public safety to de-mobilize illegally armed groups, especially where these are criminal gangs.¹⁹
- Strategies to solve problems related to public space which is limited in these settlements and which is often in poor physical condition (Díaz, 2012). The policies being applied in the central areas of the city that are seeking to improve economic activities should be adapted and applied within these zones, which are, themselves emerging as new urban subcenters.
- Public policy promotion of community gardens such as that in Isla del Sol (see Photo 7.4).²⁰ Although unusual in Bogotá such actions might be a way of promoting collaboration and community cooperation linked to the principles of sustainability mentioned in Chapter 2 (see also Sullivan and Ward, 2011).

¹⁸ According to information published by el Instituto de Desarrollo Urbano, 58 percent of the local road network is in a bad state. http://www.idu.gov.co/web/guest/malla_inventario

¹⁹ Recent news reports testify to the presence of this type of gang activity in informal settlements of the Suba and Usaquén zones. <http://www.lafm.com.co/noticias/enfrentamientos-de-bandas-134096>

²⁰ Like the Community Gardens established in the USA, Canada, and elsewhere.



Photo 7.4 Informal community garden in Isla del Sol (although it is not visible, a soccer field is adjacent)(Photo by Peter Ward).

Meso Level

At the meso level it is important to continue the improvement of sidewalks, address the future need for parking spaces, and secure independent access to the second and third floors of the houses in ways that do not obstruct pedestrian movement. It is also important to encourage schemes that will accommodate commercial activities within dwellings in such a way as not to add to the deterioration of family living conditions.

Micro level

Two types of micro level policy interventions are important: those having to do with the need for more space and those related to improving the building. The demand for more residential space can be met by taking advantage of the structures that already exist, as well as re-densification:

- Structural improvements to allow safe expansion related to the construction of additional floors.
- Improved use of different levels (*terrazas*) of the houses.²¹

²¹ See the Terrace Plan, *Plan Terrazas* offered by the construction company Apice <http://apiceconstrucciones.com/remodelacion-casas-oficinas-vivienda-bogota/plan-terrazas/>

- In the context of Bogotá where the rental market is so important, policies to enhance privacy and independent access; as well as strategies that will promote more and better standard rental units.
- Policies for separation of horizontal property and formalization of subdivision with separate titles in the cadastre, given that vertical subdivision by floors predominates.

Rehabilitation of the dwellings - structural adjustments, architectural changes, and remodeling:

- Structural adjustments: in some cases walls need to be strengthened and other kinds of reinforcement undertaken, especially for those dwellings with more than a single floor, and those built on a sloping lot.
- Architectural changes: functional improvements to ventilation and natural light. On this point, so-called “lite” or green technologies may be used internally that can be low-cost and not affect the structure of the building.
- Refurbishing to control dampness: replacement of domestic pipes (using PVC); improvements to wall finishings in damp areas (such bathrooms and kitchens); repairing cracks (noting that if cracks are large this is a sign of structural problems); and reducing damp through improving the channeling of rainwater and weatherproofing the external walls and roofing.

Strategies for financing and managing public interventions

Policies for financing interventions and strategies for managing them depend fundamentally on the scale under consideration.

Strategies for financing macro level interventions

- District level interventions to promote real estate intervention for the rehabilitation of the zone or the settlement. Specifically this should include land market activities to encourage the supply of new housing and housing for rent (Ramírez, 2012).
- To apply the mechanisms of associated management (partial plans, cooperation between participants, recommendation of lots, real estate integration) foreseen in Law 388, through the use of trusts, with linkages between private and public partnerships.

- To take advantage of the redevelopment potential and redensification in these areas by leveraging the financing required for necessary but costly public interventions. Also to transfer some of the benefits and gains in wealth from some of the high rent and profitable development areas to these cost incurring zones either through direct interventions, or through compensation funds (Figueroa, 2012).
- Bogotá has shown capacity to undertake innovative and highly original instruments for improving and maintaining public spaces. For example the agreements for making public spaces sustainable (*los Acuerdos para la Sostenibilidad de los Espacios Públicos*), and the special districts for improvement and social organization (*Distritos Especiales de Mejoramiento y Organización Social, DEMOS*). These could well be adapted to improve the public space at the local level (zones and settlements).

Schemes for financing interventions at the meso and the micro levels

- To implement mechanisms for transferring priority interest housing into these zones,²² in order to assist redensification and extensions to existing buildings, which implies priming land and housing market interventions to target existing (rather than new) construction potential (Ramírez, 2012).
- To implement, in association with local universities, technical consultancies that will advise the community on improvements.
- To strengthen the settlements' building materials stores and warehousing organized by the community itself and built upon previous experiences of self-help building materials yards.
- To channel greater amounts of national government subsidies for improving housing, linked to credit lines from the national savings fund (*Fondo Nacional del Ahorro*).

²² In Bogotá, in the context of adjustments that are being made to the land use plan (*Plan de Ordenamiento Territorial*), it is hoped that any new urban architectural project will carry the obligation to devote 30% of the net area to be urbanized to priority interest housing, which may be transferred to other areas of the city under particular conditions.

Legal and normative aspects of programs to facilitate rehabilitation and regularization

In the case of Bogotá there is a very full normative structure that contains many innovative instruments for renovation, rehabilitation and home improvement, some of which have already been mentioned in this chapter. What is needed, however, is to promote their adoption and use and to encourage the community to make them their own. Nevertheless it will be important to:

- Make titling procedures and the property identification easier by clearly regulating the form in which progressive compliance can be achieved, gradually meeting the necessary standards and architectonic norms.
- Promote collectively organized processes of titling and recognition of properties in accordance with *Curadurías Urbanas* (urban development clinics), universities and civil organizations, so as to reduce the transaction costs for the population, and to make it easier for them to obtain improvement grants available through the National and the District governments.
- Strengthen the legal consultancies that already exist and extend their influence to titling advice, in order to prevent developer and other fraudulent abuses.
- Make mediation procedures by Justices of the Peace, Public Notaries, etc. more effective and so reduce the costs of succession and inheritance processes and facilitate agreements between inheritors.
- Promote campaigns to inform the public of property rights, urban norms, and the regulations and options for succession and testamentary procedures.

Nothing can be done without social mobilization and community participation

All of the preceding proposals and interventions require social mobilization to ensure broad and democratic participation by the community. In addition Bogotá has positive experience of participatory engagement in housing and urban improvement that offers a lesson for rehabilitation in consolidated settlements: specifically, participatory programs such as *Obras con Saldo Pedagógico* (Works with Teaching and Learning Effects), and *Obras con Participación Ciudadana* (Works with Citizen Participation). It is also important to promote the active participation of young people and youth organizations in improving the settlements in ways that would encourage more engagement in cultural activities (graffiti, urban art, urban cultures, etc.), ideally with the aim of reducing violence.

SUMMARY

The findings from Bogotá show similarities and differences to the other cities studied in this volume, and while they confirm most of the general propositions identified at the outset (see Chapter 1) there are a number of local emphases and particular elements relating to Bogotá that should be pointed out:

- The idea that many of the original owners are beginning to enter old age is confirmed by our findings of a large number of senior citizens aged 60 or over often living in high densities that include extended families, cohabitations of second and third generations, and tenants who are usually related to the family.
- The average price of the dwellings is US \$20,000, with prices in the more central and northern parts of the city much higher than for properties located in the western part of the city, and with the lowest prices in the south of the city.
- With regard to residential mobility, it was found that although there is a high degree of stability (only 30% of original owners appear to have sold their properties), there is also a high rate of mobility among the young, as well as among families who are in the rental market.
- The in-depth interviews show a tightly interwoven relationship between the physical growth of the dwelling and the dynamics of households and family formation. The time it takes to consolidate a dwelling through self-build) is between 5 and 20 years, which ties in closely with economic and household dynamics.

The ongoing importance of these dwellings for the second and even for the third generation is clearly demonstrated, and requires that we think of the residence as a patrimony for the future. Currently owner parents make informal indications about inheritance of that patrimony (such as leaving one floor for each child), but these informal arrangements do not take into consideration the Civil Code which, if invoked, will assign inheritance differently, possibly leading to conflicts both between beneficiaries as well as between formal and informal normative behaviors and procedures.

The complexity observed makes it urgent to shift current policy approaches toward intervention in the existing housing stock of the city, especially in those areas that have been built and

consolidated informally. Key here will be creating the capacity for citizen mobilization and participation that will ensure that Bogotá is a city that is less segregated, less unequal, more inclusive and more democratic.
