

NOTES

CHAPTER 1:

¹ Statistics on urbanisation are generally collected via census-data. Thereby, the 'urban' corresponds with the definition used in each country, which varies widely. See Appendix I.

² Different definitions are used to assess one's origin, being either place of birth (i.e. census data), place of residence 5 years ago (most common) or derivations thereof (other data).

CHAPTER 2:

¹ It should be noted that it is a tendency towards zero marginal productivity, rather than a situation where the value added of employees actually equals zero. It is argued by Amartya Sen that the withdrawal of employees would cause others to work harder, introduce new technologies or reorganize their productive system in different ways (Ranis, 2004).

² This is especially remarkable when one considers the different definitions used; not only do they differ between countries, but also over time within countries. This might lead to the conclusion that the overall effect of the definition used on the national level is of limited influence. A different, and less likely interpretation could be that the use of definitions might have led to similar urbanisation patterns in all countries.

³ A point of caution is made by the authors of the article, stating that "*little information is available on measures of infrastructure quality and investment efficiency across countries*". They therefore had to rely on indicators of asset stocks and spending volumes.

CHAPTER 3:

¹ The term is used to describe the urban area of Trujillo, without most rural parts. For more information, see <http://www.munitrujillo.gob.pe/PlanifCatastro/planifica/paginas/planDesMet3.htm>

² Some neighbourhoods in La Esperanza were visited with civil servants from the municipality and with the water truck driver of the municipality of La Esperanza. Visits to Alto Trujillo were made with Plandemetru and the NGO Intervida, mainly to observe their work and methods. During the phase in which questionnaires were tested, students from the UPAO came along in the case study of El Milagro. Also, other parts of El Milagro were visited with employees of Plandemetru.

³ In respect to the cross-tabs and Chi-square function, it should be noted that strictly speaking an expected count of 5 is required to calculate Chi-square, and for at least 80% of the expected frequencies. This is not always the case for the tables presented in Appendix C. However, when the observed and expected frequencies in these cells are both small, than the consequences on the total are limited. In all of the presented tables, the conclusions are the same when these cells are included or omitted.

⁴ Attempts to work together with students did not result in the required results. This was due to the experience required for carrying out surveys, the limited available time of students due to classes, limited discipline of the students in showing up at appointments, and limited financial resources for compensation.

⁵ There was one particular case that showed how social desirability can influence the quality of the survey. This was on 9 July 2007, after having completed all but two of the 60 surveys to be carried out in Alto Trujillo 2B. The mayor of the Provincial Municipality visited the recent settlements to hold a speech and to be in touch with the population. He was accompanied by managers of Plandemetru and several journalists. As I went to listen to his speech and ask him some questions afterwards, I was greeted warmly by the people I knew, and was invited for the dinner prepared by the neighbourhood of Barrio 2B. On return two days later for the last two surveys, I found that answers were explicitly skewed, where high expectations of "the mayor that had always been great to them" were provided. Only after several attempts did I find two respondents that had not seen me that day and was I able to complete the surveys for Alto Trujillo.

CHAPTER 4:

¹ Utia Chirinos, José Vicente, Architect, June - July 2007.

- ² Variables on place of birth and migration movements were included in the censuses of 1972, 1981 and 1993. They were not included in the 2005 census. They were included again in the 2007 census, which is yet to be published.
- ³ No proper research on the size of migration patterns has been carried out after the 1993 census. However, these can be expected not to have increased, as the Shining Path was pacified (for a long time a source of migration away from the Central Andes) and there were no natural disasters of irregular proportions after 1993. This is not to say that there were no natural disasters (especially the phenomenon El Niño hit hard in the mid nineties), but just that they were not having a bigger impact compared those of the earlier decades.
- ⁴ The difference is that in Trujillo Province, the provinces of Poroto and Simbal are excluded. They are excluded in the Metropolitan Area of Trujillo. Due to their relatively small population, this does not make a large difference for the statistics as shown in this section.
- ⁵ Rosner (1999) indicates that the influence of terrorism on migration towards the district El Porvenir did contribute significantly to its growth during the 1980s.
- ⁶ It is important here to remember that a person is considered a migrant when having a different district of birth compared to the actual situation. Statistics on the origin of the inhabitants, on the other hand, show a generalized picture for the whole population of a district, showing the place of birth as a department only.
- ⁷ The main exception here is Nuevo Indoamerica, which did not receive any formal status since its existence. Also, some invasions in the Industrial Park of El Milagro (property of the Regional Government, whereas all other areas are part of the Provincial Municipality) were not guided by Plandemetru.
- ⁸ Interview with Héctor Benavides Rullier, executive director of demography, INEI
- ⁹ In these steps, the movement within the department of birth is often not taken into account. This is due to underreporting of these moves from the respondents, who often don't consider moving from a village to a local town as migration, especially when this happens when they are young.
- ¹⁰ Dividing the total number of people by the number of plots gives the average household size per district in the 2005 census. The average household size for La Esperanza and El Porvenir is 4.2, the household size for Huanchaco 3.3. El Milagro thus stands out from Huanchaco, but not from the districts that are close by.
- ¹¹ The poverty line is set at 1.08 international dollar, whilst the extreme poverty line is set at 2.15 international dollar. The PPP conversion factor of 2004 for Peru is 1.50. This means that a daily income of $S/.1.50 \times 1.08$ is on the extreme poverty line. This is an income of $S/.49$ per month. Conversion factors can be found at http://devdata.worldbank.org/wdi2006/contents/Table4_14.htm.
- ¹² Nelly Amemiy Hoshi is a former head of the planning department of the provincial municipality, Plandemetru. The work referred to here is her MSc Thesis as carried out at the UPAO.
- ¹³ Gamboa Cabel, José, director Parque Industrial Regional Government, April 2007.
- ¹⁴ Utia Chirinos, José Vicente, Architect, July 2007
- ¹⁵ Acuña Peralta, César, mayor Trujillo Province, July 2007.
- ¹⁶ In this specific case, the people that had torn down the wall were warned by the claimed owner of the block, telling the invaded squatters to leave, and threatening them to come back with arms. Two weeks later, some armed people appeared, threatening the squatters. The police had been warned before, and was therefore present quickly, after which the ones threatening left running, leaving a gun behind. (various sources, amongst which José Gamboa Cabel and the local representative of Los Huertos and Los Libertadores)
- ¹⁷ The prices reported are between $S/.300$ and $S/.700$. This included some basic material (adobe blocks) that can be used for construction.
- ¹⁸ Being mainly the programmes Mejoramiento Integral de Barrios (MiBarrio), La Calle de MiBarrio, y Mejorando Mi Pueblo. For a full overview of the programmes from MVCS see http://www.vivienda.gob.pe/direcciones/urbanismo_programas.aspx.
- ¹⁹ Interview with Avanibar Medina, Luis Alberto, programme manager MiBarrio Ministerio de Vivienda, May 2007. The information on projects carried out is also available via http://www.vivienda.gob.pe/direcciones/urbanismo_proyectos.aspx.
- ²⁰ Interview with Tagle Pizarro, Luis O., national director of urbanism Ministerio de Vivienda, Construcción y Saneamiento, May 2007.
- ²¹ This became clear in the interview with Tagle Pizarro, Luis O., national director of urbanism Ministerio de Vivienda, Construcción y Saneamiento, May 2007. He referred to the constant pressure from international organisations, politicians and other pressure groups,, combined with attractive benefits from keeping the a rural population as a driving force for such policy.
- ²² Regional Government, conversations with various employees of the Planning Department.

²³ The possible differences could be when dealing with external actors, such as banks. However, studies between the years 1998 and 2004 show that the possession of a property title does not lead to an increased use of private banks loans. The current use of mortgage loans from those with a property title is around and below 1.5% for the period 2000-2005. (Calderón Cockburn, 2007) Thereby, those with a property title do not use it for these purposes, and thus possible benefits are not present.

²⁴ Interviews with various employees of Cofopri, amongst which Jaramillo Quevedo, Milagros, executive assistant COFOPRI, June 2007

²⁵ interview with the Mayor of Alto Trujillo, William Alfaro Charcape, and other representatives of the municipality of Alto Trujillo, June 2007.

²⁶ Concerning the levelling, the lack of coordination has led to a highly undesired case. The inhabitants of several recent settlements of Nueva Jerusalén applied directly to the driver of the machinery to do some levelling at the time that he was working on a close-by public area. They paid the driver, and expected part of this money to be returned by the municipality. The authorities of La Esperanza claim that it neither their machinery nor their driver was present, and claim that they used machinery from and paid to the neighbouring municipality (Florencia de Mora). This conflict has not been solved, and both parties involved (inhabitants and municipal office) are frustrated by the lack of coordination from the other party.

²⁷ Canchaya Alvarez, Ketty Olived, Social Organisation Solaris Peru - Intervida, June 2007

CHAPTER 5:

¹ The Rio Santo that streams towards Trujillo is highly polluted and thus not used for drinking water. The Rio Moche is used for drinking water via the project Chavimochic.

² About 50 m³/second can be transported by the main canal, of which about 1 m³/second can be made available for drinking water via the net (MPT, 2003).

³ Interview with Gustavo Aparicio, March 2007, technical division Sedalib, Trujillo.

⁴ Conversation with Marco Arroyo Flores, general director PE PlandeMetru, March 2007.

⁵ One person is made responsible for the payment for the water used on one particular tap. Registering of households on the list of users is free, and no costs other than for the use of water apply once the tap has been installed. When thus monthly bills are paid to Sedalib, it is of little concern for Sedalib what the exact number of families is that is using a tap.

⁶ Alto Trujillo is part of El Porvenir in the tables.

⁷ Several interviews with employees of the technical division of Sedalib, April 2007

⁸ Combining these three areas is done on a simple sum basis. There is no correction made for the difference in size of the three case-studies (60 questionnaires in the case of Alto Trujillo 2B, 90 questionnaires in both the other cases).

⁹ These two households were located in El Milagro. The households themselves paid for the tubes after which an employee of Sedalib installed them for a small fee. In front of the house, the usage meter was installed normally and charging happens via the regular formal way. Their employment type or living situation or plot was in no way different from others; their individual applications had simply been approved by Sedalib. These cases can indicate preference or even corruption, though from the conversations there were no signs that bribery had taken place.

¹⁰ Several interviews with Giovanna Fernández Sánchez, representative of the decentralized office Trujillo - SUNASS, April – July 2007.

¹¹ Edgar Alfredo Alcalde Otiniano, Supervisor and analyst 'Centro de Perdidas' Sedalib, June 2007.

¹² Several day trips along the distribution points took place with Immanuel, truck driver Municipality La Esperanza, February to July 2007.

¹³ Conversation with the truck driver working for Acuña, May and July 2007.

¹⁴ Acuña Peralta, César, mayor Trujillo Province, July 2007

¹⁵ Taking place in December 2005, the figures were only reportedly lower from January 2006 onwards. This means that it was not part of the annual report by Sedalib of 2005 did not take these figures into account, and, more important the reduction in the number of connections took place after the National Census of 2005.

¹⁶ Most of the respondents were women. They often report that they cannot let their children go alone to the open field. Especially at night, they consider it dangerous for themselves too. The danger experienced varies from alcoholics and drug addicts that throw stones to rape and murder. Despite this, conversations did indicate that hardly anyone knew of cases of rape or murder in the area where they were living.

¹⁷ Such intermediary solutions can come as a shared toilet from which a pipe connects it with a closed basin where all excrements are collected and filtered (either chemically or more eco-friendly), as a toilet with a pipe going deep into the soil, or any type of system where dried excrements would be collected at certain times.

- ¹⁸ Interview with the project department Sedalib, various people, June 2007
- ¹⁹ Interview with various employees technical division Sedalib, March 2007.
- ²⁰ These latrines consist of a lavatory in a cabin with door and roof, all made from blue painted corrugated iron, a cement floor, a cement reservoir and a 150 mm pipe for ventilation.
- ²¹ Interviews with Rosa Linares, supervisor 'Asistencia de cooperacion al desarrollo' Circulo Solidario, June and July 2007.
- ²² Latrines have been placed in Moche, El Milagro and La Esperanza as well, but on a much smaller and less reliable base. In those areas, responses about the latrines were far from positive.
- ²³ Interview with Marlene Perres, director Programme management Circulo Solidario (until May 2007), March 2007.
- ²⁴ This lack of openness shows in a variety of ways; the last yearly report dates of 2004, the website is malfunctioning for almost a year, emails are not responded to, visiting the office of Circulo Solidario is only limited possible and the personnel of Circulo Solidario has very little time for citizens of Trujillo. Especially Marlene Perres provided me much information during her interview, other then from her information was hard to obtain.
- ²⁵ Interviews with Eleazar Ríos, director Projects Hidrandina, May and July 2007
- ²⁶ Conversations and interviews with Justo Estrada León, sales manager Hidrandina, May, 2007
- ²⁷ Interviews and data-analysis with Wilar Saguma C, control and maintenance, Hidrandina, June 2007
- ²⁸ Conversation with Ruby Pelaez, planning north-west Trujillo Plandemetru, April 2007.
- ²⁹ The progress is visible only since the local president has paid engineers to make the required maps, and has bought and installed posts of good quality. Further official documents were lacking, and a time path could not be given by the president. Hidrandina mentioned not to know the exact details of the situation in this case, and had certainly not formally agreed on any projects to be carried out (Justo Estrada León, see note 2).
- ³⁰ Interview with Eleazar Ríos, director Projects Hidrandina, June 2007
- ³¹ Interview and data analysis with Saguma C., Wilar, control and maintenance, Hidrandina, May 2007
- ³² Interview with Javier Ramos Campos Mosquera, regional supervisor Trujillo office Osinermin, April 2007
- ³³ In this thesis, the telecommunication sector is limited to the telephone and internet sector.
- ³⁴ Interview and data analysis with Lucia Valenzuela, technical assistant FITEL Ministerio de Transportes y Comunicaciones, May 2007.
- ³⁵ In this analysis, a correction is made for geographical differences, population density, human development index and GINI-coefficient.
- ³⁶ ADSL stands for Asymmetric Digital Subscriber Line/Loop
- ³⁷ WAP stands for Wireless Application Protocol. This technology is used to access the internet via mobile phones.
- ³⁸ At the time of writing, no indicators on the amount of people getting access to the internet via public cabins were present. Since the use of internet is included as a variable in the national census of 2007, these data will be available soon. In 2001, the amount of public places to use the internet is estimated to be around 2000, and has increased rapidly since then (OSIPTTEL, 2003b, p. 50-51).
- ³⁹ Such educational institutes are the universities (Universidad Privada Antennor Orrego, Universidad Nacional de Trujillo and the Universidad Cesar Vallejo) as well as other private schools.
- ⁴⁰ The description for internet cabins in Trujillo is based mainly on the author's own observations only. Though formally registered, the information on the number of public cabins was not easily obtained, and those data available were in line with personal observations. Some observations; La Esperanza has about 40 public places (500+ computers) from where internet can be accessed, El Milagro has only one place (5 computers), and Alto Trujillo has only some public internet cabins (< 25 computers).
- ⁴¹ Unlike most other questions, this question was asked to the individual. The ones that reported not to make phone calls all (but two) reported that their husband/partner did not make phone calls either.
- ⁴² This was reported as the reason by 17 respondents without phone; one reported there was no network available so that owning a phone would be useless.
- ⁴³ The group of people that do not make phone calls includes only 18 people. Therefore, it is harder to determine a statistically significant relation. Also, indications for such a relation are rare; amongst them are the current situation regarding the status of the settlement (squatter settlement yes/no), and the age (more likely to be under 15 or over 55 (five groups, 15-24, 25-34, 35-44, 45-54, 55+ years).
- ⁴⁴ Nowadays, there are state owned companies only in Colombia, Costa Rica, Ecuador, Paraguay and Uruguay.
- ⁴⁵ This network allows businesses to have one-on-one connections at very low rates. This type of direct connect phones is often referred to as walkie-talkies. The coverage of this network is along the coastal line of Peru and in some cities in the Andes only; thus excluding most rural areas, and all of the Amazon basin (and thus Iquitos).
- ⁴⁶ Interview with Palomares Sartor, Claudio, coordinator FITEL Ministerio de Transportes y Comunicaciones, May 2007
- ⁴⁷ Interview with Eyasta Hermoza, Efrain, director zone Trujillo Telefónica Peru, June 2007

⁴⁸ The costs for the pre-paid card and phone are S/. 35, and can be used for free during a one-month trial.

⁴⁹ Interview with Eyasta Hermoza, Efrain, director zone Trujillo Telefónica Peru, June 2007

⁵⁰ Interview with Juan Carlos Gonzalez Hidalgo, executive director Municipality of La Esperanza, March 2007

⁵¹ Conversation with Fernando Bazán Pinillos, mayor Huanchaco, February 2007

⁵² Interview with William Alfaro Charcape, mayor of Centro Poblado Alto Trujillo, June 2007

⁵³ The municipalities deal with the households on a one-on-one base, but only as far as it concerns payments to the municipality.