

4 MIGRATION AND URBAN GROWTH OF TRUJILLO

4.1 INTRODUCTION

The growth of and migration to the city of Trujillo form an important part of this research: its size and characteristics are vital in analyzing its impact on the infrastructure services. To understand the process of migration and its influence, a qualitative analysis of the settlement process is described. By doing so, answers are provided to the first two research questions;

“What is the size and direction of the migration flows concerning the metropolitan area of Trujillo?”

“What are the characteristics of the migrants and their settlement in the poor urban areas of Trujillo?”

In this chapter, these two questions correspond roughly to the next two sections. First, we discuss the migration and urban growth, including the migrants' characteristics. Then, the process of settlement and the various actors involved are elaborated upon.

The main sources used for this chapter are the two censuses of the National Bureau of Statistics (INEI, 1993a and 2005a), the Environmental Atlas of Trujillo (MPT, 2003), a study by Rosner (1999), by Amemiya Hoshi (2003) and the survey as carried out by the author. Waltraud Rosner conducted an interesting study on the impact of migration on the urban development of Trujillo. The study carried out by Nelly Amemiya Hoshi provides insights in the process of settlement. The Environmental Atlas of Trujillo contains various maps on the spatial distribution and developments on urban and socio-economic characteristics.

Other sources are only of limited use for this thesis. This is surprising, as a great number of studies on Peru's internal migration have been carried out since the 1950s. These studies were mainly anthropological studies on the population originating from the Andes (1950s onwards), the self-organisation of the people living in Lima (1970s onwards), and studies on the migration as a result of terrorism by the Shining Path (1980s and 1990s). Concerning studies on internal migration, we can distinguish three different types of studies. Studies that deal with rural-urban migration and its consequences on the Peruvian cities; studies analysing migration between the three natural regions (coastal area, Andes Mountain range and the Amazon basin), and studies dealing with migration increasing the Lima metropolitan area (Rosner, 1999, pp. 2-12). Over the last five years, especially the latter have been sufficient whilst studies on other cities remain scarce. Furthermore, most studies use INEI census data as their main source without adding independent data or interpretations, thus leading to duplication. Also, those that focus on the city of Trujillo are too few to be relevant. The relevant parts are also often included in the above-mentioned study by Rosner and in the Environmental Atlas of Trujillo.

In this chapter, the topic of migration and settlement is discussed at the national, regional and local level. Peru is divided into departments. Every department covers various provinces, which in turn cover different districts/municipalities. These different levels are also displayed on the maps of the

appendices (see Appendix A). In the next section, we describe the migration flows from these various areas towards Trujillo. Then, the behaviour of the actors, migrants and the settlement process in Trujillo are discussed.

4.2 MIGRATION AND URBAN GROWTH

4.2.1 POPULATION GROWTH AND MIGRATION IN PERU

The population of Peru has been increasing continuously since 1940, when data collection via national censuses began. This increase has been most visible in the urban areas. In those urban areas, the mortality rate was lower and job opportunities at the haciendas and in the industry led to a positive migration rate. As a result, the growth rate has always been higher for the urban areas than for the rural areas. This changed the relative importance of the urban and rural areas immensely. They sheltered about the same amount of people in the 1960s (according to the respective censuses, see Appendix D-1), after which the urban areas became increasingly important. Nowadays, the urban areas house 76% of the total population of Peru, compared to 24% in the rural areas (INEI, 2007).

Table 4.1: Population growth of Peru, for various areas.

	Urban	Rural	Lima	Other 31 cities	Rest urban	Total
1940 – 1961	3.7	1.3	5.0	4.0	2.4	2.2
1961 – 1972	5.0	0.5	5.4	5.9	2.0	2.9
1972 – 1981	3.6	0.8	3.7	4.9	2.4	2.6
1981 – 1993	2.8	0.9	2.7	3.3	2.4	2.2
1993 – 2005	1.9	0.2				1.4

Sources:

INEI, 1995, *Migraciones Internas en el Perú*, Lima

INEI, 2005, *Censos Nacionales 2005, X de Población y V de Vivienda*, Lima.

The relatively large increase of the population living in the urban areas was mainly due to the substantial increase of the population in the bigger cities. As can be seen in Table 4.1, the growth of the capital Lima has been similar to the national average for the urban areas since 1972. In the next largest 31 cities, the urban growth has always been larger than the average of all urban areas. These grow considerably faster than the rest of the (smaller) urban areas. In absolute terms, the growth in Lima is still larger than the following 31 cities (INEI, 1995).

The larger Peruvian cities (such as Lima, Arequipa and Trujillo) have experienced large growth due to migration since the 1960s. Due to the increasing population size of these cities, rural-urban migration was steadily less responsible for the total share, whereas natural growth as well as movements within the metropolitan area have become increasingly important. Also, the migration flows have spread to different cities, which has made the smaller cities (such as Chimbote and Pacasmayo in La Libertad) go through a phase of extensive growth as was earlier¹ experienced by the larger cities.

Migration patterns at the national level are best described as migration between departments. Peru is divided in 24 departments, of which focus La Libertad is the main in this research. The share of people that moved to a department different to the department of birth in 1993 was 20.6 percent of the total population, just over 4.5 million people. This proportion increased little from 1970 to 1993², and can be expected to have continued at this slow rate³. The ENAHO confirms this, with estimates that in 2003 about 22% of the total population migrated to a different department. (FAO-

RLC, 2005, p. 52-53) The majority of the people, therefore, continue to live in the department where they were born.

The patterns of migration provide a clear picture: Migrants move away from the Andes, mainly towards the coast. The departments with the largest cities attract most of the migrants, where Lima is by far the most popular destination (attracting about 40% of all migrants). Again, the data from the censuses of 1981 and 1993 provide detailed figures (see Appendix E). They show that the departments of arrival that were popular over 1976-1981 remained popular over the period 1988-1993. The departments in the Andes had a negative migration balance (except for Arequipa), even more so before 1993 than in the earlier five-year period. The Amazon departments became less popular, still the balance remained positive. (INEI, 1995) The changes in the flows between those two periods are thus small, as general trends stay the same. Migration has led to increased urbanisation, with especially the biggest cities becoming larger.

La Libertad has a population of about 1,5 million, and accounted for 6% of the county's population in 2005. The department is divided into twelve provinces, of which Trujillo is by far the largest (INEI, 2005a). Over the last half century, the population growth of La Libertad has been moderate, with an average annual growth of 2.6% over the period 1961-1972, steadily declining to about 1.8% over 1993-2005, as can be seen in Table 4.2 below (Gobierno Regional La Libertad, 2007). The annual population growth has thus slowed down in relative terms; in absolute terms the growth has never been larger than it was in the last decade.

Table 4.2: Population of the department La Libertad by the National Censuses

Year	Total	Period	Increase	Annual growth in %
1940	418,358			
1961	625,578	1940 - 1961	207,220	1.93
1972	825,285	1961 - 1972	199,707	2.55
1981	1,011,728	1972 - 1981	186,443	2.29
1993	1,287,383	1981 - 1993	275,655	2.03
2005	1,599,096	1993 - 2005	311,713	1.82

Source:

Gobierno Regional La Libertad, 2007, *Region en Cifras*, Trujillo.

Important changes have taken place on the composition of the rural versus urban population in La Libertad, as is shown in Table 4.3. The share of the urban population increased from 31% in 1940 to 74% in 2005. By far the fastest rate of urbanisation was reached in the period between 1961 to 1972, when the urban areas grew by 6.1% annually, mainly due to large-scale rural-urban migration. From 1993 to 2005, the urban area grew by 2.3%, whilst the rural area decreased slightly with -0.04% growth. This data is in line with national data and the constant increase in the urban population of the coastal regions (Gobierno Regional La Libertad, 2007; INEI, 2005). Over the last two decades, the growth of the urban area of La Libertad has been slower than the national population growth average for all urban areas combined. As the rural areas of La Libertad have become relatively less important, their share in the total growth via rural-urban population migration has become less significant too.

Table 4.3: Change in the urban and rural share of the population for the department La Libertad.

	Population			Annual growth		
	total	urban %	rural %	period	urban	rural
1940	395,233	30.9	69.1			
1961	597,925	41.3	58.7	1940 - 1961	3.41	1.20
1972	799,977	59.2	40.8	1961 - 1972	6.10	-0.66
1981	982,074	64.0	36.0	1972 - 1981	3.19	0.90
1993	1,270,261	68.5	31.5	1981 - 1993	2.75	1.02
2005	1,539,774	74.1	25.9	1993 - 2005	2.29	-0.04

Sources:

Gobierno Regional La Libertad, 2007, *Region en Cifras*, Trujillo.

INEI, 2005, *Censos Nacionales 2005, X de Población y V de Vivienda*, Lima.

The province of Trujillo is the most populated one of the 12 provinces of La Libertad. Nowadays, 50% of the total population of La Libertad lives in Trujillo Province. All the other provinces also have one or more cities or towns, and have therefore at least part of their population living in urban areas. Despite this, it is clear that the coastal provinces (Trujillo, Pacasmayo, Ascope, Chépen, Virú) are highly urbanised, with 84 percent of the population living in urban areas. The non-coastal provinces have less than a quarter of their population living in urban areas, and can therefore still be considered rural (see table 4.4 below, or in more detail in Appendix E). The province of Trujillo is almost completely urbanised. In the province as a whole, 97% of its population lives in urban areas. In this way, the Metropolitan Area of Trujillo is highly comparable with Trujillo province⁴. This does not mean that there are no rural areas in the Trujillo Metropolitan Area, but just that these areas are inhabited by very few people.

Table 4.4: Urbanisation rate of the provinces of the department la Libertad in 2005.

	Department: La Libertad			
	Trujillo Province	Other Coastal Provinces	Non-coastal Provinces	Total
Urban share (%)	97.4	84.0	24.1	74.1
Rural share (%)	2.6	16.0	75.9	25.9
Total	765,171	350,386	424,217	1,539,774

Source:

INEI, 2005, *Censos Nacionales 2005, X de Población y V de Vivienda*, Lima.

Migration has contributed significantly to the urbanisation of La Libertad. The department became a popular place to find work and make a living. From 1988 to 1993, La Libertad was the third most popular destination (after Lima and Arequipa) for migrants to move to. At the same time, the outbound migration flows remained large as well. (see Table 4.5 below, and Appendix D-2 for details). The share of the population that migrated to La Libertad increased during the 1980s, and is higher than the national average when Lima is excluded. The share of the population moving away from La Libertad has decreased to about 12% in the period 1988-1993. In 2007, these figures can be expected to have decreased further, as the share of the total population in the rural areas of La Libertad also has continued to decrease.

Table 4.5: Migration balances for Peru and the department La Libertad

	Numbers			% of population		
	Inbound	Outbound	Balance	Inbound	Outbound	Balance
Peru						
1976 – 1981	971,394	971,394	0	13.5	13.5	0.0
1988 – 1993	1,502,492	1,502,492	0	16.0	16.0	0.0
La Libertad						
1976 – 1981	40,946	54,377	-13,431	9.9	13.1	-3.2
1988 – 1993	80,368	65,722	14,646	14.9	12.2	2.7

Source:

INEI, 1995, *Migraciones Internas en el Perú*, Lima

The general trend for La Libertad as a popular destination for migrants is in line with the national trend that departments with large cities attract more migrants. Before 1981 however, La Libertad attracted few migrants. This changed and La Libertad became the third largest destination for migrants, after Lima and Arequipa. As Trujillo is the most important city in La Libertad, the trends can best be explained by looking at the developments at the province or metropolitan level. This is done in the next section.

Some conclusions can be drawn from the above description of the population growth and migration patterns of Peru and La Libertad. Nowadays, most of the Peruvians live in urbanised areas. Migration has been away from the Andes, towards the big cities that are mainly located at the coast. In La Libertad, these urban areas are also located along the coastline, whilst the rural provinces are located inland, with almost all of these provinces in the Andes mountain range. It is clear that the population growth in the urban areas has slowed down in relative figures over the last two decades; in absolute terms the impact is now larger than ever before. In the metropolitan areas of Lima and Trujillo, there is a slowing of the population growth in relative terms. Again, in absolute terms these cities continue to expand significantly. As Trujillo is by far the most important city in La Libertad, the migration patterns towards and the development of this city are highly relevant.

4.2.2 DEVELOPMENT OF THE METROPOLITAN AREA OF TRUJILLO

Since the 1940s, the city of Trujillo has increased considerably, covering an increasingly extensive area. As can be seen on the map of Appendix A Figure 5, the urban evolution took off in the form of developments in the eastern and north-eastern direction. These expansions of the urban area were not influential on the actual shape of the city and were still relatively small compared to expansion in the following decades, when new districts were formed. Today's city structure can be seen as an extension of the area as it existed around 1969. At that time, the historical city centre still occupied a central place, with an urban branch leading (Victor Larco Herrera) towards the ocean south-west of the city centre and three mutually connected new urban expansions (La Esperanza, Florencia de Mora and El Porvenir). Due to the explosive growth of Trujillo in the 1960s, various districts increasingly grew together with their borders less visible. In the 1980s and 1990s, the development of the city took place along the Pan-American Highway, where La Esperanza and the populated centre El Milagro are located, and in some other populated centres along the coastal part of the city (Huanchaquito, Alto Moche, Las Delicias) (Plandemetru, 2007aa). Most recent are the developments in Alto Trujillo, as well as at the edges of the existing urban areas. (MPT, 2003)

The total population of Trujillo Province amounted to 777,294 in 2006, and is expected to have passed the number of 800,000 inhabitants in 2008. The population growth has not been measured by the same organisation on a regular basis, making comparisons harder. The national census of 1993 was followed by the much discussed 2005 census, which is the best point of reference for comparisons. Various sources combined show that whereas the annual population growth rate declined after 2000, it has now increased again. The growth rate from the period 1995-1996 was around 2.7% annually, and slowed down after this period to an average of 1.7% over 2002-2005. More recently, the growth seems to have increased again, to about 2.5% over 2005-2006.

In the metropolitan area of Trujillo, all districts have had a growing population over the last 15 years. The population growth rate was smallest in the districts that were part of the older core of the city where space is limited (Trujillo, Victor Larco, Florencia de Mora) and largest at the outer part of the metropolitan area (Huanchaco, El Porvenir, La Esperanza) where horizontal expansion is easier (see table 4.6 below). These are also areas where more vacant land is present and horizontal expansion of the city takes place. In both the eastern and western area from the city centre, there are a number of family-owned areas (formerly established haciendas), where agricultural use has put its claim on land. In south-eastern and eastern direction, the irrigation project Chavimochic has led to increased large-scale use of fertile land strengthening the continued use as agricultural land, whereas developments towards the west are limited by the protected ruins of Chan Chan. Thereby, the city no longer develops in a spherical way. Much of the area north and north-west of Trujillo is claimed for agricultural developments under Chavimochic. The vacant areas on the west and north-west are filling up rapidly, as the city continues to expand horizontally. Huanchaco and El Milagro can thus be expected to absorb much of the city's growth and new developments, and La Esperanza and El Porvenir (i.e. Alto Trujillo) continue to expand towards the municipal borders.

Table 4.6: Population growth for selected districts of the metropolitan area of Trujillo

Department: La Libertad - Province: Trujillo Province						
	Trujillo Centre	F de Mora	La Esperanza	El Porvenir	Huanchaco	Total
1995 - 1996	1.6	0.7	3.1	3.6	6.4	2.7
1996 - 1997	1.6	0.8	3.1	3.5	6.2	2.7
1997 - 1998	1.6	0.9	3.0	3.4	6.0	2.7
1998 - 1999	1.7	1.0	2.9	3.3	5.8	2.7
1999 - 2000	1.7	1.1	2.8	3.1	5.6	2.6
2002 - 2003	0.9	0.9	2.2	2.1	3.7	1.8
2003 - 2004	0.9	0.9	2.2	2.0	3.6	1.7
2004 - 2005	0.9	0.8	2.1	2.0	3.5	1.7
2005 - 2006	1.5	1.2	2.7	3.9	5.0	2.5

Notes:

See Appendix E Table 6 for details.

Sources:

1993: INEI, 1993, *Censos Nacionales 1993, IX de Población y IV de Vivienda*, Lima.

1995 – 2000: INEI, 1999, *Perú: Estimaciones de Población por Departamentos, Provincias y Distritos 1995-2000 (versión actualizada)*, Lima.

2002 – 2005: Plandemtru, 2007, *Trujillo en Cifras y Mapas*, deducted from website MPT, Trujillo.
<http://www.munitrujillo.gob.pe/Trujilloencifrasymapas/paginas/menutotal.htm>

2005 – 2006: Sedalib, 2006, *Memoria Descriptiva del Sistema de Agua Potable CPM Alto Trujillo*, Trujillo.

From the paragraphs above, it can be concluded that the growth of the city has been rapid. Land for new expansion of the city is limited, but still available at the northern and western part of the city

where the poorer districts are located. Furthermore, what used to be one city can now better be described as a metropolitan area. Districts are increasingly interwoven, whilst large differences exist between various districts. This has led to a situation where different centres exist, and parts of the city have their own characteristics and institutions (such as municipalities). As we will see section 4.3, these spatial differences and actors highly influence the progress in the recent settlements.

4.2.3 MIGRATION FLOWS OF TRUJILLO

The metropolitan area of Trujillo has grown rapidly over the last few decades. Migration has been highly influential in the shaping of this city, and continues to play a significant role. The earlier developments of the city determine its current shape, and are still very visible.

Until the 1930s, migrants were mainly moving towards the employment-offering sugar cane haciendas at the coast, and the mining sites in the Andean mountains. The sugar cane workers were often illiterate small scale farmers, and they mainly moved to live permanently (either intended or by enforced contracts) at the haciendas. With the decrease in demand for sugar from Peru in Europe in the 1920s, the haciendas went into crisis. Over the next decades, most workers moved away from the haciendas, towards Trujillo where they were employed in the industrial sectors. It was also this demand from Trujillo's industry that attracted former mineworkers. These patterns of migration were eased by the recently built roads (such as the Pan American Highway along the coast, in the 1940s and the roads between coastal areas and the mines). Later on, the agricultural reform of 1969 (see also section 2.3.3) provided an incentive for farmers to try to get agricultural land from the haciendas, thus leading to migration directed from the mountains towards the coastal region.

Several external events (natural disasters) had their influence on migration. The earthquake of 1970 with its epicentre at Ancash made many people there and in the surrounding areas homeless. This made the decision to migrate towards the (richer) neighbourhoods and poor recent settlements of Trujillo a new option for many during the 1970s. (Rosner, 1999, p. 77- 95) Furthermore, the damaging effects of El Niño of 1982-1983 and 1997-1998 increased the movement of people, mainly away from the Andean mountains. Finally, terrorism by the Shining Path drove away a great many people away from the central part of the Peruvian Andes in the 1980s. However, its impact on Trujillo or La Libertad has never been properly studied⁵, but is estimated to be limited as most migrants fled to the central and southern coastal cities (INEI, 1995).

The department of birth for the population of Trujillo Province shows where the inhabitants of Trujillo originate from. Most were born in the department La Libertad, overall about 78% (see table 4.7). The most important department of origin of those not born in La Libertad is the neighbouring Cajamarca, followed by Lima and Ancash. There are differences in the importance of migration in the different districts. Migrants contribute to a larger share of the population in Huanchaco, Victor Larco Herrera, Trujillo and La Esperanza. There were relatively few migrants in El Porvenir, Florencia de Mora and the more rural districts of Trujillo Province in 1993. Until 1993, the most important migration flows towards Trujillo had been from the Andean mountains. The migration from the coastal regions towards Trujillo amounts to half of that from the mountain areas (INEI, 1993). The above is in line with the national migration trend, with a slightly higher number of migrants compared to the national average. Until 1993, the share of migrants from other departments towards Trujillo was not different than could be expected from a large Peruvian city.

Table 4.7: Place of birth (department) for selected districts of the Province of Trujillo in 1993

	Department: La Libertad - Province: Trujillo Province				
Department	Trujillo	El Porvenir	La Esperanza	Huanchaco	Total
La Libertad	74.4	87.6	76.0	71.5	78.3
Cajamarca	7.5	4.6	13.3	10.2	7.7
Lima	3.9	1.5	2.1	4.2	3.0
Ancash	3.0	2.2	2.1	3.9	2.6
Piura	2.9	0.8	1.6	2.7	2.0
Other	8.3	3.3	5.0	7.5	6.4
Total %	100.0	100.0	100.0	100.0	100.0

Source:

INEI, 1993, *Censos Nacionales 1993, IX de Población y IV de Vivienda*, Lima.

The migration towards Trujillo Province has until now been considered at inter-departmental migration level. The share of migrants is obviously much higher when considering migration from one district to another. The places of birth of the people living in Trujillo show that migration has been highly important in the growth of the city. As can be seen in Appendix E, the ratio of migrants as part of the total number of inhabitants is highest in the areas that developed more recently. In the central part (district) of Trujillo, about 50% of the population was not born there. The district Victor Larco has the highest ratio of migrants (76%), followed by La Esperanza (72%), Florencia de Mora (71%) and El Porvenir (69%) (Rosner, 1999). This indicates that internal population growth from within the district contributes only to a small part of the total growth of the district. This is not surprising, and just underlines that the city was adopting a more metropolitan character, where districts are no longer separate entities but more interconnected.

There are some differences in the origin of the migrants that moved from different a department or district towards a district in Trujillo Province. Rosner used detailed data to express the different places of birth relative to the number of migrants. The difference between this method and simply taking the place of birth of the total population is that the former excludes those who in 1993 lived in the same district of Trujillo Province as they were born⁶. The data from Rosner (see Appendix E Table 5) shows that about half (53%) of the total number of migrants come from within the department of La Libertad, 17% from the neighbouring district Cajamarca, and 6% from Peru's capital Lima (Rosner, 1999, p.166). This analysis does not change the importance of different regions for migration. However, it underlines more specifically the importance of the migration flows as they have taken place from the Andean mountains towards the province of Trujillo until 1993.

The distribution of the migrants by department of birth in the city of Trujillo in 1993 shows us that some differences exist. First, the migrants from within La Libertad contribute to the largest part of the total number of migrants in El Porvenir and Florencia de Mora. They contribute much less to the total in the district of La Esperanza, central Trujillo and Victor Larco Herrera (see table 4.8 below). The migrants coming from Cajamarca contribute to 26% of the total number of migrants of La Esperanza. In other districts, the contribution is much lower (not exceeding 15%). This can be explained by the proximity of La Esperanza to Cajamarca. La Esperanza is the closest location along the road towards this department. The two departments La Libertad and Cajamarca contributed to more than three quarters of the total number of migrants in El Porvenir, La Esperanza and

Florencia de Mora, and much less in central Trujillo and Victor Larco Herrera. In the latter two, the diversity is much larger. (Rosner, 1999, p. 170-172) From this it can be concluded that the migration from close-by regions was much more important than from regions in other parts of the country (in 1993). This is especially the case in the poorer and less central departments which today are growing fastest.

Table 4.8: Department of birth of the migrant¹ population for selected districts in 1993

Department: La Libertad - Province: Trujillo Province					
Department	Trujillo Central	VL Herrera	La Esperanza	El Porvenir	F de Mora
La Libertad	47.3	42.1	52.2	74.0	68.6
Cajamarca	15.4	14.9	26.4	9.6	14.4
Lima	8.0	11.3	4.2	3.2	3.5
Ancash	6.2	5.7	4.2	4.7	4.8
Piura	6.0	6.3	3.1	1.6	1.6
Other	17.1	19.7	9.9	6.9	7.9
Total %	100.0	100.0	100.0	100.0	100.0

Note:

1. Migrants are all those that have moved from one district to another (e.g. from Trujillo Central to La Esperanza). This defines the group of migrants, whilst for the analysis the department (e.g. La Libertad) of origin is used.

Source:

Rosner, W., 1999, Progresos migracionales y su impacto en el desarrollo urbano: El caso de Trujillo, Perú, in: Suida, H. (ed.), *Salzurger Geographische Arbeiten*, Volumen 35, Insituts für Geographie und Andgewandte Geoinformatik der Universität Salzburg, Salzburg.

The work of Rosner (1999, p.172-190) contains an analysis of the relation between the various migrants in selected areas to other areas. He shows that in 1993, the migrants settling in a certain area showed a strong correlation concerning their place of birth with those settling in close-by neighbourhoods. Thus, within the city the migrants' origins were centred. He shows that most of the migrants from the Andes Mountains settle in the northern part of the city, whereas those from the coastal areas settle in the central and southern part of the city. The migrants coming from the Andes but outside the department La Libertad settle along those neighbourhoods along the northern Pan-American highway, whereas those from the within La Libertad settle in the areas along the road leading to this part of the Andes. Similarly, the migrants from the southern versus the northern coastal provinces settle in different neighbourhoods in the southern part of the city.

Migration has been influential in the shaping of the city. This is equally the case for the central and the more distant districts when considering the place of birth. Most of the migrants are born in La Libertad, about 22% are born in a different department. The migration patterns at the district level show that a strong link exists between neighbourhoods, where movements are generally made to close-by districts or neighbourhoods. This indicates that the metropolitan area of Trujillo is likely to continue to expand in or close to those areas where most of the population lives. Thereby, further growth of the city in the north and north-west can be expected.

4.2.4 MIGRATION TO RECENT SETTLEMENTS

The recent settlements as mentioned in the methodological chapter (see Chapter 3) are areas where horizontal expansion of the city is takes place. The data from the surveys provides information on the migration towards the three selected recent settlements in El Milagro (formerly part of Huanchaco), La Esperanza and Alto Trujillo (formerly part of El Porvenir). Of those living in these

recent settlements, the place of birth, the last migration movement, their location five years ago and the nature of their migration movements are discussed.

The recent settlements of poorer areas of the city are located at the edges of the urban area. They come in the form of squatter settlements (*invasiones*) and areas where plots are handed out via Plandemetru. They include the whole of Alto Trujillo, some areas north-east of La Esperanza, the most western parts of El Milagro, and some areas at the more isolated Alto Moche and Alto Salaverry. The largest increase has taken place in Alto Trujillo, where about 11,832 families have been located since 1995 or 6,345 since 2000. In El Milagro about 4,000 families have settled since 2000. The increase is smaller in La Esperanza, where since the year 2000 about 2,061 families have inhabited the expansions Las Palmeras, Nuevo Indoamerica and Nueva Jerusalén (see Appendix E Table 7 and 8). Furthermore, expansion of Huanchaquito, Alto Moche, Alto Salaverry continues on a steady yet moderate level (Villacorte, 2007). The above described settlements have to large extent⁷ been planned and guided by Plandemetru (see next sections) over the last ten years, when a large influx of migrants was in need of plots. Since 2007, however, new squatter settlements have arisen due to changes in politics (see Section 4.3.2).

The place of birth of the people living in the recent settlements surveyed shows that they house relatively more migrants than the rest of the city. The percentage of people born in La Libertad is 61% on average (see Table 4.9 below), compared to 78% for the whole metropolitan area of Trujillo (see Table 4.7). The northern departments contribute to 32% of the total population, whereas the southern departments contribute to 7% only. Overall, this data shows that those born in the coastal provinces have barely moved to these recent settlements, whereas the departments of the Andes and Amazon basin contribute significantly more to the total population. The second largest department of birth is Cajamarca, accounting for about 15%. Interestingly, the departments San Martin (7%), Loreto (4%) and Amazonas (3%) contribute much more than average to the total population of these neighbourhoods. The migrants having arrived from Lima only account for 2% of the population, similar to the 1993 census. Also, La Libertad's neighbouring department Ancash hardly contributes to the total population of these settlements, whereas it does in the 1993 data. This means that the population that has left the northern departments is likely to move to the recent settlements of northern Trujillo. Migration from other department remains more important in these recent settlements than in the district as a whole.

Table 4.9: Department of birth for the three selected neighbourhoods

Department	Department: La Libertad - Province: Trujillo Province			
	Alto Trujillo 2B	La Esperanza NJ	El Milagro VII	Total
La Libertad	71.7	61.1	54.4	61.3
Northern	20.0	31.1	41.1	32.1
Southern	8.3	7.8	4.4	6.7
Total %	100.0	100.0	100.0	100.0

Source:

Own survey data.

The data on the province of birth (see Table 4.10) show us from which area those born in the department La Libertad have moved. The most common province of birth is Trujillo, from which 42% of those born in La Libertad have moved to the selected areas. The next largest provinces are all part of the Andes; Otuzco, Sanchez Carrion and Santiago de Chuco. The coastal provinces

contribute significantly less to the total population, with Ascope as an exception. In Alto Trujillo, there is a large share of migrants from Otuzco, and a very small share of the coastal provinces. This indicates less diversity, and a stronger link with the areas in the Andes.

Table 4.10: Province of birth of those born in the department La Libertad (N=147) for the three selected neighbourhoods

Province	Department: La Libertad - Province: Trujillo Province			
	Alto Trujillo 2B	La Esperanza NJ	El Milagro VII	Total
Trujillo	41.9	43.6	40.8	42.2
Otuzco	32.6	14.5	10.2	18.4
S Carrion	11.6	18.2	8.2	12.9
S de Chuco	9.3	7.3	12.2	9.5
Other	4.6	16.4	28.6	17.0
Total %	100.0	100.0	100.0	100.0

Source:

Own survey data.

The collected data on the district of birth of those born in Trujillo Province shows that there is still a link with the location of the settlement and the proximity of other areas. The district La Esperanza is the most common district of birth (see Appendix C-2). Almost all of the eleven districts occur in the samples, with La Esperanza, El Porvenir, Florencia de Mora and El Porvenir contributing significantly more to the total population. In Alto Trujillo, significantly more people have moved from El Porvenir and Florencia de Mora and relatively few from La Esperanza. This shows that the own districts contribute to most of the growth of the recent settlements. The link between the district of birth and district of settlement still exists.

The importance of migration for the recent settlements is further illustrated by the figures for the location of the current inhabitants of the settlements five years ago. Below, this is done at departmental level (table 4.11) and for the metropolitan area of Trujillo (table 4.13). This variable on the location of people five years ago has also been included in the census of October 2007⁸. The three selected neighbourhoods are all recent settlements, which have been established not much longer than five years ago, and some areas within the neighbourhoods are even more recent. The figures for these settlements show that 18% of their population was living in a different department (see table 4.11 below). This figure is slightly higher than the national average over earlier periods and clearly higher than the average for Trujillo (see Table 4.5). The location where migrants lived five years ago is similar to the distribution of the places of birth for the migrants. The number of people that lived outside La Libertad five year ago is about half that of those that were born outside La Libertad. The share of the departments in the Amazon Basin is particularly small, indicating that the migration from the Amazon Basin has reduced significantly over the last five years. Migration over the last five years is more important for those settlements than for the metropolitan area as a whole.

Table 4.11: Department five years ago (2002) for the three selected neighbourhoods

Department: La Libertad - Province: Trujillo Province				
Department	Alto Trujillo 2B	La Esperanza NJ	El Milagro VII	Total
La Libertad	85.0	82.2	80.0	82.1
Cajamarca	6.7	3.3	7.8	5.8
San Martin	1.7	2.2	5.6	3.3
Other	2.0	12.3	6.6	8.8
Total %	100.0	100.0	100.0	100.0

Source:

Own survey data.

The impact of migration in the recent neighbourhoods can be extrapolated to the populated centres and districts where they are located in. This gives the impact of migration on the northern part of the metropolitan area of Trujillo. Table 4.12 shows how this estimation is done. The total number of people settled over the last five years in the district La Esperanza, and the populated centres Alto Trujillo and El Milagro is about 36 thousand. About 17% of the inhabitants were not living in the department La Libertad five years ago. This indicates that only a minor share of the total population in the settlements has recently migrated from other departments.

Table 4.12: Migrant population that five years ago lived outside the of the department of La Libertad

District / Populated Centre	People settled last 5 years ¹	Migrant share (%) ²	Migrant settled last 5 years
Alto Trujillo	18,582	15.0	2,787
La Esperanza	6,035	17.8	1,074
El Milagro	11,714	20.0	2,342
Total	36,332	17.1	6,203

Notes:

1. This figure is based on the number of households settlements since 2000 (seven year period). It is adjusted (multiplied by 5/7) to get a five year period, and multiplied by the average household size to get the total number of people settled over the last five years. The household size of the sample is 4.1 for all three neighbourhoods (see Section 4.2.5 for details).
2. The migrants shares are taken from the survey data. The figure for the total share is weighed with the total number of people settled over the last five years.

Source:

Own survey data.

The data for the migrants from outside the metropolitan area of Trujillo show a different picture. Of the people that settled in the recent settlements, 39% lived outside the metropolitan area of Trujillo five years ago. This share is much higher than the share of people that came from outside the department, and shows that the definition of migrants influences the share heavily. Those that did not live in the metropolitan can be considered migrants, since they lived in much smaller towns or rural areas before. This migration movement is thereby different in nature from those that move within the metropolitan area. From these figures, it can be concluded that migration contributes to much of the growth of the recent settlements. Since they contribute most to the total growth of the metropolitan area of Trujillo (see section 4.2.2 and Appendix E table 5-2), migration plays a significant role in the total growth of the metropolitan area of Trujillo.

Table 4.13: Migrant population that five years ago lived outside the of the metropolitan area of Trujillo

District / Populated Centre	People settled last 5 years ¹	Migrants share (%) ²	Migrants settled last 5 years
Alto Trujillo ³	18,582	43.3	8,046
La Esperanza	6,035	34.4	2,076
El Milagro ³	11,714	35.6	4,170
Total	36,332	39.3	14,292

Notes:

See table 4.12

Source:

Own survey data.

The changes in migration patterns are best understood by comparing the place of birth (from the 1993 census and own data) with the last migration movement. The last migration movement towards the recent settlements shows that La Libertad is by far the most important department, especially in the case of Alto Trujillo (see Table 4.14). Other departments contribute only marginally to the total direct migration. Furthermore, Cajamarca hardly stands out from other departments as a provider of migrants, and the departments of San Martin, Loreto and Amazonas contribute only marginally to the total migration. The southern departments hardly appear as an origin of the migrant population. This is in line with the statistics from the 1993 census, and indicates that the pattern of migration towards Trujillo has not changed. The data indicates indirect migration, as many of the inhabitants of recent settlements are not born in La Libertad. This means that migrants move to other areas within Trujillo Province before moving to these settlements. This phenomenon is strongest for Alto Trujillo. There is no clear pattern in these indirect migration patterns, other than that most of the migrants who moved to La Libertad move to the Province of Trujillo (86%) before moving to the recent settlements (see Appendix C-2).

Table 4.14: Department before last movement for the three selected neighbourhoods

Department	Department: La Libertad – Province: Trujillo Province			
	Alto Trujillo 2B	La Esperanza NJ	El Milagro VII	Total
La Libertad	98.3	86.7	81.1	87.5
Cajamarca		2.2	6.7	3.3
Lambayeque		3.3	3.3	2.5
San Martin		2.2	4.4	2.5
Lima		3.3	1.1	1.7
Other	1.7	2.2	3.3	2.5
Total %	100.0	100.0	100.0	100.0

Source:

Own survey data.

Migration patterns within the metropolitan area of Trujillo towards the settlements show the urban dynamics. These are highly important for the formation of the settlements, as most of the settlers come directly from within the metropolitan area of Trujillo. No direct migration from either Poroto or Simbal is observed, showing that these rural districts are not part of the metropolitan area, are rather isolated and do not contribute to the growth of the metropolitan area. Most of those settling in the recent areas come from La Esperanza, followed by Trujillo, Florencia de Mora and El Porvenir. The different cases show that migration from the own and close-by districts is more

important than from other districts (e.g. El Porvenir contributes to half of Alto Trujillo’s growth). Inhabitants of the districts that are further away (i.e. Victor Larco Herrera, Laredo and Moche) have contributed very little to the growth of the studied areas. This shows that though the share of migrants is significant, they do not often move to different districts within the metropolitan area of Trujillo.

Table 4.15: District before last movement for the three selected neighbourhoods

Department: La Libertad - Province: Trujillo Province				
District	Alto Trujillo 2B	La Esperanza NJ	El Milagro VII	Total
La Esperanza	3.7	50.7	44.1	34.4
Trujillo	14.8	28.4	25.4	23.3
Florencia de Mora	24.1	7.5	5.1	23.3
El Porvenir ¹	50.0	4.5	3.4	17.8
Huanchaco ²	5.6	1.5	15.3	7.3
Other	1.9	7.5	6.7	5.6
Total %	100.0	100.0	100.0	100.0

Notes:

1. Alto Trujillo is included in the data for the district El Porvenir. See Appendix C-2 for data on Alto Trujillo.
2. El Milagro is included in the data for the district Huanchaco. See Appendix C-2 for data on El Milagro.

Source:

Own survey data.

The reasons for people to migrate include both push and pull factors. They are diverse, and include the need of shelter after disaster, work and education opportunities and affordability. In the case of the migration movement directed towards the recent settlements, the main reason for migration is to find a place for the household only, sometimes forced by high rents. The migrants either lived with family or rented a place before. Work and employment opportunities were reported only in 10% of the cases, and 5% named education (for children) as the main reason. Natural disasters were not often mentioned also in previous migrations, where work was more dominant as a reason. This is in line with the Todaro model, which states that migration continues to be driven by the prospect of employment opportunities in the city. The migration movement towards the settlements can best be described as push factors related to affordability, and the prospect of having a place of one’s own as a pull factor.

Most of the migrants that live in the recent settlements have moved to these areas in steps. They do not move directly from their place of birth to these areas, but much rather move from their department of birth to La Libertad or the metropolitan area of Trujillo, and then move to the recent settlements. This is especially the case when people are born outside the province of Trujillo. Table 4.16 shows that about one-third of the total whom settle moves directly to the new settlements. These are inhabitants of Trujillo Province that often move out of their parents’ houses to live on their own. Only a small part of the population of the recent settlements has moved there in three or more steps⁹.

These migration steps have occurred over the lifetime of the migrants. As the settlements where the survey is carried out have been established rather recently (in the last seven years), the last migration step was undertaken only recently. On average, this move was made about 1.5 years ago (see Appendix C-2). There are some years between this last movement and the previous movement.

This previous move was made 11 years ago on average, though a decent share moved less than 10 years ago. If a migrant has made three or more steps, then the first steps were taken 20 years ago on average. Only a small share of the population has made three or more migration movements, thus older migration patterns seem to be less influential on the migration.

Table 4.16: Number of migration steps of those living in the recent settlements

	Alto Trujillo 2B	La Esperanza NJ	El Milagro VII	Total
One	23.3	35.6	37.8	33.3
Two	61.7	53.3	51.1	54.6
Three or more	15.0	11.1	11.1	12.1
Total %	100.0	100.0	100.0	100.0

Source:

Own survey data

From the above analysis, it can be concluded that migration from the departments north of Trujillo, as well as migration within La Libertad have highly shaped both the city and the recent settlements. In these recent settlements, the movements within the metropolitan area of Trujillo are important. Furthermore, these recent settlements contain more people who are born outside La Libertad compared to the rest of the city.

The type of migration of those people that have moved towards the recent settlements can be characterised in a few ways. First, it is chain migration, where people move from a smaller place to the regional centre or directly to a major city (Trujillo). From there they continue to move, to the more recent settlements that are on the borders of the urban area. As we will see in the next sections, they do so mainly to get their own plot and house. Secondly, the last stage of the migration is mainly of the urban-urban kind, whereas the previous movements indicate rural-urban migration. Specifically, the earlier steps of migration take place away from the rural Andes, and to a lesser extent the provinces of the Amazon Basin. Migration from the more urbanised coastal provinces does not contribute significantly to the growth of the city via the recent settlements. Migration from the coastal provinces towards Trujillo and the coastal districts has taken place in the past, but this does not influence the current extension of the city in the recent settlements. Finally, the location of settlement of the migrants in the recent settlements is linked to the close-by districts. Thus, migrants generally settle in a place that is close to where they used to live. Migration movements of the past will thereby continue the shaping and expansion of the city significantly.

4.2.5 POPULATION CHARACTERISTICS

Within the metropolitan area of Trujillo, spatial segregation by varying incomes and the access to services is clearly visible. For the main part of the city, this is well illustrated in the Environmental Atlas of the provincial municipality of 2003. For the specific coverage of infrastructure services, see chapter 5 of this thesis. In this section, some characteristics of those that moved to the recent settlements are discussed and compared with the rest of Trujillo.

The families living in the recent settlements are not particularly large. On average they consist of 4.1 people of which 1.7 is below 15 years old. The average of 4.1 people as measured in the three settlements is the same as the average measured by the 2005 census¹⁰ (INEI, 2005). This goes against popular belief that those settling in recent settlements have large families. The household size of

those living in the recent settlements often did not change (69%), and in some cases increased (17%). This indicates that population growth is not currently leading to massive growth of the number of the inhabitants of these areas. Also, there is no relation found between income and household size. This is surprising, as theories (see section 2.2.4) suggest that either a positive or negative link exists. Furthermore, there are few changes in household size that are reported. Increases are commonly reported, as children are born. However, respondents barely mention to have experienced a decrease or temporary change in household size seldom occurs. Thereby, seasonal migration seems to be of no influence on these settlements.

The income of the families can be expressed by observing the population in poverty. The district with the least families in poverty in 2002, percentage-wise, were Trujillo and Victor Larco Herrera. Most districts have about 50% poor families, and the northern districts Florencia de Mora, El Porvenir and La Esperanza are inhabited by mostly poor families. (MPT, 2003) The inhabitants of the recent settlements are generally very poor. Their household income is often around or below minimum wage (minimum wage is S/. 500 per month). Only 23% of the household incomes was higher than S/. 500 per month, and most fall into the category of S/. 250 - 500 per month (see Appendix C - 2). When dividing this income by the household size, this means that all but some of the families live below the poverty line. This is not surprising, as it is indicated that 40% of those living in urban areas live below the poverty line as used by the Peruvian government¹¹. The amount of people living in extreme poverty is about 8% in Peruvian urban areas. (World Bank, 2005) An income of about S/. 200 per month for an average household is on the extreme poverty line of \$1.08 per capita per day. The data from the survey shows that 35% of the population lives below a monthly income of S/. 250. Therefore, the share of the population living in extreme poverty is higher in the recent settlements, whilst the share of people living in poverty (\$2.15 per capita per day) is not higher than average.

The prices of land in the different areas show large differences between the central and the more recent districts. The historical city centre is most expensive (over S/.150 per m²), followed by parts of Victor Larco Herrera south of the city centre. The price declines further from the city centre, where the principal roads increase the price of close-by districts. The poorest areas consist of illegal squatting settlements and the legal expansions where plots are provided by Plandemtru. Prices in these two types of settlements are generally below S/.25 per m². The density of neighbourhoods seems to increase over time, with the historical centre as the exception. Some districts seem to develop some local centre towards which the density increases, but this is not the case for La Esperanza where the diversity is larger. (MPT, 2003)

These above described indicators illustrate that the districts at the northern part of the city are generally poorer and cheaper, with the more recently developing parts of the city inhabiting the poorest population whilst providing the cheapest plots. They are the target category for tackling the millennium goals, and thus an interesting population for NGOs and public institutions.

4.2.6 PRELIMINARY CONCLUSIONS

The process of urbanisation has been gradual and ongoing in Peru. Migration towards the coastal cities and internal growth led to a steady increase in the size of the urban areas. This is no different for the department La Libertad, where a steady growth of the population took place and a continuous influx of migrants lead to further expansion of the city. The growth has steadily been

declining since the 1970s, though recently an increase can be noticed. Natural disasters (El Niño) temporarily increased the influx of migrants in the early 1990s, and the population of El Milagro and Alto Trujillo grew rapidly as a result of this migration.

The migration towards the coastal cities in Peru has been mainly rural-urban, where migrants left the Andes. This is also the case in Trujillo. The close-by departments and districts of the Andes contribute significantly more to the total migration than other areas. The importance of migration on the total growth of the city is moderate. It is especially visible in the rise of recent settlements that continue to develop in the more recent districts of the metropolitan area. Differences in income between districts are large. Recent expansions as they take place at the borders of the city are amongst the poorest, and continue to be formed. These settlements are formed mainly north and northwest of the city, and show a relatively strong link with the close-by district. Thereby, both internal growth and chain migration continue to lead to the horizontal expansion of the city to the north and northwest.

4.3 SETTLEMENT PROCESS

4.3.1 HISTORICAL OVERVIEW

In the national policy of Peru, land issues has been a contentious topic over the last half century. The aspects of neighbourhood organisation and more recently property rights have gotten much attention (amongst others by John Turner and Hernando De Soto respectively). This is illustrated by the notion that until the 1960s, the national government's policy was direct towards the formal provision of housing only. In 1961, a policy of accepting squatter settlements and providing them the prospect of obtaining property titles was developed. So during the period from 1963-1985 (including the military regimes), houses were constructed for the middle class, and squatter settlements were accepted. Only from 1985 onwards was there active involvement in improving these settlements, and property titles were provided. In 1992, a change of policy took place, and decentralisation combined with a reduction of government involvement lead to a situation where market forces were expected to regulate the provision of plots in urban areas. (Calderón Cockburn, 2007)

This policy and the issues mentioned by the government concerning settlement in recent expansions are limited to land issues and property rights. Until recently, there have been few governmental programmes directed towards the provision of housing and the urban poor. This sets Peru apart from other countries in a similar setting. By doing so, the economic costs and political conflicts have been limited, since for much of the poor Peruvians the main issue was the need for plots. (Ramírez Corzo and Riofrío, 2006, p. 12-19) Nowadays, the government-subsidised programmes concerning the urban poor mainly deal with land issues, rather than the provision of housing or improving neighbourhoods. As we will see later on (section 4.3.2 and 4.3.3), the current division of responsibilities puts much pressure on the individual, at and neighbourhood level, which can lead to the ineffective and inefficient development of neighbourhoods.

The responsibility of handing out property titles has changed between various actors. Until 1980, central government was responsible for handing out property titles. This changed in 1980, when the municipalities became the responsible actors. In 1996, the agency COFOPRI took care of all formalisation of informal property. Their role was limited again in 2001, when the prime responsibility was transferred to the Provincial municipalities, with COFOPRI as an assisting agency. Under the current administration, the recognised organisation became COFOPRI once again, with no role left for the provincial municipalities on the authorisation of informal property. (Calderón Cockburn, 2007) As we will see in section 4.3.3, this is the general case for Peru, but especially the recent changes are differently coped with in Trujillo.

The processes of settlement in Peruvian cities can be portrayed by considering the sequence of some processes. These are the obtaining of a plot, securing it and ensuring a property title, the construction of houses and the obtaining of services (infrastructure services, schools, hospitals, parks, etc.) A distinction is made based on the legal situation and the change in role of COFOPRI. Calderón Cockburn (2007) describes that in the late 1990s, the property title was provided only after a neighbourhood or block had been established and serviced and thus characterises the process of settlement as follows:

- Obtaining land (via squatter settlements/relocation);
- Securing a plot;
- Constructing houses;
- Obtaining services;
- Property titles.

The massive handing out of property titles under the *Plan Nacional de Formalización* (PNF) at the end of the 1990s has changed this process so that today, as he claims, the process has the following sequence:

- Obtaining land (via squatter settlements/relocation);
- Property titles / securing a plot;
- Obtaining services;
- Constructing houses (Calderón Cockburn, 2007).

In the case of Trujillo, various procedures have existed next to each other, under different authorities, subsidy programs and at different locations. These different procedures show some varieties on the two above described sequences. Even so, these are basic differences, that apply to most areas in Peru (and most likely all of the rural areas). The different patterns of settlement up to 2003 are elaborated on by Amemiya Hoshi¹² in her work on especially Alto Trujillo (2003, p.53-68). In Trujillo, squatter settlements have existed since the 1940s. They were recognised as Marginal Urban Neighbourhoods (*Barrios Urbano Marginales*, or *BUMs*) and correspond to large parts of the districts El Porvenir, Florencia de Mora, Michael Grau and La Esperanza. Since the 1970s, squatter settlements were formed at the vacant areas that were surrounding these districts. The provincial municipality guided the process soon after the occupation of vacant land, from 1981 onwards. In both these cases, the process goes according to first sequence described above, where the property titles are handed out after the neighbourhoods have been serviced. This process of settlement is carried out similarly in the case of illegal sales of plots, where the authorities do not interfere at all in the process after the first occupation, thus tolerating the occupation and construction of houses. This has been the case in the Industrial Park of the regional government in Trujillo over the last 25 years¹³.

The process of ‘guided occupation’ (Ocupación Guiada) is often referred to by Peruvian planning authorities, with Alto Trujillo as the main example. Here, the planning and handing out of property rights occurs before the occupation of land, after which the construction takes place and services are provided. By doing so, large inflows of migrants were provided plots rapidly during the 1990s (Amemiya Hoshi, 2003). These property rights are of a temporary nature, and cannot be sold to others, and so they are similar to the first sequence as described above by Calderón.

Finally, there are the programmes implemented by the national government where formal housing is provided; *Techo Propio*, *Urbanizaciones Populares* and *Habilitación Urbana Progresiva*. The former is established to provide an alternative to the illegal occupation of land, with a process similar to guided occupation. The program *Techo Propio* and *Habilitación Urbana Progresiva* have been implemented in the district of Manuel Arévalo in Trujillo over the last 20 years, but only on a limited scale¹⁴. The programme *Urbanizaciones Populares* is more influential in Trujillo, and directed towards the middle and lower-middle class (Amemiya Hoshi, 2003). These programmes are limited in scale or not targeting most of the urban poor. They are further discussed in section 4.3.3. The neighbourhoods established under the latter two programmes are the only ones in Trujillo,

next to the commercially viable construction, that provide services before the actual construction of houses takes place. This means that there is a constant pressure on the further expansion of infrastructure services as the expansion of the city continues in different ways.

4.3.2 CURRENT SETTLEMENT PATTERNS

The current reality of Trujillo is different from the above presented description that is more general and historical. The settlement in Trujillo is described in detail below, with special attention to the characteristics of the recent settlements and differences within the city.

- Basically three different processes of settlements are identified in this study of the recent expansions of the metropolitan area of Trujillo. These are the following:
- Settlements that were occupied in a guided way;
- Squatter settlements that are (expected to be) subject to relocation;
- Squatter settlements with a tolerated illegal status for a prolonged period of time.

The first type, guided occupation, is the case in the older part of the samples of Alto Trujillo and Nueva Jerusalén in La Esperanza. Here, Plandemtru has planned roads and public areas, and plots are distributed amongst the population in need of these plots. The procedure of obtaining a plot is via a standardised procedure with clear requirements (see section 4.3.3). The planning of public areas as well as the handing out of well-defined plots are part of the initial stage. Next, construction of public areas as well as houses takes place, after which infrastructure services can be applied for. Property rights are granted only later on, but security of plots is guaranteed. This process thus follows the line of the 'guided occupation' as described in the previous section. Although plots cannot be sold formally, this is happening in parts of Alto Trujillo. Here, squatters try to obtain a plot, and then change the name under which it is registered. The buyer will pay up to S/. 300 for a plot, without having all the legal rights¹⁵. The main problem is that many that do not sell their plot leave the neighbourhood, as they move somewhere else. This leads to half-occupied neighbourhoods, which are therefore unlikely to get full infrastructure services (i.e water, sanitation and electricity) installed.

The second group concerns settlers that occupy vacant land close to recently established neighbourhoods. Examples of this can be found in Nueva Jerusalén (sector II and III) and at many areas around the northern settlements of Alto Trujillo. The studied area Alto Trujillo 2B is also surrounded by some squatters. The squatters build only basic housing, in a very dense and organic way. These squatters demand plots from Plandemtru at the same time, and hope to be relocated. In this situation, there is much uncertainty as to what will happen, and when. In the case of Alto Trujillo 2B, the people occupying vacant land originally destined for industrial use are still waiting to be relocated, whilst the highly similar and close-by settlement on the other side of the 2B have been promised plots and roads in the area they used to. The inhabitants of these areas were not aware of the differences, and they expected to be treated similarly.

The third group, which has the tolerated illegal status, occurs in a large part of the sample of El Milagro, where settlements are located on the property of the regional government as part of the Industrial Park. Within this group, important differences exist: some land was vacant before occupation, while other blocks were illegally claimed by small scale industry (*corralones*). Where the land is vacant, the squatters invaded the area and settled down organically, but soon established

a more organised form of occupation. Public areas were reserved and new plots indicated before occupation took place there. In the case that land has been claimed by entrepreneurs for industrial purposes, this was done by constructing a wall, either from bricks or more common with adobe blocks. When the claimed area is not in use, either the population in need of plots tear down these bulwarks and use the material to start constructing, or the 'owner' divides the area himself and sells plots. Both these two ways of dealing with *corralones* are present in El Milagro and are highly undesirable. The first is undesirable because the industrial representative is likely to put a claim on his land after occupation, which can and has led to life-threatening situations for the squatters¹⁶. The second situation is undesirable since it concerns illegal sales and accordingly high prices for the plots¹⁷ whilst no official rights are transferred.

The level of consolidation of a neighbourhood is linked to the construction materials used. This link exists in two directions. For the authorities, it is much harder to relocate or change the plots once houses are built with adobe or bricks. The population, on the other hand, only starts constructing with decent materials when they expect it to be worth the investment. Improving the house is delayed mainly for two reasons; a lack of money or because the household doesn't have its own plot yet (see Appendix C-3). The level of consolidation does not have to be formalised, as the above described category of prolonged squatter settlements shows. Over the last decade, there have been no cases of forcing the departure of settlements that were reasonably consolidated in Trujillo. There is thus a balance between the public policy and the actions taken by the migrants, where the expectations of the migrants for obtaining a plot are not set very high.

The investments made and materials used typically follow a sequence. First, a family lives in a reed-mat house. A one- or two-roomed house is created, with poles and reed mats for walls and roofing. There are often no provisions taken to improve the floor. Plots are not clearly indicated, and the density of the neighbourhood is high. In the cases of informal settlements that are planned to be relocated, migrants often construct with mats only. In the next stage, plots are more clearly defined, either by the authorities or by self-organisation. Reed houses are moved for some time to these new plots, and construction with better materials is done elsewhere on the plot. A shaft is dug, about half a metre deep, and foundation stones are placed. On these, construction with adobe blocks (either reinforced with natural fibres or just plain adobe) starts. The roofing materials are often first provisional (reed mats, poles with plastic bags, small corrugated iron sheets, etc), and improved at a later stage. Some families can afford to build the roof with good materials (poles, mats and adobe) immediately, whereas others continue with provisional roofs for years. Further extension of the house and improvement of the floor indicate a high level of establishment, as does the construction of brick walls. Cement flooring and brick walls are rarely used in the recent settlements studied.

This sequence is clearly visible in the surveyed areas. A strong relation is found between the time since arrival and the materials used. For the materials used for the walls, this can be seen in Table 4.17. Those that moved to the current location less than a year ago construct mainly with reed mats, though about one third has already started building with adobe. The use adobe has become the most common material in recent years, whilst 28% continues to live in reed-mat houses. Families start building with bricks only after two years of settlement, and even then this construction material barely appears in the studied areas. The link with other parts of the house (floor, roof) shows a similar tendency, with a less defined pattern than the walls (see Appendix C-3).

Table 4.17: Construction materials of the walls by the time since arrival

	Under one year	Under two years	More than two years	Total
Adobe	34.8	68.5	80.0	50.8
Mats	63.1	27.8	11.1	45.4
Bricks	1.4	1.9	8.9	2.9
Other	0.7	1.9		0.8
Total %	100.0	100.0	100.0	100.0

Source:

Own survey data.

From these processes of settlement, it can be concluded that the current situation in Trujillo has changed considerably. It is different from both the ideal situation where property rights and services are installed before settlement takes place, since services are installed only much later in the process. The process of settlement of this study differs from the situation in Trujillo as described by Amemiya Hoshi in two ways. It differs since it includes the Industrial Park of El Milagro. Here, no guidance from any public authority takes place with regard to the plots. Also, this research shows that the current situation has changed for the most recent settlements in areas where guided occupation was planned. These are squatter settlements that show their demand for land by actually invading vacant areas. This has not happened before at this scale over the last decade in those areas where Plandemetru is responsible for the planning. The process of settlement has become slower, and delays before services are requested and installed have increased.

4.3.3 ACTORS INVOLVED AND NEIGHBOURHOOD ORGANISATION

There is a variety of actors involved in the process of the expansion of the metropolitan area and the settlement in new neighbourhoods. The number of actors involved with migration as such is relatively limited. Many more are actively participating in the actual settlement of people moving to new areas. The most important actor is Plandemetru, the planning office of the provincial government.

The national subsidy programmes¹⁸ from the ministry MVCS have had a significant impact on the construction sector in parts of Lima and some other large cities. In Trujillo, however, these programmes have had very little impact from 2004 to 2007. There were only three projects carried out under the various programmes, two in central Trujillo and one in La Esperanza. The planned extension of these programmes in cities other than Lima happens slowly, and the requirements for neighbourhoods are often hard to meet by poorer areas and experience is first gained in and around Lima¹⁹. Other recent programmes from the central government concerning housing ('Techo Propio', 'Techo Propio Costo Cero') have had only a marginal impact in the poor urban areas of Trujillo. This is mainly because a neighbourhood needs a decent level of consolidation before one can apply. Inhabitants of the poor neighbourhoods do not know of these subsidy programmes, and municipalities are not involved in the process of application²⁰. Most of the subsidy programmes such as 'A Trabajar Urbano' and 'Banco de Materiales' have a highly disintegrated system of subsidy provision, with little coordination between them (Calderón Cockburn, 2007). It can thus be concluded that the national government has little direct influence on the housing situation in the poor urban areas of Trujillo. Since the ending of the national housing fund (FONAVI) in 1998, the involvement of the national government in the supply of housing in the urban areas outside Lima has been much more limited. This is basically because the focus is on improving the situation in rural areas, with a reduction of migration towards the coast as the main goal²¹. Potentially, the more

recent programme 'Techo Propio Costo Cero' and 'Techo Propio' can influence most of the recent settlements in Trujillo. The programme MiBarrio is less likely to have impact on Trujillo (Estéves Dejo, 2005). To use this potential, better coordination between the neighbourhoods in Trujillo and the Ministry MVCS, as well as tender-support from NGOs are required.

The regional government of the department La Libertad is the most important actor in the Industrial Park, and outside this area not involved in the urban developments of Trujillo. The responsibilities of the regional government are mainly related to the rural areas. Over the last few years, the socio-environmental issues related to the booming mining sector, and coastal developments related to erosion are the main priority²². They do not actively try to influence the migration patterns to and from the rural areas of La Libertad. The Industrial Park in Trujillo, northwest of La Esperanza, is property of the regional government. The regional government has to apply to the national government's ministries to change the zoning plan, so that it can be used for residential instead of industrial purposes. In this case, the park was originally designed to attract and locate new industry, but as the demand declined over the years, the land available in the park was never fully occupied. As a result, the regional government has been slacking in the relocation of the squatter settlements, although they had originally intended to. This applies to the studied case of El Milagro (i.e. Las Molinas), where a high level of permanency of the building has been reached too. Furthermore, the management of the Industrial Park does not try to limit or support the inhabiting of industrial plots (*coralones*). Thereby, squatters inhabit these plots and entrepreneurs threaten them to relocate. Mediation from the management of the Industrial Park could solve these issues beforehand. Overall, the policy of the regional government towards settlement in the Industrial Park is vague, and should be changed to actively sustaining and using the zone for either industrial use, or for residential use.

The most important actor concerning the metropolitan city of Trujillo is the planning department of the public authorities of Trujillo Province, Plandemetru. They are the main authority concerned with planning, and are involved with the spatial design and allocation of public works (such as squares, parks, roads), as well as the allocation of plots in (often vacant) areas of the province and providing them to the applicants. This area includes the municipalities of the various districts and populated centres, and does not include the property of the regional government. As part of the planning of vacant land, they act as an intermediary between the need for urban expansion and the expansion of the special (agricultural irrigation) project Chavimochic. This task is increasingly important, since the most recent urban expansions on the northern side of Alto Trujillo are touching upon the planned land designated for agricultural use. The office Plandemetru has gained in-depth knowledge on developments, and its effectiveness and efficiency concerning the handing out of plots is of a high level. Perfect!

The responsibility for providing property rights has traditionally been of the national institution Cofopri. They are active in most urban and all rural areas of Peru. In La Libertad, the provision of plots has been dealt with by Plandemetru. They do not provide property rights that can be sold to others, but apart from that there is no practical difference²³. Over the last five years, several laws to change the handing out of property from local authorities to Cofopri have been approved by the National Congress. This has lead delays, as data was transported from provincial governments to the office of Cofopri, and needed revision. The situation concerning the populated centres and municipalities within the metropolitan area of Trujillo is different. Plandemetru still deals with these, though Cofopri claims to be the responsible actor for these areas too²⁴. Changes in the

responsibility are unlikely to lead to improvement, as Plandemetru has been dealing with the expansion of the city and the handing out of plots over the last decade in an effective way. The temporary changes of responsibilities and forced slowing down in the handing out of plots has led to the rise of new squatter settlements in Alto Trujillo. Such situations should be avoided, and changes in the responsibilities for providing properties should be considered with great care.

The municipalities are involved in the process of settlement in two ways. They have planning departments that deal with the execution of projects, and they coordinate the neighbourhood organisation via committees. The planning departments from the municipalities are mainly concerned with the planning of the public areas, such as parks, roads and levelling of land. Project proposals from various committees (*comités*) are considered, and when approved executed. The municipality often subsidises labour and fuel, and provides machinery. In the case of Alto Trujillo, the municipality pays S/.700 of the total S/.1,200 per day, the inhabitants of the neighbourhood (or block) pay the rest. The municipalities of Alto Trujillo and La Esperanza do not undertake any levelling of land before the population has applied for it, mainly to discourage the appearance of squatter settlements²⁵. This is in line with the settlement process where the provision of services is only the last step, but considerably increases costs for carrying out the levelling.

The neighbourhood organisation is generally coordinated by the municipalities. Different committees are formed (for general issues, different infrastructure services, health and children, etc) and a local president is elected yearly. The relation between the municipalities and these committees differs. In El Milagro, no coordination exists, and the presidents active in the studied area do not have regular contact with the municipality or each other. In La Esperanza, the contact of the neighbourhood's population with the municipality is mainly via a separate office (*participación vecinal*), which after approval can get the representatives in contact with the relevant public servants. Involvement from this office is low, and knowledge of the actual situation not up to date. This is mainly due to a lack of dedicated manpower and resources. As a result, the coordination of neighbourhood improvement in La Esperanza does not take place via the municipality, but much more in an informal way. Local presidents that live further away from each other do not have contact with each other, even though they often share many characteristics and problems. The municipality does not provide sufficient support in the services that they offer (such as the availability of machinery for levelling), which leads the population to distrust the municipality's goodwill²⁶. In Alto Trujillo, the topic of neighbourhood organisation is much higher on the political agenda. Alto Trujillo has the status of an independent authority (*centro poblado*) since 2002. Since then the municipality has managed to receive support from NGOs. These are recently starting to function as an intermediary between with the local presidents and representatives of the municipality. The prospects for improving the process of settlement and obtaining of infrastructure services are good. However, continuity and independency of the NGOs are prerequisites here.

The involvement of NGOs involved with the processes of migration and settlement are limited in Trujillo. In the capital Lima, the neighbourhood organisation of earlier settlers has led to their own non-profit institutions and attracted NGO involvement. In Trujillo, this has not happened, and neighbourhood organisation has only recently become an issue for the NGO Intervida Trujillo. Their planned efforts to bring together different local representatives can have a positive impact on the process of settlement and obtaining of services²⁷. This will be especially the case when Intervida systematically provides support when these representatives deal with other institutions.

Furthermore, the weak link between neighbourhoods and governmental programmes can be improved with the knowledge and efforts from Intervida.

From this analysis, it can be concluded that the impact on migration patterns is limited. Plandemetru has dedicated an area in which the city can grow, and follows the migration movements of the population by providing plots to squatters. This has been done rather effectively, though changes in administration and uncertainty of responsibilities led to a slowdown of the provision of plots. The organisation of neighbourhoods happens on an ad-hoc basis, where formal responsibilities are not backed up by support. Involvement of NGOs has been limited in these processes, and can improve the contact between various actors and increase knowledge of the existing possibilities for improvement in the recent settlements.

4.3.4 PRELIMINARY CONCLUSIONS

The process of settlement in new areas in Peru has been dealt with in various ways. Squatting has generally become less common, and formalization of property is carried out on a large scale. The expansion in the poor areas of the metropolitan area of Trujillo is coordinated by Plandemetru. Under their supervision, large settlements were created and formalized and squatting became uncommon. The last year, squatters invaded vacant land again, as the process of handing out properties slowed down.

When recent settlements are established, the population is provided with plots without services. The processes of obtaining these services have yet to start. There is thus a constant need for further expansion of the infrastructure networks. Plandemetru and other actors are thus responsive to the population rather than pro-actively dealing with migration and growth of the city. In Alto Trujillo, illegal sales of plots are becoming more important, and stricter control of Plandemetru will be required. The case study of El Milagro shows that the regional government allows squatting in practice, and allows neighbourhoods to settle on areas dedicated for industrial use. Within three years after arrival, most of these settlements have reached a medium to high level of consolidation that makes relocation hard.

The next steps in getting services are to be taken by the organisation of the neighbourhoods. The contact with the municipalities is often insufficient and the different committees get little support. The NGOs active in Trujillo have insufficiently gotten involved in the organisation of neighbourhoods Trujillo. Thereby, the local presidents and committees deal with most applications themselves. Continuous involvement of NGOs by monitoring the process, advising local representatives and mediating between actors improves the situation. This is mainly since knowledge about developments increases and processes can be speeded up.