



**"IMPLEMENTATION OF STRATEGIC
INTEGRAL PLANS TOWARDS
URBAN SUSTAINABILITY
THE CASE OF ASUNCION"**

FABIANA AGUILERA

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"Implementation of Strategic Integral Plans towards Urban Sustainability: The case of Asuncion"

Fabiana Aguilera Yambay
S_2717034

Supervised by: Dr. ir. W.G.Z. Tan

Master in Environmental and Infrastructure Planning
Faculty of Spatial Sciences
University of Groningen
August_2015



**rijksuniversiteit
 groningen**



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ABSTRACT

This master thesis situates itself in the broader debates concerning on the one hand sustainable development of our cities, and on the other hand the mechanisms to achieve such goal by analyzing institutional barriers and how to overcome them through policy change.

This work builds a bridge between these three debates, by examining the mechanisms to achieve sustainability through the implementation of strategic integral plans. Moreover, it intends to increase the general understanding of the importance of analyzing the specific barriers that impedes the execution of urban projects. To achieve these goals, this research focuses on the Metropolitan Area of Asuncion. It is an area that needed a special attention regarding urban sustainability since the metropolitan area has been expand outside sustainable limits as a consequence of a lack of implementation of urban development plans.

Therefore, this research will first, discuss the notions of sustainable development, institutional barriers, and policy change in order to create a theoretical framework to guide the research. Second, this research analyzes the context of the case study so as to identify context-specific barriers in the implementation of strategic integral plans. This section demonstrates which are the barriers affecting the execution of plans in the Metropolitan Area of Asuncion by applying a case study method, interviews, policy analysis and literature review. The final part of this study concerns the policy change needed to move towards more sustainable paths. This can be achieved through a series of context-specific strategic recommendations for the implementation of plans in the MAA.

Key terms: sustainable development, institutional barriers, policy change, strategic integral plans, context-specific barriers.



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ACRONYMS

BID: Banco Interamericano de Desarrollo (Inter-American Development Bank).

DNEE: Direccion Nacional de Estadisticas Encuestas y Censo (National Secretariat of Statistics and Census).

ICES: Iniciativa Ciudades Emergentes y Sostenibles (Emerging and Sustainable Cities Initiative).

IPPUC : Instituto de Pesquisa e Planejamento Urbano de Curitiba (Urban Planning Institute of Curitiba).

MAA: Metropolitan Area of Asuncion

MOPC: Ministerio de Obras Públicas y Comunicaciones (Ministry of Public Works and Communications).

NGO: Non-Governmental Organization.

Public Private Partnerships (PPPs).



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GLOSSARY

Strategic Integral Plans: Is a process that determines community goals and aspirations in terms of community development. The outcome of comprehensive planning is the Comprehensive Plan which dictates public policy in terms of transportation, utilities, land use, recreation, and housing. Comprehensive plans typically encompass large geographical areas, a broad range of topics, and cover a long-term time horizon. The term comprehensive planning is most often used by urban planners in the United States. Larz (1995).

Urban sprawl: *“Gluttonous use of land, uninterrupted monotonous development, leapfrog discontinuous development and inefficient use of land”* Peiser (2001: p.78).

Sustainable development: *‘Development that meets the needs of the present without compromising the ability of future generations to meet their own needs’* (WCED 1987, p. 8).

Urban planning: Technical and political process concerned with the use of land, protection and use of the environment, public welfare, and the design of the urban environment, including air, water, and the infrastructure passing into and out of urban areas such as transportation, communications, and distribution networks. McGill, CA. (2015).

Institutional Barriers: Forces that prevent a measure from being implemented in its ideal form. These forces (or barriers) could either reduce the potential of a measure once implemented, or even make implementation impossible. Benister (1998, p. 54)

"Implementation of Strategic Integral Plans towards Urban Sustainability: The case of Asuncion"



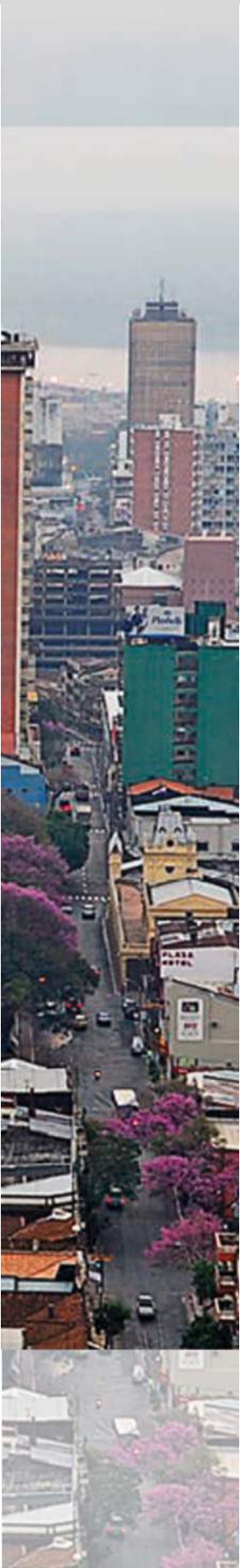
Ñande Táva Guazu Our Big City

Image: Asunción Bay, Action Plan for the Metropolitan Area of Asunción. Ñande Táva Guazu means 'Our big city' in native Guarani, which is one of the official languages of Paraguay. Source: BID (2014).

CHAPTER 1



View of the blossomed 'Tajá' trees. Asunción is known as the 'Green Capital' of South America because of its large amount of vegetation (UCCI, 2014). Source: <http://blog.fotociclo.com/>
Photographer: Juan Carlos Meza.



INTRODUCTION

In developing countries in Latin America, the need of transportation is increasing in line with global economic growth, where the increased household income is followed by increase of private vehicle ownership (Cervero, 1998). The increase in private car usage results in traffic congestion especially without policy intervention to regulate the transportation network.

Strategic integral plans to mitigate these negative effects of transportation are therefore important for sustainable urban development and mobility patterns. Asuncion, the capital of Paraguay, has a few of projects regarding strategic integral plans but not all of them have being carried out. The aim of this study is to identify the possible barriers to project implementation, and therefore try to overcome those barriers.

1.1_ Introduction

Paraguay is located in South America bordering Argentina, Brazil and Bolivia. The autonomous capital Asuncion is located along the Paraguay river, it is a district which is not part of any department (see figure 1.1). The metropolitan area, called Gran Asunción, includes 10 cities which are part of the Central Department: Lambare, Fernando de la Mora, San Lorenzo, Capiata, Luque, Mariano Roque Alonso, Villa Elisa, San Antonio, Limpio, and Ñemby, Asuncion has 544 309 habitants, while the metropolitan area has 2 536 195 habitants (DGEEC, 2012).



Figure 1.1: Location of Paraguay and Asuncion. Source: www.googlemaps.org, and author.

The main road network in Asunción consists of six radial and six ring roads. The radial roads originate in Micro Centro and spread outward in fan shape, and each connects with national or departmental highways. Ring roads are spaced at 1 to 2km apart from each other, and the progress of their development is a little slower than for radial roads (see figure 1.2).

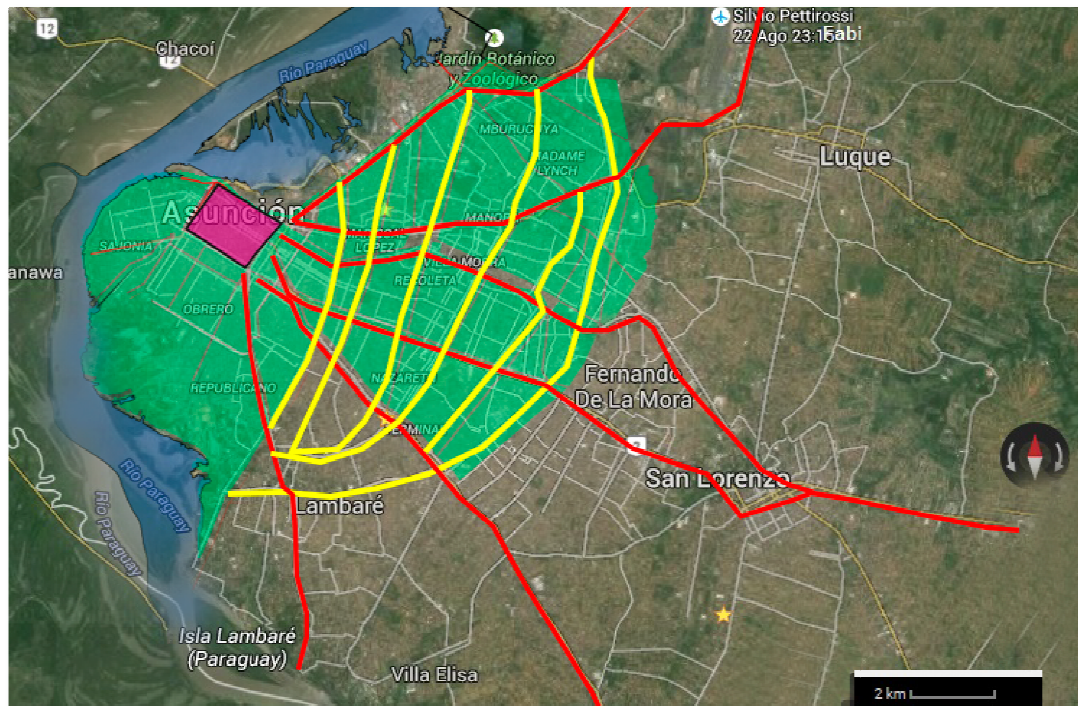


Figure 1.2: Metropolitan area of Asunción, the red lines indicate the six radial roads, and the yellow lines indicates the six ring roads. Source: www.google.es/maps, and author.

Cities in Latin America are facing a rapid population growth, this becomes a problem since the process of expansion and diversification are messy and often anarchic with a tendency to expand outside of current urban development plans. Asunción, the capital of Paraguay is no exception to this. Paraguay has a surface of 406.752 km² and a population of 6.783.374, from this number Asunción has 544 309 habitants, while the metropolitan area has 2 154 092 habitants (see figure 1.3) (DNEE, 2015). Since the Population Census of 1962, the trend of population growth in each municipality of the metropolitan area shows that the increase is more prominent in suburban cities than Asunción, which clearly indicates a tendency of urban sprawl (see figure 1.4). This urban sprawl is caused by a series of factors but mainly is due to the lower prices of the real estate market, offering cheaper houses outside the city center. Moreover, national housing policies created social houses outside the metropolitan area, widening the expansion of the city, creating more traffic due to mobility need to go to work and study.

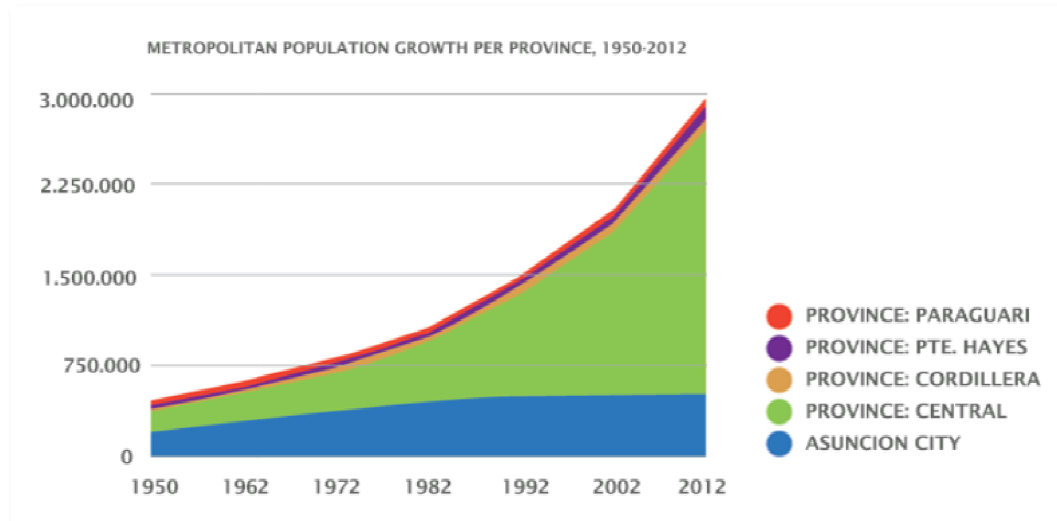


Figure 1.3: The metropolitan municipalities that belong to the Central Department accounted for 88% of the new population in the period from 1972 to 2012 (and over 92% in the last decade). By contrast, the population of the capital has hardly grown in 1992-2012. Source: ICES, 2014.

In order to achieve urban sustainability a few Master Plans for the City of Asuncion and the Metropolitan Area had been created. According to Plan CHA (2014) Asuncion has various urban planning projects developed since the 90's, immediately after the end of the dictatorship in Paraguay. To name two examples, we can cite the Transportation Master Plan known as CETA / 98 Plan of JICA cooperation, nowadays known as the BRT project promoted by the MOPC with the support of the IDB; or the project of the Coastal Strip, promoted by various institutions such as the Municipality of Asuncion and the MOPC. It started in the beginning of the 90s, and now partially implemented. Therefore, it is important to emphasize that the problem is not a lack of projects or technical limitations of the Government, but the low capacity to implement, evaluate and manage them over time.

As stated before, there are many projects for the Metropolitan Area of Asuncion, but there is little discussion on how to put them in practice. The aim of this research is to address this gap by first identifying the barriers in the implementation of projects. *"Context-specific barriers need to be identified, in order to then look for context-specific ways of overcoming them"* (Tan et al., 2014, p. 2). Moreover, defining the issues can be more accurate when the actors and stakeholders are involved in the process (Paulley and Pedler, 2000). Therefore, a combination of inductive and deductive research processes is proposed and applied. Second, an approach will be suggested in order to successfully execute strategic integral plans for urban sustainability in the Metropolitan Area of Asuncion. This, by acknowledging that in order to change from a non-sustainable growth to a sustainable one, a transition process must occur. (Tan, 2013).



Figure 1.4: Metropolitan Area of Asuncion, urban sprawl comparison between 1840, 1990 and 2005. Source: B. Bozzano, 2007.

1.2_Problem Statement

In the last 25 years of democratic government in Paraguay there has been a series of projects related to strategic integral plans, but none of them have been put into practice. For example, The bus rapid transit 'Pya'e Porá' project, Action Plan for the Metropolitan Area of the City of Asuncion, Bicentenario Bridge, and the Master plan to build houses in Chaco'i. Rapid development in Paraguay led to urban sprawl, and so far the government has not translate these urban projects into reality (ICES, 2014). It is not enough to have plenty of urban projects for the development of the city, if they are not being implemented then money, time, and resources are wasted over time. As described in Brundtland report (WCED, 1987) sustainable development is just an idea, what is really important is what people do with the concept. Asuncion is facing sustainability problems such as low planning capacity, shortage of housing, deficiency in transport infrastructure, increase of poverty, governance crisis, and environmental degradation (Bozzano, 2007). The societal relevance of the thesis lies in how it offers a way to change the current planning and governance system in Asuncion in order to implement Strategic Integral Projects, and by doing so improve the capacity of the civic participation for the accountability of the implementation of these plans. This is of particular significance for a city facing current economic and environmental un-sustainability such as the Metropolitan Area of Asuncion, in the hopes of ensuring access to better housing, public spaces, mobility, security, and a healthy environment for its citizens.

Rapid expansion of cities due to economic growth is a global issue (Jordan, 2007). There are social and spatial consequences resulting in large environmental and social costs(WCED, 1987). Literature show us examples of these consequences: air pollution, ecosystem fragmentation, spatial and social segregation, accidents, and governance problems (WCED, 1987). Therefore, it is necessary to find the barriers that are causing the delays in the implementation of projects (Tan, 2013) to contribute to the urban sustainability of our cities. Theory also tells us that (after the publication of Brundtland report in 1987) there have been an increasing demand for systems of governance capable of leading society on a more sustainable track (Jordan, 2007). As explained by Curtis et al. (2012) in a world looking to confront global environmental issues, it is critical to pursue the local and national institutional change in order to tackle the problem more effectively.



The scientific relevance of the thesis lies in how it considers the challenge of a developing country of moving from a non-sustainable to a sustainable path. The goal is to demonstrate that the identification of context-specific barriers (Tan, 2013) can also be applied to identify context-barriers in the implementation of Strategic Integral Plans in the Metropolitan Area of Asuncion, so as to improve the capacity of the current governance system to execute projects. The thesis will formulate a sustainable framework to address the specific barriers by proposing Institutional change through a series of context-specific recommendations based on the results of policy analysis, literature review and interviews.

1.3_Research Aims and Objectives

The aim of this research is to identify context-specific barriers in order to implement Strategic Integral Plans for urban sustainability. These plans are process that determines community goals and aspirations in terms of community development (Larz, 1995). The thesis focus specifically on Strategic Integral Plans because they give comprehensive holistic long-term steps to be carried out, and goals to be accomplished in order to develop or improve a non-sustainable development. Rather than just focusing on projects that means to solve particular problems such as building schools, health centers or maintaining roads.

The applicability of strategic integral plans remain a challenge even though they are broadly accepted, and Institutional barriers are an important part of this problem (Tan et al., 2014). Therefore, to ensure the success in the execution of a plan the solution proposed should match the barriers that will be identified. Literature provides combined strategies integrating policy instruments to attain synergy and reduce the implementation barriers (Clifford et al., 2005). Yet, the applicability of such proposition is still vague because barriers are context-specific. This research will be based on the approach proposed by Tan et al. (2014) to identify barriers within a given context.

1.4_Research Question

Based on the problem statement above, the main research question of this study is: ***What are the necessary planning context and processes for implementing Strategic Integral Plans for urban sustainability in the metropolitan area of Asuncion?***

In order to support the main research question, several supporting questions arise (see table 1.1):

1. What are the context-specific barriers to strategic integral plans implementation in Asuncion? This question will be answered by exploring through literature review. Also by interviews, and policy analysis.

2. What strategies can be used in order to implement strategic integral plans in Asuncion? This question will be answered by analyzing literature on policy change.

3. What successful policy change and strategic integral plans implementation are there in the region to be use as an example? This will be answered by examining information on policy change and urban sustainability master plan implemented in Curitiba Brazil.



Question N#	Research Question	Strategy to answer	Main source of data
1.	What are the necessary planning context and processes for implementing Strategic Integral Plans for urban sustainability in the metropolitan area of Asuncion?	This question will be answered by exploring through literature review. Also by interviews, and policy analysis.	Journal, academic research, NGO research, newspaper, governmental regulation from Paraguay, reports of decision making processes.
2.	What are the context-specific barriers to strategic integral plans implementation in Asuncion?	This question will be answered by exploring through literature review. Also by interviews, and policy analysis.	Journal, academic research, NGO research, newspaper, governmental regulation from Paraguay, and reports of decision making processes.
3.	What strategies can be used in order to implement strategic integral plans in Asuncion?	This question will be answered by analyzing literature on policy change.	Analysis of chapters 3 and 4, academic literature on policy advice.
4.	What successful policy change and strategic integral plans implementation are there in the region to be use as an example?	This will be answered by examining information on policy change and urban sustainability master plan implemented in Curitiba Brazil.	Journal, academic research, NGO research, newspaper, governmental regulation from the chosen country used as example.

Table 1.1: Overview of the questions and the strategies to find the answers and data. Source: made by author.

1.5_Thesis structure

According to the thesis structure, the framework of the research is shown as the organization chart below (see figure 1.5).

Chapter 1_Introduction: Background, Problem statement, Research aims and objectives, Research question, Data Collection , Thesis structure

Chapter 2_Theoretical Framework : Sustainable urban development, Institutional barriers, Policy change.

Chapter 3_Methodology : Case study, Literature review, Policy analysis, Interviews, Survey.

Chapter 4_Case study, Asuncion: Analysis of the current situation of the Metropolitan Area of Asuncion.

Chapter 5_ Identifying implementation barriers: Applying the methods described in chapter 3.



Chapter 6_ Institutional change for sustainable development : Policy change towards sustainability, Case of success: Curitiba, Policy strategy: Policy entrepreneurs as drivers of change for the implementation of strategic integral plans.

Chapter 7_ Conclusion and Recommendation

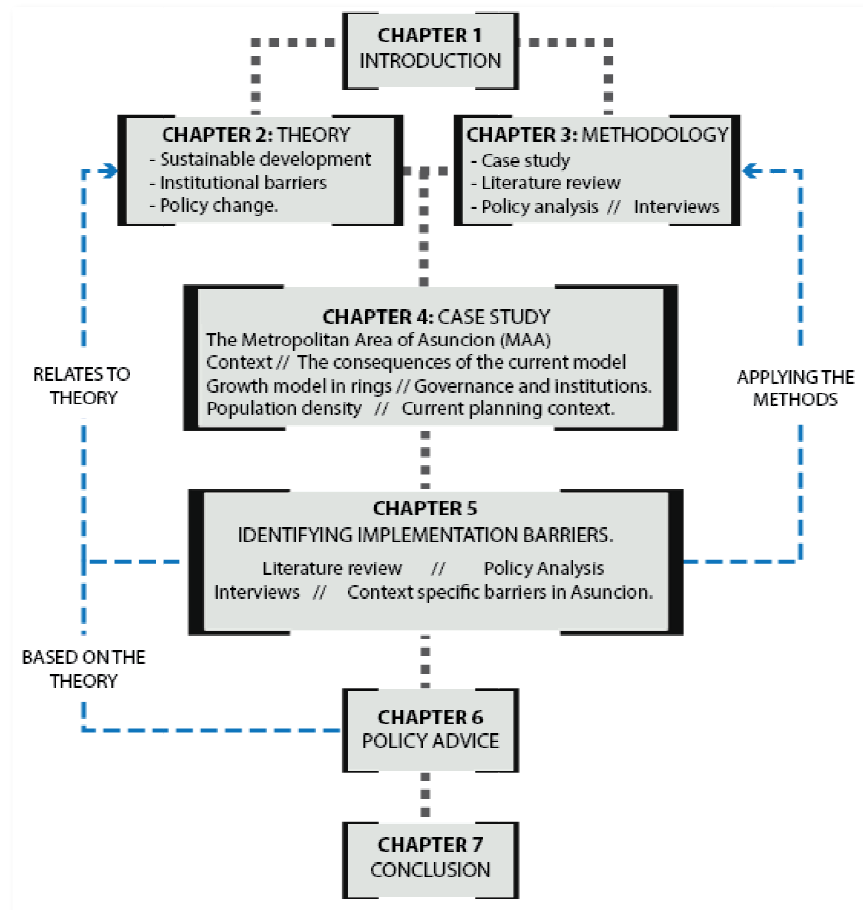


Figure 1.5: Organization chart of the research structure and the relationship between the chapters. Source: made by author.

CHAPTER 2



View of the Historic Center of Asunción. Source: <http://blog.fotociclo.com/>
Photographer: Juan Carlos Meza.





THEORY

2.1 Introduction

In this chapter the selected Sustainable development, Institutional barriers and Policy change theories are described and analyzed in a general context so as to understand how they work and what are the goals pursued by each of them. As many of the literature relating this theories are based in developed countries, the following sections will add a series of additional perspectives to relate the theories to the planning culture in the MAA. Furthermore, this main three tools will generate a theoretical framework in order to assess the barriers in the implementation of strategic integral plans. Finally, after the analysis of the barrier, this main three tools with the additional perspectives will create a tailor suited, context-specific policy advice for the MAA.

The first part (section 2.2) introduces the issue of sustainable development in our cities: its definition, causes, consequences, and the policies and spatial issues related to the MAA. The aim pursued here is to provide a better understanding of the overall issue of sustainability in our cities, and why it is necessary to achieve it. The second part (section 2.3) explains the types of institutional barriers in the implementation of projects, and why it is relevance to overcome them. The third part (section 2.4) presents the importance of a policy change, how to induce it and what are the goals. Finally, a third part (section 2.5) illustrates the theoretical framework developed based on the theories.

The aim of this research is to identify context-specific barriers in order to implement Strategic Integral Plans for urban sustainability. This research focuses on Strategic Integral Plans because they give comprehensive holistic long-term steps to be carried out, and goals to be accomplished in order to develop or improve a non-sustainable development (Larz, 1995). Rather than just focusing on projects that means to solve specific problems such as creation of school, health centers or maintaining roads. The question then arises, if the applicability of strategic integral plans are broadly accepted then why is there still a challenge for its implementation (Tan et al., 2014). Many cities like the case of Asuncion have various plans that attempt to solve the issue of urban sprawl, but those plans are not being implemented. In this literature review theories regarding urban sustainability, barrier in the implementation of projects and policy change will be addressed.

2.2_Sustainable urban development

Modern society is more and more dependent on the automobile. The car dependency culture is creating conflicts like urban sprawl; in addition, the city's expansion causes problems such as pollution, environmental degradation, lack of efficient infrastructure and social problems. A new way of approaching the problem is needed. Consequently, sustainable mobility merges as a response to car-use negative externalities, cities need to turn to sustainable and livable developing plans in order to generate a better quality of live for their inhabitants. Suzuki et al. (2013) explains, that in order to lower the necessity of traveling by private motorized vehicles an integrated transit and



land development is needed. An attractive city for people to live are places with good and walkable access to public transit, as well as good designed urban spaces. This kind of environment improves a city's economic competitiveness, lower local pollution and global greenhouse gas emissions, and foster urban development.

The Brundtland Report (1987), defines sustainable development as *'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'* (WCED 1987, p. 8). Moreover, James (2015) explains the concept of development as *"a social change –with all its intended or unintended outcomes, good and bad – that brings about a significant and patterned shift in the technologies, techniques, infrastructure, and/or associated life-forms of a place or people"* (James, 2015, p. 12)

The trends are to position the city as the center of economic and human development in the region. The city is creating jobs, is innovating, is rethinking its health and education, transport systems, is facing climate change is creating opportunities for discussion and socializing. For this dynamic to be seen as a successful city phenomenon, it is an imperative to plan the present thinking about its future, pursuing a balance between economic growth, social inclusion and respect for the environment. Therefore, it is the responsibility of cities to improve the quality of life of present generations without compromising the welfare of future generations.

The sustainability of cities is only achieved with an integrated perspective; a holistic approach towards solutions, working together with the economic, fiscal, urban, environmental, institutional and governance of cities, where different areas and levels of government coordinate with each other and in which articulate the private sector and civil society (Seik, 2000).

The importance of designing sustainable urban development master plans relies in the fact that it aims to improve the quality of life of the citizens (Vojnovic, 2012). This can be achieved using standards indicators such as physical and mental health, wealth, built environment, education, recreation and leisure time. Hence, the quality of urban life can be improved by providing a high quality of public open space, in order to fulfill the demand of recreation. This is more evident in urban areas, where because of urban growth, land becomes more scarce and packed. Consequently, planners should identify and understand citizen's needs and aspirations in order to improve the quality of urban life (Seik, 2000).

Paraguay is an example of late urban development. The urban population represented only 37% of the total population in 1974. The migration flows significantly increased in the beginning of the nineties and intensified in the 2000 (see figure 2.1).

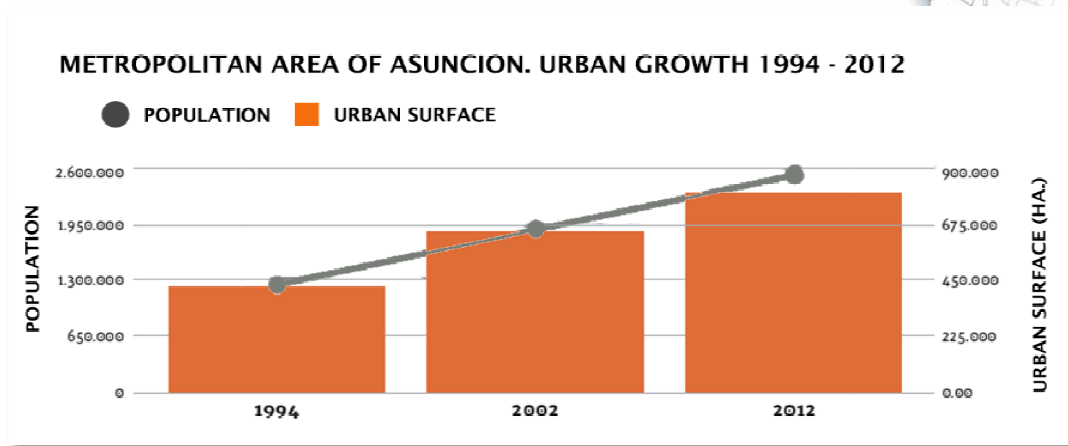


Figure 2.1: The developed land in the metropolitan area now covers an area of 810 km² and shows an average rate of the last two decades from 3.8% annual growth, with 5.4% in the period 1992-2002 and 2.2% in 2002-2012. Source: ICES, 2014.

Currently the urban population of the metropolitan area of Asuncion has an urban area of 810 square kilometers and a population of 2,536,195 inhabitants according to estimates in 2012 (see figure 2.2), representing a gross urban density of 32 inhabitants / Ha. (DNEE, 2015). The developed land in the metropolitan area now covers an area of 810 km² and shows an average rate of the last two decades from 3.8% annual growth, with 5.4% in the period 1992-2002 and 2.2% in 2002-2012, as shown in figure 2.1. The decrease of the increase in the period 2002-2012 coincides with the slowdown in the rate of population growth fell from 5.3% in the 90 to 3% in the last decade (ICES, 2014). The explosive population growth experienced by the metropolitan area of Asuncion in recent decades has created new opportunities but also huge challenges for the quality of life and economic competitiveness of the metropolis.

In order to support medium-sized cities in the region and address these challenges to prevent future limitations its development, the Inter-American Development Bank launched the Emerging Sustainable Cities Initiative (ICES) in 2010. The ICES identified Asuncion and its metropolitan area as an emerging city with the highest potential to promote sustainable urban development, and in 2013 started a joint work to identify the most urgent challenges to propose a series of concrete actions to confront sustainability (ICES, 2014).

The aim of this research is to identify the barriers in the implementation of projects like the Emerging Sustainable Cities Initiative for Asuncion. If context-specific barriers can be identified, then context-specific ways of overcoming them can be suggested (Tan et al., 2014). The barriers to implementation of projects can clarify why progress towards urban sustainability are slow or never implemented (Banister, 1998).

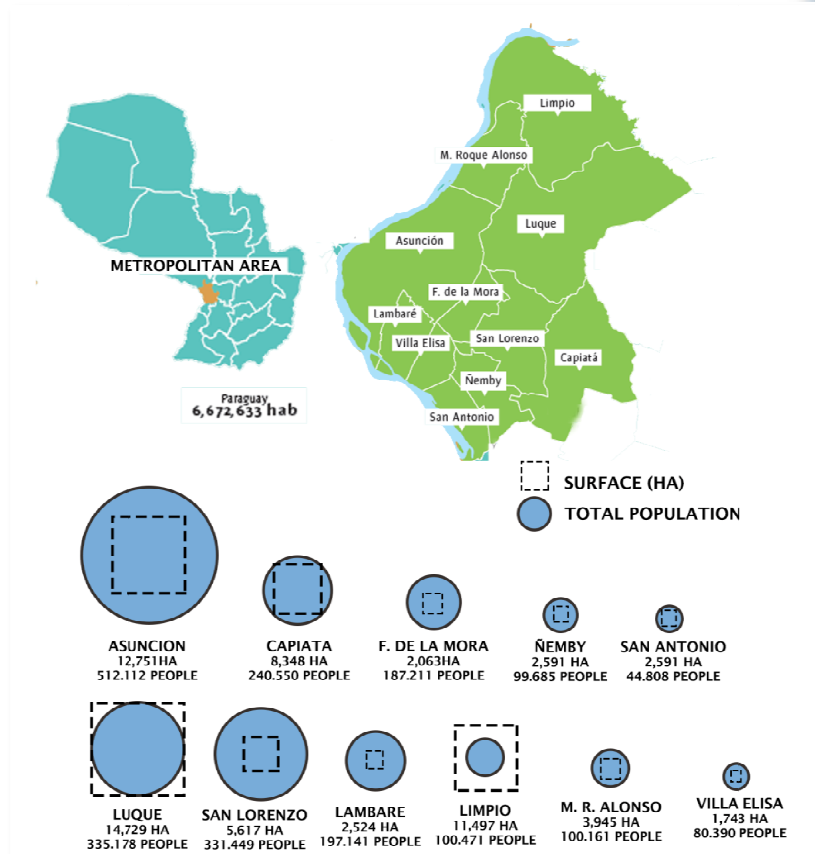


Figure 2.2: Extremely low population density in the MAA. Currently, the footprint covers an area of 810 km² for an urban population of 2,536,195 (for a total of approximately 3 million inhabitants), representing a gross urban density of 30 inhabitants / ha, too low when compared with other similar cities, and unsustainable environmentally, socially and economically.. Source: re drawn by author, based on ICES (2014).

2.3. Institutional barriers

Benister (1998, p. 54) explains that "there are several forces that prevent a measure from being implemented in its ideal form. These forces (or barriers) could either reduce the potential of a measure once implemented, or even make implementation impossible". Projects regarding sustainable urban development take for granted that once a policy decision has been made the project will be implemented, and people will react with the anticipated changes in behavior (Banister, 2004). But, this is not always the case, and in many scenarios different types of barriers to the successful implementation of the policies appear. Clifford et al. (2005) presents 5 types of barriers to sustainable development: legal (L), financial (FI), political/cultural (PC), institutional/territorial (IT) and practical/technological (PT). Institutional/ territorial refers to organizational divisions (Clifford et al., 2005, 17).

As explained by Banister (1998), because of the large number of public and private parties involved in the planning and implementation process of projects, it is often complex to realize a coordinated action by the agency in charge of implementing the



policies (Banister, 1998). *"Institution and policy barriers are related to problems with coordinated action between different organizations or level of government, and to conflict with other policies"* (Banister, 1998, p 54).

Moreover, North (1991, p. 97) defines Institutions as: *"humanly devised constraints that structure political, economic and social interaction ... consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)"*. This institutional barriers were identified by many scholars as most fundamental ones to overcome (Banister, 2005; Rietveld and Stough, 2004; Tan et al. 2013).

Barriers in the implementation of projects are thus context-specific (Tan et al. 2013), this means that a context-specific solution are required to tackle the problems. This research will be based on the approach proposed by Tan (2013) where contextualization of problems and solutions through a series of methods is suggested. In her work she explores the dynamics between formal and informal barriers leading towards the possible lifting of barriers of TOD projects (see figure 2.3). As explain by Tan (2013) these dynamics have been presented as vicious cycles, where a self-reinforcing negative loop impedes the implementation of TOD projects. Thus, a virtuous cycle is also possible (Tan, 2013; Cervero, 1998; Curtis et al., 2009; Dittmar & Ohland, 2004). Therefore, the implementation of projects (in this case TODs) can be foster through processes of learning and institutional innovation (Tan, 2013; Bertolini et al., 2012, Marsden & Stead, 2011)

This conceptualization will be used as a basis to generate the theoretical model of this thesis. Current literature explains concepts and types of barriers (Clifford et al., 2005; Benister ,1998; North, 1991; Rietveld and Stough, 2004; Tan, 2013), and shows us how to identify specific barriers from a context(Tan, 2013). This research will go beyond the current literature by addressing the context-specific barriers to the implementation of Strategic Integral Plans using a developing country as a testing ground. The approach will focus on how to change from a non-sustainable development model to a sustainable track by solving the existing project implementation gap.

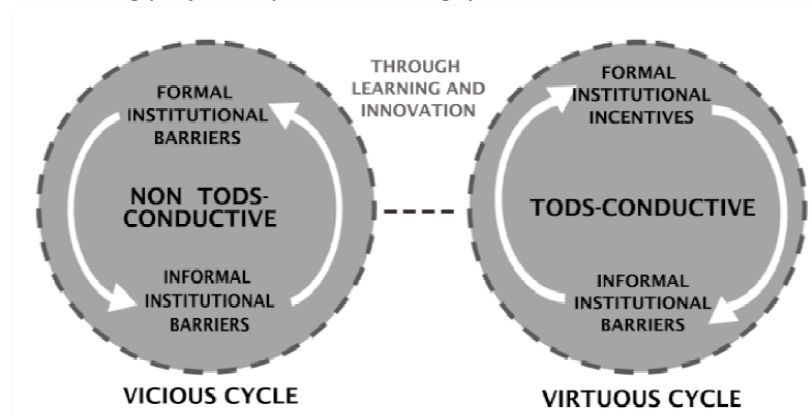


Figure 2.3: Conceptual model on the dynamics between formal and informal barriers (left), leading towards the possible lifting of the barriers (right). Source: Re-drawn by author from Tan et al. 2013.

In the last 25 years of democratic government in Paraguay there has been a series of projects related to integral plans, but none of them have been put into practice; for instance, the bus rapid transit 'Py'a'e Porá' project, Action Plan for the Metropolitan Area of the City of Asuncion, Bicentenario Bridge, and the Master plan to build houses in



Chaco'i . Moreover, Plan CHA (2014) explains that Asuncion has various urban projects developed since the 90's, for example the Action Plan for a Sustainable Metropolitan Area of Asuncion developed by the Inter-American Development Bank (ICES, 2014). It is emphasized that the problem is not a lack of project or the financial and technical limitations of the Government, but the low capacity to implement, evaluate and manage them over time. There is little discussion on how to implement these projects; therefore, the aim of this research is to address this gap by first identifying the context-specific barriers in the realization of projects. As stated by Tan et al. (2014, p. 2) "Context-specific barriers need to be identified, in order to then look for context-specific ways of overcoming them".

2.4. Policy change

As Banister (2005, p. 93) points out, *‘the role of institutions is crucial to the effective implementation of challenging options on sustainable development’*. But at the same time institutions are the ones that hinder the way. A challenge then arises. From one perspective general society looks to the more responsive organs of governance for answers to new and developing issues, for example, environmental change or urban sustainability. Yet, these organs of governance are intended to embody a short term vision, because of general elections and change of authorities. Therefore, there is a tendency in these organs of governance to forget about the problems and leave it to the next administration to try and solve them.

On the other hand, the more enduring institutions of administration, the bureaucratic apparatus of the state, and the nexus of private interests around it (less obvious to research and less accountable to the general citizens) is capable of developing a long term perspective. But, is less responsive to new requirements for action. It is the enduring organizations of administration that need to change, both the organization and the individuals inside them. This change needs to take place with unprecedented pace (Curtis et al., 2012).

"In a world seeking to tackle global environmental problems such as climate change, the importance of local and national institutional change to deal most effectively with these issues is critical" (Curtis et al., 2012, p. 13). Literature also show us other examples of the pursue of institutional and legal change such as The Brundtland report (WCED, 1987) that summarizes proposed legal principles supporting environmental protection and sustainable development.

As explained by Huitema and Meijerink (2010) policy change has to be developed in advance, and this is carried out by people who endeavor to create and offer alternative approaches. Furthermore, is important to understand *"the role of 'policy entrepreneurs' in instigating, implementing, and sometimes blocking policy change"* (Huitema and Meijerink, 2010, p. 1). This research will focus on the power that policy entrepreneurs have to instigate policy change, this by using a set of strategies which are available to policy entrepreneurs. It is important to acknowledge that policy change is one element of a transition, yet an important one, even at a time when it has become common to speak of "governance" instead of "government" (Jordan et al. 2009).

Implementation of strategic integral plans present difficulties in Asuncion, even though there are a few master plan projects to make a sustainable city, and the interest of local authorities and the community. One of the most critical issues identified in the metropolitan area of Asuncion is the lack of a holistic vision of the area towards



sustainability. The territory is divided in different jurisdictions, this conspires against the solution of common problems. Many of these problems are identified as priorities for the sustainable future of the city as, for example, urban sprawl, the lack of efficient infrastructure, environmental pollution, traffic congestion and quality of public transport. These are issues that have a direct impact on quality of life and welfare of the inhabitants of Asuncion.

Therefore, for positive transformation from a non-sustainable towards a sustainable future to occur, it will depend on the effort and cooperation of municipal governments, organizations of civil society, the citizens, and the private sector together with the support of the National Government. The process of formulating the action plan must seek to generate a process of dialogue, collaboration, and coordination between various metropolitan actors. The role that policy entrepreneurs can have in the process of inducing a policy change will be analyzed in this research.

2.5. Theoretical model

This master thesis situated itself in the broader debates concerning, on the one hand sustainable development of our cities, and on the other hand the mechanisms to achieve such goal by analyzing Institutional barriers to the implementation of projects by proposing an Institutional change through a tailor made policy advice. The deficiencies in the planning framework of the MAA will be exposed, and a theoretical model based on the dynamics of vicious and virtuous cycle described by Tan (2013) will serve as a guide to frame the goals of the research. The aim is to bridge the possible gaps in the implementation of strategic integral plans in the MAA, and transform the current non-sustainable cycle into a sustainable cycle (see figure 2.4). It is important to explain that the elements and relationships shown are not linear but interact with and influence each other within the complex arena that is the city. As shown in figure 2.4, there are connections between all the elements of theory.

Therefore, in order to change from a non-sustainable to a sustainable track a cycle of change is proposed. This cycle aims to achieve sustainable development by first analyzing the possible context-specific barriers (Tan, 2013) in the implementation of Strategic Integral Plans in the MAA. Once the barriers are identified, a policy change needs to be proposed. This can be done through a series of context-specific policy advice in order to foster and induce the execution of projects. This approach can be imitated in other backgrounds taking into consideration that there is enough access to an expert stakeholders and also to policy documents. Moreover, the approach, identification and analysis led to the recognition and eventual conceptualization of sustainable and non-sustainable cycles as a consequence of the non-implementation of strategic integral plans. The conceptualization illustrates a the chance to break the cycle by intervening through a series of processes that assess and foster the implementation of projects and therefore contributes to the sustainability of our cities.

Based on the analyses of the theory presented in the previous section, figure 2.4 demonstrates the scope and goals of this thesis in a theoretical model. It aims to address the setback on the implementation of strategic integral plans by focusing on the context-specific barriers of the MAA (Tan, 2013). Engaging these three theories (sustainable development, institutional barriers, and policy change) through a set of strategic planning recommendations serve as a guide to change the path of the MAA from a non-



sustainability towards a sustainable future. Therefore it is important to improve the specific policy and operational barriers that currently exist in the MAA.

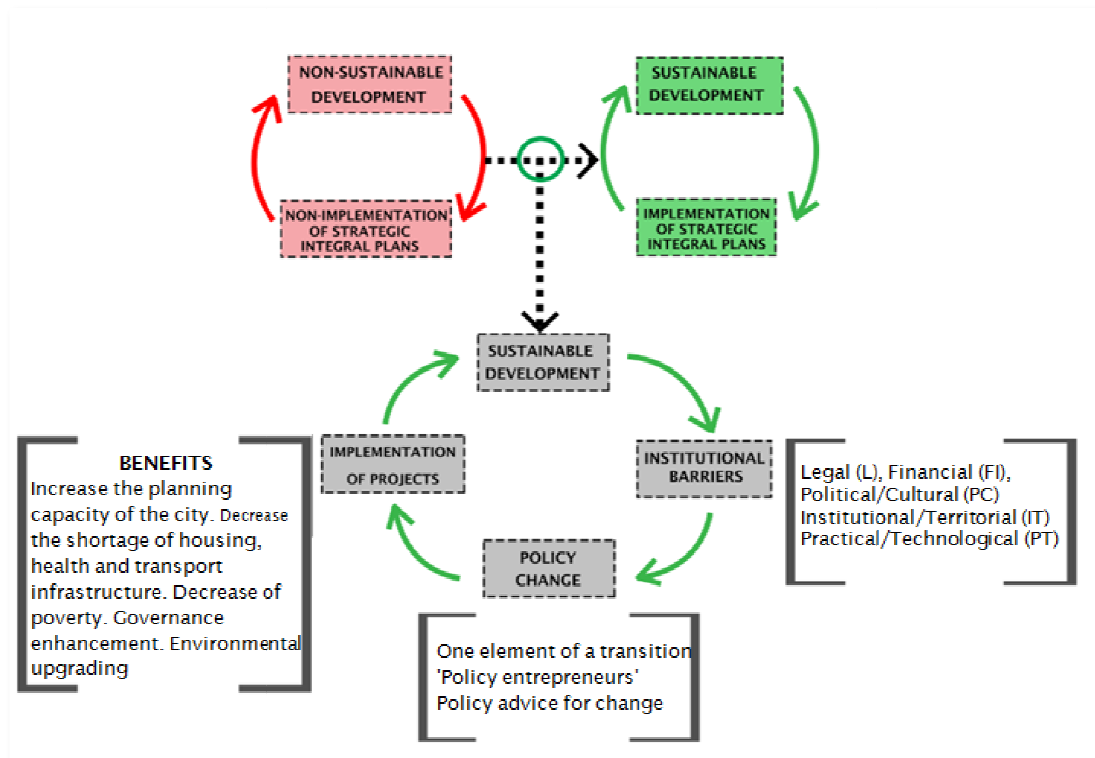


Figure 2.4: The deficiencies in the planning framework of the MAA will be explored. A theoretical framework based on the dynamics of vicious and virtuous cycle described by Tan (2013) serves as guide to frame the goals of the research. Source: Author.

CHAPTER 3



View of Asuncion Bay with its new waterfront. Source: <http://blog.fotociclo.com/>
Photographer: Juan Carlos Meza.



METHODOLOGY

Based on the theoretical framework a case study will be used to understand how sustainable urban development and strategic integral plans works. The case will be examined through policy analysis, literature review, and interviews. The selected case study is the Asuncion's Metropolitan Area, because is a metropolitan region of 2.154.092 inhabitants which exemplifies typical issues sustainable urban development tries to overcome; such as, rapid population growth, urban sprawl, transportation issues, traffic, and lack of adequate infrastructure (DNEE, 2015).

In order to support medium-sized cities in the region and address the challenges of a non sustainable development, the Inter-American Development Bank launched the Emerging Sustainable Cities Initiative (ICES) in 2010. In 2013 BID started a joint work to identify the most urgent challenges for the city of Asuncion. But, if strategic integral plans are being developed why are they not implemented. The aim of this research is to identify the barriers in the implementation of plans. As stated by Tan et al. (2014), if context-specific barriers can be identified, then context-specific ways of overcoming them can be created.

3.1. Case Study Asuncion, Paraguay.

Case study method was selected as tool for this research because it involves a complete and exhaustive study of a particular case (Bryman, 2012). Moreover, as explained by Bryman (2012) the word 'case' commonly connects the case study with a location like a group or an association emphasizing an exhaustive research of the situation. Three basic criteria were used for the case selection. The first criterion was concerned with the number of cases to be examined. One case was selected because the research question were precise and needed to be addressed to a specific context. This will allow to collect a good amount of data and reach the best outcomes after the analysis of the information. The second criterion was the selection of a developing country to do the analysis. The aim is to demonstrate that a series of strategies can be applied to a different context and still be useful to identify barriers; if this policy advice is applied to a developing country it could help the city continue its growth through a sustainable path. The third criterion was to select a country that needed a special attention regarding urban sustainability by fostering the implementation of Strategic Integral Plans.

Therefore, the country selected was Paraguay and more specifically the Metropolitan Area of Asuncion. Paraguay is among the countries of late development, where the process or urbanization still continues. The urban population accounted for 37% of the total in 1974, reaching 59% at present. Asunción and its Metropolitan Area concentrates 65% of the urban population in Paraguay (ICES, 2014). Explosive population growth experienced by the MAA in recent decades has created new opportunities but also huge challenges for the quality of life and economic competitiveness of the metropolis. This research aims to support medium-sized cities such as Asuncion and the cities that



conform the metropolitan area to address these challenges and guide them towards a sustainable path.

3.2. Identification of barriers:

Bryman (2012) explains that proponents of case study design frequently prefer qualitative methods (such as participant observation and unstructured interviewing) because in the creation of an rigorous, detailed assessment of a case these methods are viewed as particularly helpful.

This research will be based on the approach proposed by Tan (2013) where contextualization of problems and solutions are achieved through series of methods. Actors and stakeholders should also be involved in the assessment process for identification of barriers. Inductive and deductive processes are used for the research (see Figure xx). The deductive process begins with the theoretical analysis from the literature review, this is used to guide the course of observations and answers compilation from different stakeholders. This will be done through policy analysis, interviews and literature review. Later, an inductive process is carried out using the observations and results to evaluate the theoretical concepts; therefore, identify the context-specific barriers in Asuncion. For an easier understanding of the process, Figure xx presents the four steps in a linear order. Yet, the research was carried out with iterations between the different steps.

Three research methods: literature review, policy analysis and interviews, have been used in parallel to identify barriers in the implementation of projects (see figure 3.1). The three methods, their results and the way they influence each other are then presented in chapter 5.

Research strategy

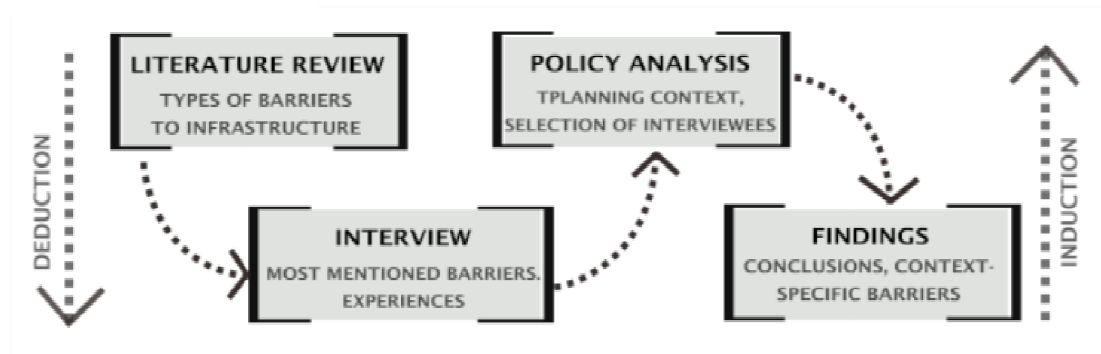


Figure 3.1: Representation of the three-step approach framework with different methods and findings; as well as deductive and inductive processes. Source: Author. Based on Tan et al. (2013).

3.3. Literature review

According to Bryman (2012) the literature review helps to develop an argument based on the research that scholars have already done in a certain field, and what are the research methods and strategies they have employed to develop study the area.



The literature review begins with an analysis of the concept, implications and benefits of urban sustainability and as a tool to achieve a sustainable city. Asuncion has various projects regarding urban development and infrastructure improvement but they are not being implemented. Therefore, an analysis of barriers to sustainable development will be conducted. Clifford et al. (2005) summarized these barriers in land use and transport integration as: legal (L), financial (FI), political/cultural (PC), institutional/territorial (IT) and practical/technological (PT) barriers. The goal is to identify context-specific barriers in Asuncion first by understanding what other authors have research about the topic, and then try to overcome the problem by proposing a strategy.

3.4. Policy analysis

Analysis on policy documents regarding land use, transportation and infrastructure planning, from the last twenty decades concerning the Metropolitan Area of Asuncion will be conducted. A research of policy documents of 18 of the most important projects such as The bus rapid transit project, Social housing projects, Action Plan for the Metropolitan Area of the City of Asuncion, Bicentenario Bridge, and the Master plan to build houses in Chaco'i will be analyzed. Each project will be examined through literature review of different governmental documents, news papers, research work, and books. The data will be categorized in the following order: founding, year of implementation, year of conclusion, proponent Institution, implemented by whom, investment, beneficiaries, media diffusion of the project, public involvement in the process of development or implementation of the project, reason for non-implementation (see figure 3.2). Moreover, the projects were categorized by type in Master plans, transportation, infrastructure projects, green infrastructure, and land use projects. In the end, the projects that were implemented were marked with a green color whereas the non-implemented with the color red (see appendix 4: policy analysis).

The findings of the policy analysis will give the key stakeholders list to address the interviews. The policy analysis will also help relate the literature review to the Paraguayan context and ground the results from the interviews and literature review. The analysis of these plans will set a reference of the possible causes for the non implementation, and the success of others. The most important results will be developed further on in this paper to describe the planning and policy context.

POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.													
Area	Fact sheet N	Name of the project	Proponent Institution	Implemented by whom	Year of initiation of the project	Year of conclusion	Source of founding	Investment	Who benefits	Media diffusion of the project	Public involvement in the process of development or implementation	Reason for non implementation	Status of implementation
Master plans	1	Modernization Program of the city Center, public transport and government offices.	MHPC	Technical Regeneration Unit under the Directorate of Public Works	2015	2018	IDB	125,000,000 USD	Citizens of the metropolitan area of Asuncion	Radio, Tv, newspapers, magazines, and web pages	No public participation	Partially implemented	Green
	2	Restructuring Plan of Asuncion's Historic Center	International network of Ideas, Secretariat of Culture	Private consortium Asu Lab	2015	on going	National Government	20,000 USD	Citizens of the metropolitan area of Asuncion	Magazines, radio, Tv, newspapers, and web pages	Public participation during the process of development of the master plan	Currently being implemented	Green
	3	Action Plan for the Metropolitan Area of the City of Asuncion	IDB	Not get implemented	2014	on going	not known yet	not known yet	Citizens of the metropolitan area of Asuncion	No promotion	No public participation	Lack of organizational skills to put the plan in action	Red
	4	Asuncion waterfront	Private consortium FI and AMOPSA ordered by the Municipality of Asuncion	MUPC	2008	2018	IDB	25,000,000 USD	Paraguayan citizens	Radio, Tv, newspapers, magazines, and web pages	Public participation for resettlement of informal neighborhoods	Implemented and finished	Green
			Ministry of Public						Committee of the	Magazines, radio,		Lack of	Red

Figure 3.2: Multicriteria analysis grid for the evaluation of the multiple projects of the MAA. Source: Made by the author.



3.5. Interviews

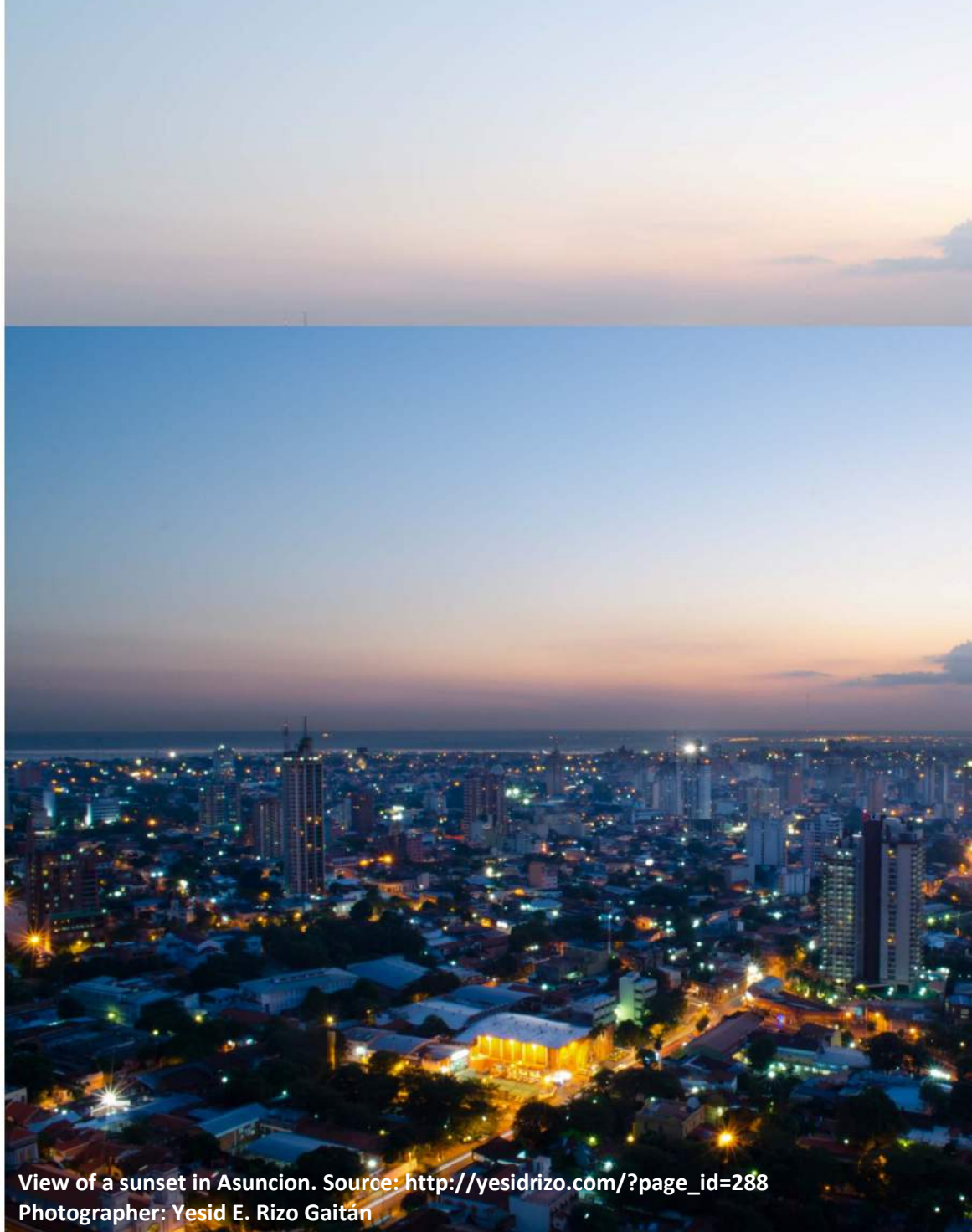
Exponents of case study frequently use qualitative methods, such as participant observation and unstructured interviewing, these methods are useful in the generation of an intensive, thorough assessment of a case (Bryman, 2012). For this research series of semi-structured interviews in order to help identify context-specific barriers in the Metropolitan Area of Asuncion will be performed. As described by Tan (2013) the sampling should consist of representative stakeholders from various levels of scale. In this study the different stakeholders will be selected from the analysis of policy documents. Experts from different levels (local and national), sectors (land use, transport, academia) and organizations (private or public) will be selected. The aim is to interview at least one stakeholder per category (see figure 3.1). The interviews will be evaluate later in order to categorize the context specific barriers.

A list of questions or rather specific topics will be cover during the interviews. Questions will not follow an exact outline or schedule (Bryman, 2012) so as to allow the interviewee to have a great deal of flexibility in how to respond. Emphasis will be address on what the interviewee sees as relevant in clarifying the event, patterns, and forms of behavior (Bryman, 2012). Collection of interviews will end when repeated viewpoints take place and saturation is achieve (Bryman, 2012; Tan, 2013). In total, six interviews with relevant stakeholders who are experts on Strategic Integral Planning in Paraguay will be conducted.

Table 3.1: Selection of interviewees per category			
Interviewee	Sector	Public/Private	Urban/Local
Int. 01	Master plan	Public	Urban
Int. 02	Master plan	Public	Urban
Int. 03	Transportation	Private	Urban
Int. 04	Infrastructure	Private	Local
Int. 05	NGO	NGO	Urban and local
Int. 06	Land use	Public	Local

Table 3.1: Shows the selection of interviewees per category. The experts were selected after the analysis of the multicriteria table. Source: made by author.

CHAPTER 4



View of a sunset in Asuncion. Source: http://yesidrizo.com/?page_id=288
Photographer: Yesid E. Rizo Gaitan





CASE STUDY: ASUNCION

4.1. The Metropolitan Area of Asuncion (MAA)

One of the most critical sustainability issues identified in the metropolitan area of Asuncion is the lack of an integral area vision. The atomization of the territory in different jurisdictions fractionated conspires against the solution of common problems. Many of them identified as priorities for the future sustainability of the city, for example, urban sprawl, infrastructure deficit, environmental pollution, proper disposal of solid waste, traffic congestion and quality of public transport. These are issues that have a direct impact on quality of life and welfare of the inhabitants (ICES, 2014).

The Paraguayan planning system has demonstrated to be highly fragmented. There is no general planning goal or master plan translated into national policies. This causes a lack of continuity, especially in projects that demand longer periods of time to be developed. Urban sustainability cannot be achieved if the government do not develop a long term strategic vision to be carried on by the new administrations after an election. This research will focus on Strategic integral plans, such as the bus rapid transit 'Pya'e Porá' project, Action Plan for the Metropolitan Area of the City of Asuncion, Bicentenario Bridge, and the Master plan to build houses in Chaco'i, because their implementation requires strong focus and continuity over a long period of time and are constantly being threatened by changes in the policy goals (Tan et al., 2014). Thus, infrastructure projects that are less complex will also serve as a comparison tool in the policy analysis section. Moreover, the lack of integrations and cooperation among the different municipalities generate a conflict when projects such as master plans need to be executed (Municipality of Asuncion, 2013).

4.1.1. Context.

During the last 10 years the population concentration in the metropolitan area has increased more rapidly, and low-density urban sprawl has taken place (see figure 4.1). In the metropolitan area population has been growing more rapidly than in the city center of Asuncion (see figure 4.2). This phenomenon seems to have a correlation with cheaper and more accessible housing offers, and the trend of rapid motorization where the use of private cars surged due to the bad public transportation system, and the low and easy access to credits for buying used cars imported from Japan via Chile. Therefore, urban sprawl continues, and the metropolitan area accelerates its dependence on private vehicles. It is evident that trunk roads and the city center will be even more congested, and that environmental deterioration will further progress.

Without policies that limit the use of private vehicles and prioritize public transport, travel speed of vehicles on trunk roads will be as slow as walking during peak hours in 2015, which inhibits efficient urban activities. Thus, it is imperative to make a decision on these transport policies now.

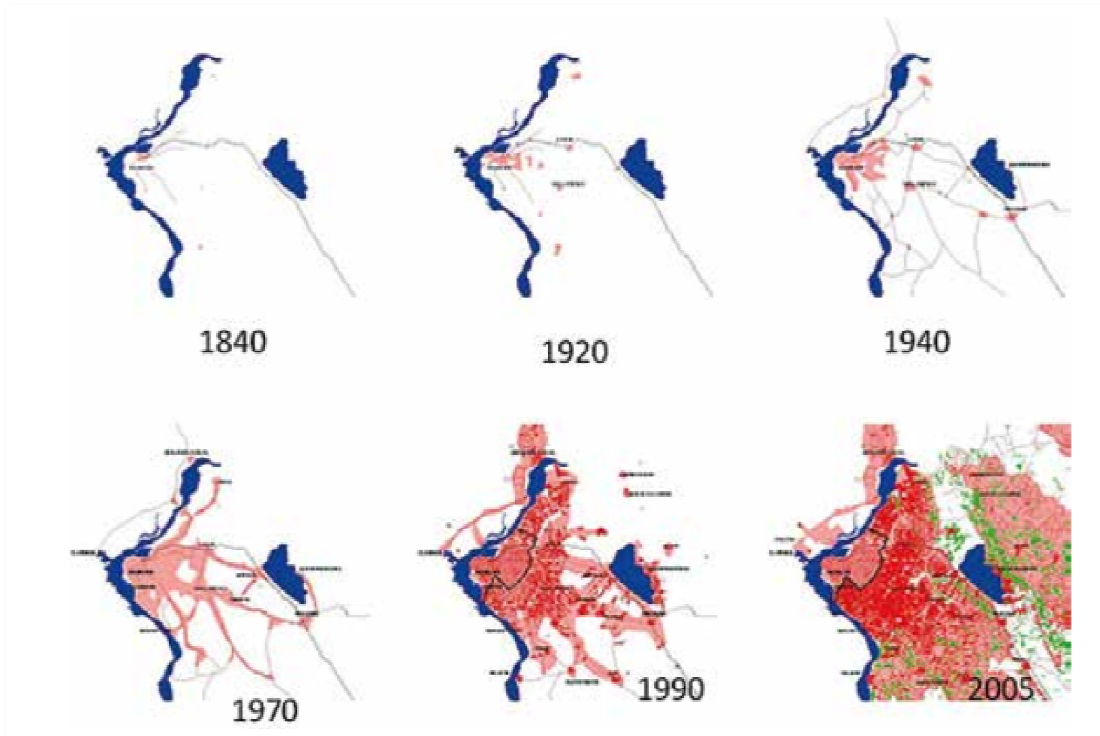
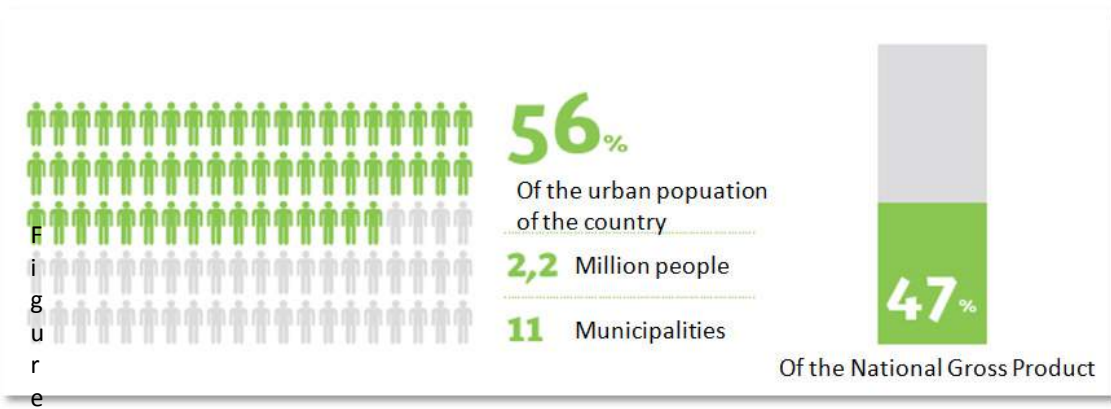


Figure 4.1: Asuncion Metropolitan Area, urban sprawl since 1840 to 2005. Source: Bozzano, 2007.



4.2: The Metropolitan Area of Asuncion comprises 11 municipalities which are part of the conurbation (continuous urban sprawl) and have only urban population which accounts for 56% of the total urban population of the country. This area covers an area 686 km² inhabited by 74% of the metropolitan population. Source: ICES, 2014.

Asuncion is losing population, but that adds up problems related to lack of infrastructure. Citizens move to municipalities in the metropolitan region, particularly those located at distances exceeding 35 km. There are many cases of workers employed up to four hours a day, round trip, from the residence to the workplace. The capital has virtually zero population growth, but does not reduce the number of users of its infrastructure and urban services; in that sense the number of people and vehicles



entering Asunción double that of residents, and out of those residents there are very few taxpayers (Municipality of Asuncion, 2013).

Besides the lack of tax payers, traffic is a main issue that needs special attention. Estimates of the fleet of Asuncion citizens is about 280,000 vehicles daily, added to the more than 350,000 entrants from neighboring cities, this gives a total of 630,000 vehicles that clog the streets of access and egress, which collapse every day (MOPC, 2014). From this number only 20% of people move by car, 80% do so by public transport. However, 65% of the investment in the city is used on roads for vehicles, and less than 35% goes to public transport, bicycle, and pedestrian mobility. On average, a private car transports 1.2 passengers and an articulated bus carries up to 240 people. Therefore, the problem lies in that, more and more people want to travel in their private vehicles to occupy 50 times more space and resources. That is why it is necessary to create alternative mobility policies, best public transport, and more green areas to generate a urban sustainable city (TCRP, 2004).



Figure 4.3: Estimates of the fleet of Asuncion citizens is about 630,000 vehicles which collapse every day (MOPC, 2014), only 20% of people move by car, 80% do so by public transport Source: <http://www.dende.org.py>

This is the scenario Paraguay is facing regarding the mobility, the urban sprawl generates greater car use, which causes higher social costs such as emission of greenhouse gases and pollutants, accidents, congestion and noise. Moreover fiscal costs of providing infrastructure and equipment to those remote houses, are extremely high for the government. The costs for citizens are equally high, especially for those households who own cars and have to travel long distances. Consequently, this situation requires rethinking urban development to generate effective, inclusive, equitable and sustainable cities. This means that there should be a shift towards models and strategies for sustainable urban development.

4.1.2. Growth model in rings

The urban footprint grows in the shape of belts or rings from the center of Asuncion and through the radial road system. From the period of 1953 to 1972 Asuncion and the cities of Fernando de la Mora and San Lorenzo grew at an accelerated pace. In the early



1973, the conurbation of Asuncion becomes evident involving two neighboring cities Lambare and Fernando de la Mora. In the period 1972-1992, the first ring is consolidated, its cities grow at a steady pace during this period. In a short time, the phenomenon of conurbation would absorb the other neighboring cities to Asuncion Mariano Roque Alonso, Luque, San Lorenzo, Capiata, San Antonio, Villa Elisa, Ñemby, Limpio, and Nanawa forming the current urban footprint (see figure 4.4).

In the past two decades, the growth of the urbanized area has mainly occurred in the cities of the second and third ring in the Central department. By contrast, the cities of the first ring growth has slowed down. Many of urban land has been developed, but they have not implemented effective policies that promote densification models, including height advantage and development of idle land and abandoned buildings (ICES, 2014).

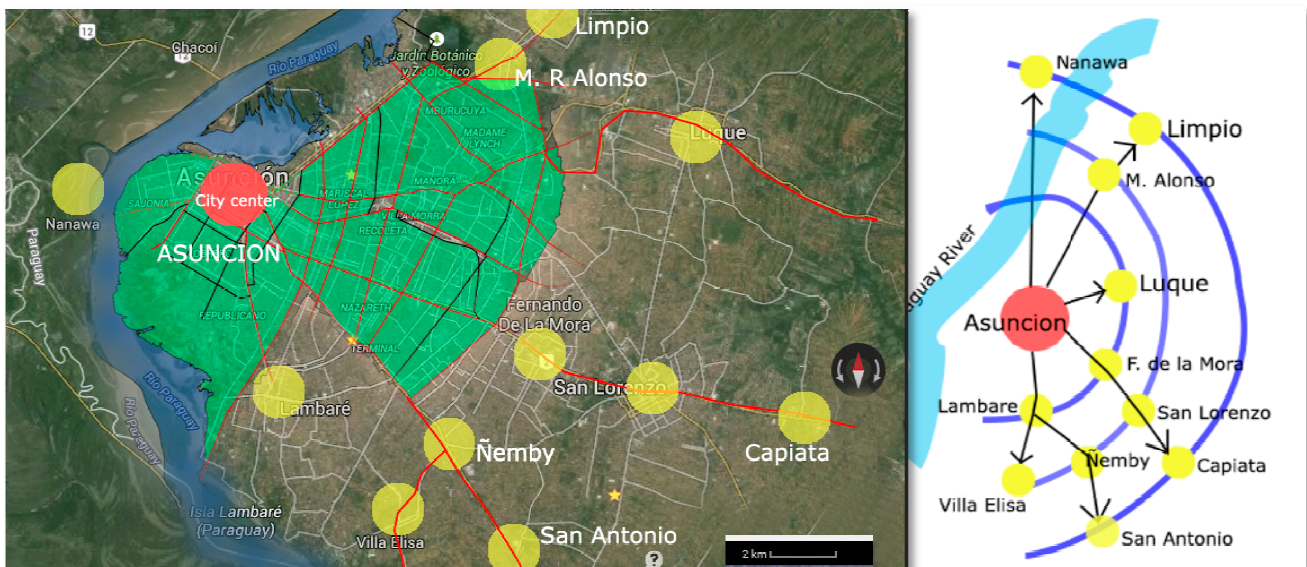


Figure 4.4: Metropolitan Area of Asuncion, Ring Growth. Source: Made by author. Google Earth. 11 Municipalities. Asunción, Fernando de la Mora, Lambaré, Luque, Mariano Roque Alonso, Ñemby, San Lorenzo, Capiatá, Villa Elisa, San Antonio and Nanawa.

This urban sprawl is caused by a series of factors but mainly is due to the lower prices of the real estate market, offering cheaper houses outside the city center (see figure 4.5). Moreover, national housing policies created social houses outside the metropolitan area, widening the expansion of the city, creating more traffic due to mobility need to go to work and study, and creating a social gap between the rich and the poor (SENAVITAD, 2013). The capital city is losing population, but that adds up problems related to lack of infrastructure. It has virtually zero population growth, but does not reduce the number of users of its infrastructure and urban services; in that sense the number of people and vehicles entering Asunción double that of residents, and out of those residents there are very few taxpayers (Municipality of Asuncion, 2013).

This is the scenario Paraguay is facing, the urban sprawl generates greater car use, which causes higher social costs such as emission of greenhouse gases and pollutants, accidents, congestion and noise. Moreover, fiscal costs of providing infrastructure and equipment to those remote houses, are extremely high for the government. The costs for citizens are equally high, especially for those households who own cars and have to travel



long distances. Consequently, this situation requires rethinking urban development to generate effective, inclusive, equitable and sustainable cities. This means that there should be a shift towards models and strategies for sustainable urban development.

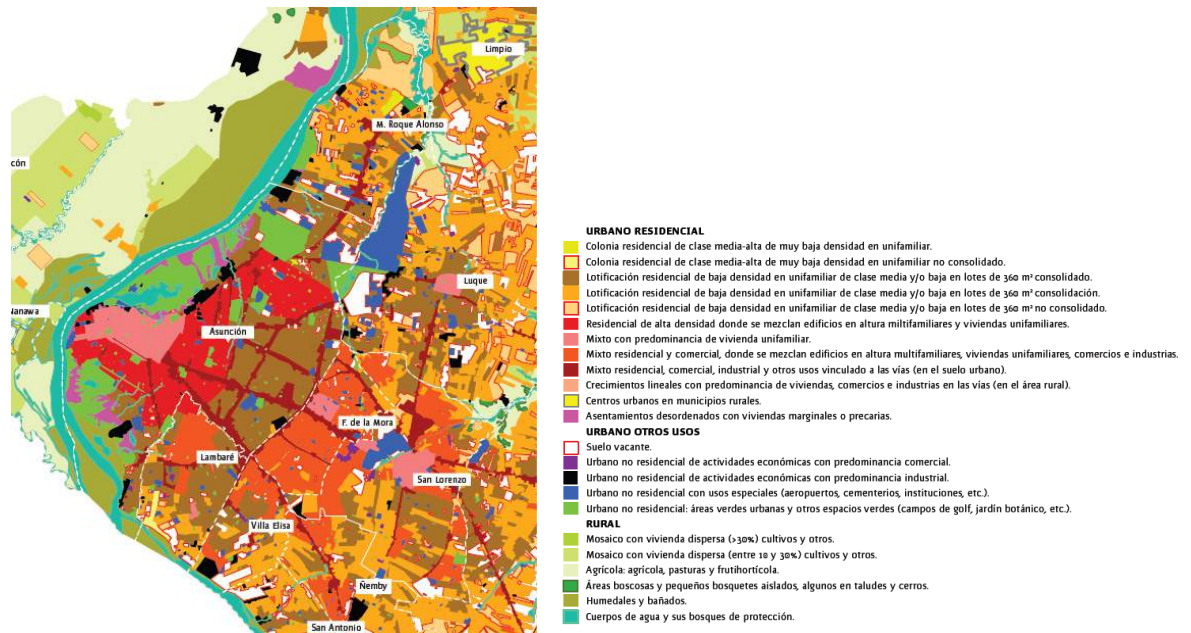


Figure 4.5: Land use marked by colors. 29% Urban, 71% Rural. Source: BID
 Total area: 527km² (represents 0.14% of the territory)
 Population 2,536,195 (people 29% of the national population and 51% of the total urban population).
 Average density of 28.5 persons per hectare.

4.1.3. Population density

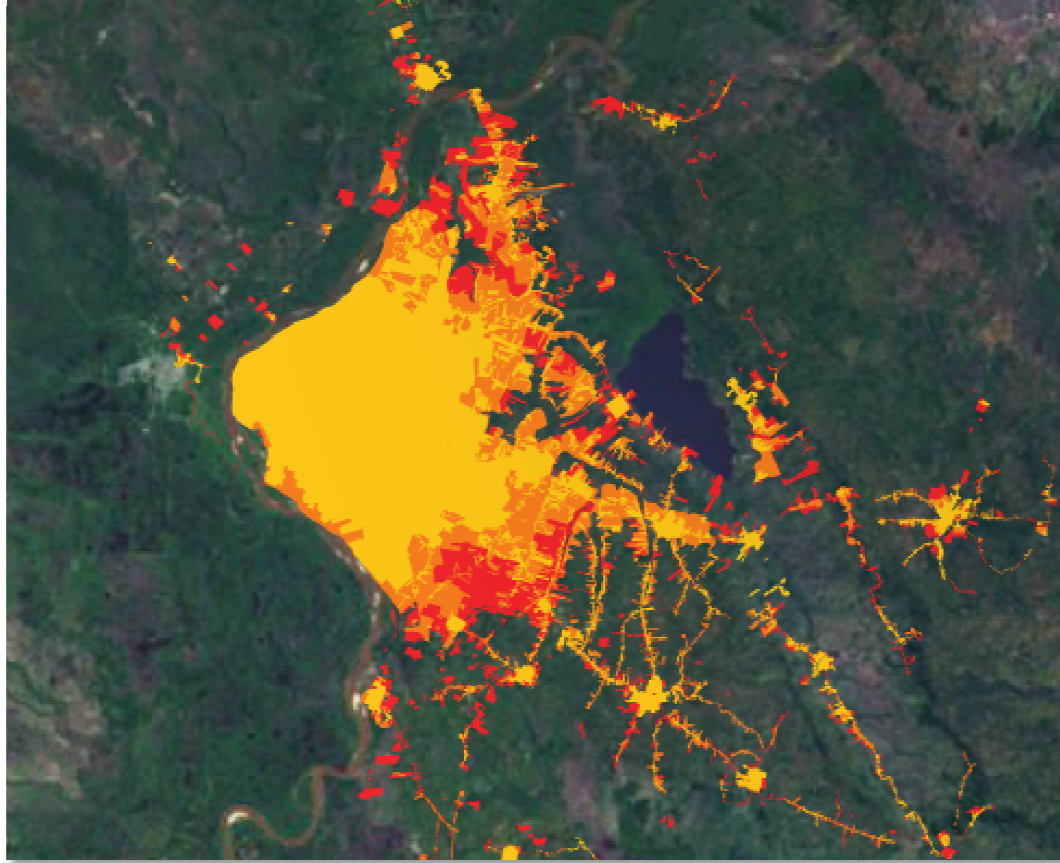
The metropolitan area of Asunción has developed from a low-density to a medium-density expansion process in the last fifty years. An incomplete city without basic sanitation services and low urbanization, which imposes the most negative externalities to the citizens with less purchasing power, helping to perpetuate a vicious cycle of poverty as explained in figure 4.8 (Cristaldo and Silvero, 2010).

Asuncion is suffering serious shortfalls in infrastructure, basic social services and key equipment. Both for the wellbeing of the population as for the productive development of enterprises. The current model of the city is poorly planned and has many scattered low density houses. These characteristics represent a barrier to the sustainable development of the region. Moreover, the situation conditions the ability of the transport system (passengers and cargo) to provide an efficient service. In turn, this model makes the provision of other services such as sewerage, storm drain increasingly difficult to solve economically because of the high investment costs required (ICES, 2014).

Urban density, specific measure referring to the number of inhabitants in a given urban area, in the Metropolitan Area of Asuncion is 43 people per hectare (see figure 4.6). The population density in the metropolitan area is even lower with approximately 31.3 p.ha. These values are well below the reference theoretical minimum considered sustainable according to ICES (2014) methodology 79 p.ha. Only two cities in the metropolitan area are above this value, Fernando de la Mora with 91 p.ha. and Luque with 87 p.ha. The rest of the cities in the MAA has very low population densities. The



dispersion of the built environment causes the metropolitan area to occupy more surface than actually needed, resulting in higher costs for the government and the municipalities. One of the main causes of the low density land use is the lack of an appropriate urban plan to order the rapid population growth, as well as the current urban model that encourage urban sprawl outside the metropolitan area (ICES,2014).



	1994	2002	2012
Urban sprawl 1992			
Urban sprawl 2002			
Urban sprawl 2012			
Year			
Urban Surface	427,45	652,98	809,83
Growth rate of the urban sprawl		5,4 %	2,2%
Num. of inhabitants	1.246.009	1.890.531	2.536.195
Population's growth rate		5,3%	3,0%
Density	29,1	29,0	31,3

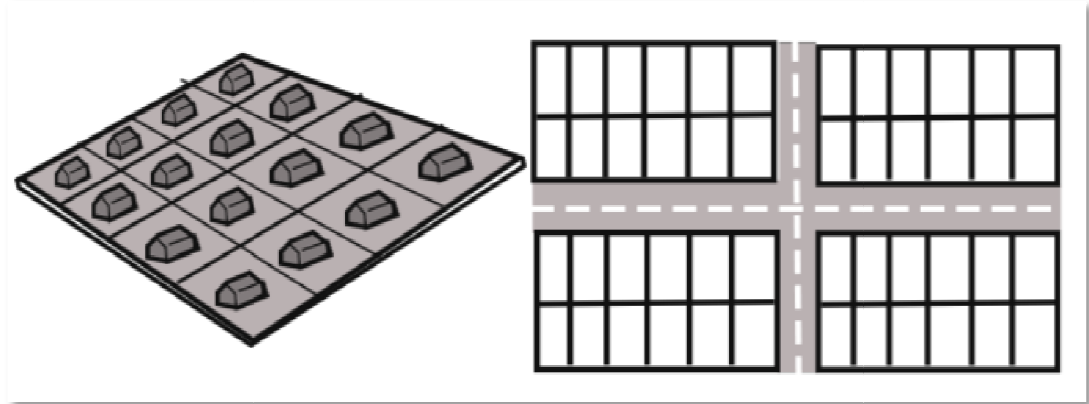
Figure 4.6: The Central Department absorbed almost the entire population growth. Sources: ICES, 2014. The metropolitan cities that belong to the Central Department accounted for 88% of the new population in the period from 1972 to 2012 (and over 92% in the last decade. By contrast, the population of the capital has hardly grown in the period 1992.

4.1.4. Current planning context: legislation and praxis.

The urban space is not only a result of the processes of socio-economic development. The city is also created through the policy tools and the practice of the institutions. In the metropolitan area of Asunción there are some key elements that contribute to form the current dispersive low density model:



First we highlight the role played by the projective practice of public institutions: both the Paraguayan Institute of Housing and Urbanism (IPVU), formed in 1991 (previously known as the National Housing Council) always gave preference to isolated housing solutions in private lots. According to Cristaldo and Silvero (2010), the proposals of IPVU generally do not propose a imaginative reformulation of the urban scale, they just limited the housing units in a simple extension of a existing grid. The conceptualization of the city was reduced to a parcel. Thus, the proposed solutions are mostly confined to the block defined by four streets. The most common proposals are carried out in conventional plots of 10 x 25m - 12 x 30m. This matrix of 360 m² is the prototypical urban grid for the metropolitan area of Asuncion Created from an inadequate urban praxis driven by public institutions (see figure 4.7).



The housing legislation established one plot of a minimum of 360m² and 12m in the front side.

Figure 4.7: Dispersive model: Public institutions always developed isolated social housing (IPVU: 1964-1989; CONAVI 1991). In addition, NGOs have reinforced the 60 years old obsolete legislation which consisted in the construction of peripheral low density houses. Causing the continuous urban expansion outside the metropolitan area. Source: Re-drawn by author, based on Cristaldo and Silvero, 2010.

The second factor is an obsolete legislation establishing a minimum plot of 360 m², and does not provide any municipal administrations land management tool that allows the development of consolidated urban areas. The tax model also contributes to the perpetuation of a non sustainable planning system. Taxes are higher for those who build than for those who hold idle land. This model rewards speculation and discourages investment in construction. Through a qualitative analysis of these housing projects, their characteristics are described as follows:

- Its peripheral inclusion in the urban fabric: The logic of a vicious circle is that because of the large size of a single plot, the acquisition of large areas to build few homes is required (28 per hectare considering plots of 360 m², or a density of 112 inhabitants / hectare). Since new neighborhood requires minimal infrastructure, real estate investors value peri-urban land. This generates benefits to the owners living near these neighborhoods, and forces forthcoming initiatives of social housing to be developed even further from the metropolitan area.

- Typology: in general the plots do not recognize road hierarchies, and pose a road network of 18 meters (with 12m space for motor vehicles, and 3m for sidewalks). We therefore have a vast road capacity with low intensity of use.



- Lack or low quality of public services and infrastructure: the current planning system allows people with low purchasing power to buy a plot at a very low price. The big issue is that in order for the plot to be cheap, it does not count with the basic infrastructure services such as sewages or public transports. Moreover, these plots are located very far away from the urbanized area, meaning that sometimes do not even have access to a proper electricity system.

4.1.5. The consequences of the current model

This model generates positive and negative externalities. The purpose of an urban management and design should be to foster the equitable distribution of the costs and benefits of urbanization among different members of a community. In the case of Paraguay, the fragility or lack of urban master plans and clear regulations, makes costs and negative externalities of the process to be absorbed by the poorest sections of society. While the benefits and positive externalities are consumed by a small sector of the population with high levels of income. Cristaldo and Silvero (2010) state that is an exclusionary system in which poverty breeds poverty (see figure 4.8).

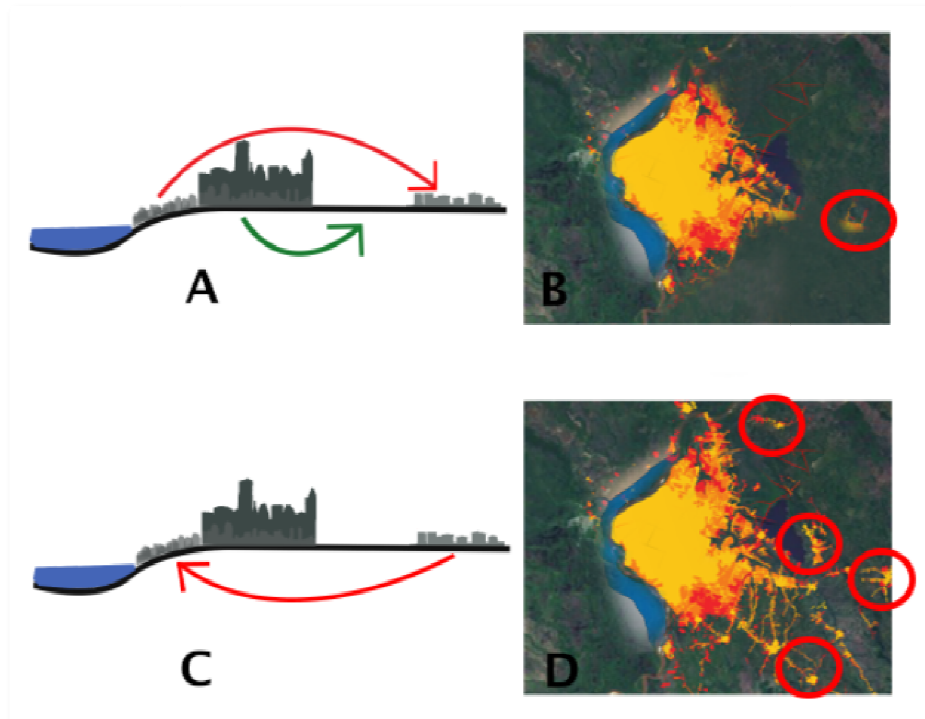


Figure 4.8: The vicious circle of urban sprawl in Asuncion and the metropolitan area. Source: Source: Re-drawn by author, based on Cristaldo and Silvero, 2010.

A. The poorest, removed from informal settlement neighborhoods are re located in peripheral sets created by the state or by NGOs. The other part of the citizens also buy land in the metropolitan area of Asuncion to build their own homes.

B). Each private house or new social housing development, demand from the National Government the basic services and infrastructure.



- c) On many occasions pressured by the high transport costs or loss of employment opportunities, low-income residents leave their homes in the periphery of Asuncion and return to the same precarious neighborhoods close to their jobs.
- D). The city extends increasingly, closing the vicious circle.

The deficits in access to urban infrastructure and services have their origin in the lack of adequate urban planning to order the rapid expansion of recent decades and the resulting urban growth model. The municipalities the responsibility to develop the urban planning agenda but lack the technical and financial resources to better plan for urban development. Most municipalities in the MAA, do not even have a Urban and Territorial Plan. As a consequence of this model an un-planned, dispersed and fragmented city has emerged. This growth is socially, environmentally and economically unsustainable. Uncontrolled urbanization of the metropolis in recent decades has the form of precarious and informal peri-urban areas, settlements lacking infrastructure and services. The qualitative indicator housing deficit shows that 40.5% of the housing stock does not meet the minimum standards of habitability (do not have room for bathroom and / or kitchen), well above the maximum theoretical reference (10%) as shown in figure 4.9 (ICES, 2014).

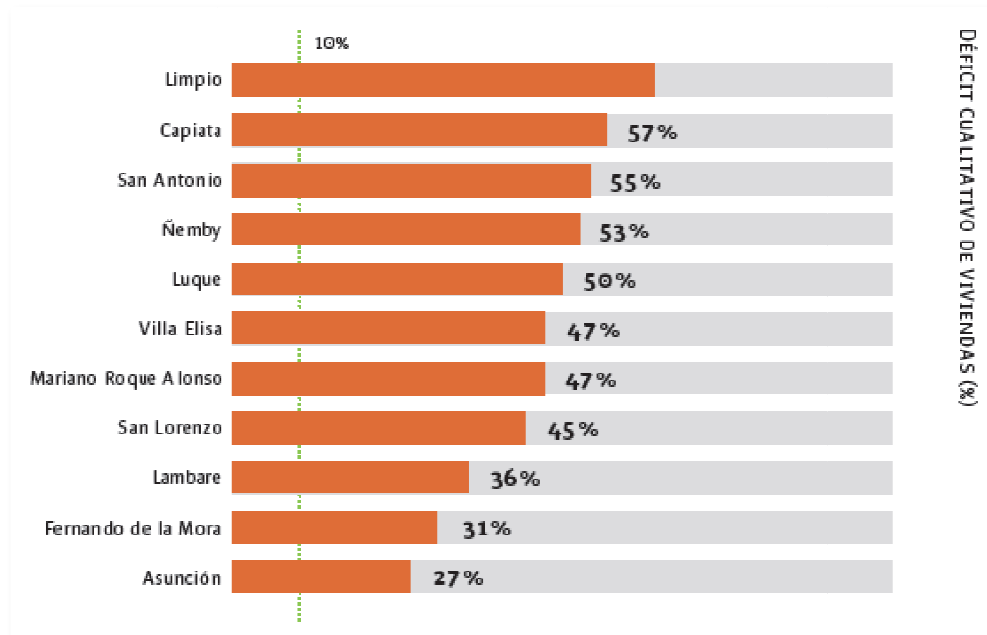


Figure 4.9: Percentage of qualitative housing deficit of the 11 cities conforming the Metropolitan Area of Asuncion. Source: ICES, 2014.

4.1.6. Governance and institutions.

Paraguayan institutions do not have planning goals or master plans for their cities. This demonstrates the highly fragmented organizational structure. This is translated in lack of continuity of various projects and this affects specially projects which need longer periods of time to be developed. Therefore, it is necessary for the National and Regional governments to generate strategic long term vision plans in order to achieve urban sustainability. Because of the long period of time this complex plans need to be



implemented, they are always being threatened by the constant changes of administrative staff in the different municipalities.

According to the ICES (2014) by 2013 none of the municipalities in the metropolitan area of Asuncion has implemented participatory planning or participatory budgeting as a municipal management system. These two indicators reflect the shortfall in participatory governance. The municipalities of Asuncion and Lambare carry forward some participatory processes in cooperation with community organizations and with citizen participation. Luque is the only municipality that performs a public budget hearing. Additionally, a small percentage of the budget of the Municipalities of the metropolitan area of Asuncion is used for projects presented by the Neighborhood Committees. These initiatives represent important advances in citizen's participation but need to be deepened in order to improve the effectiveness and transparency of public administration (ICES 2014). Moreover, the Metropolitan Area of Asuncion has not made sufficient progress in the incorporation of new technologies to improve governance. None of the metropolitan municipalities have electronic systems to track and monitor fulfillment of municipal objectives. This accounts for an institutional weakness with respect to measuring the quality of governance. The current urban central government and governance institutions will be develop further, as well as the different actors (see figure 4.10).

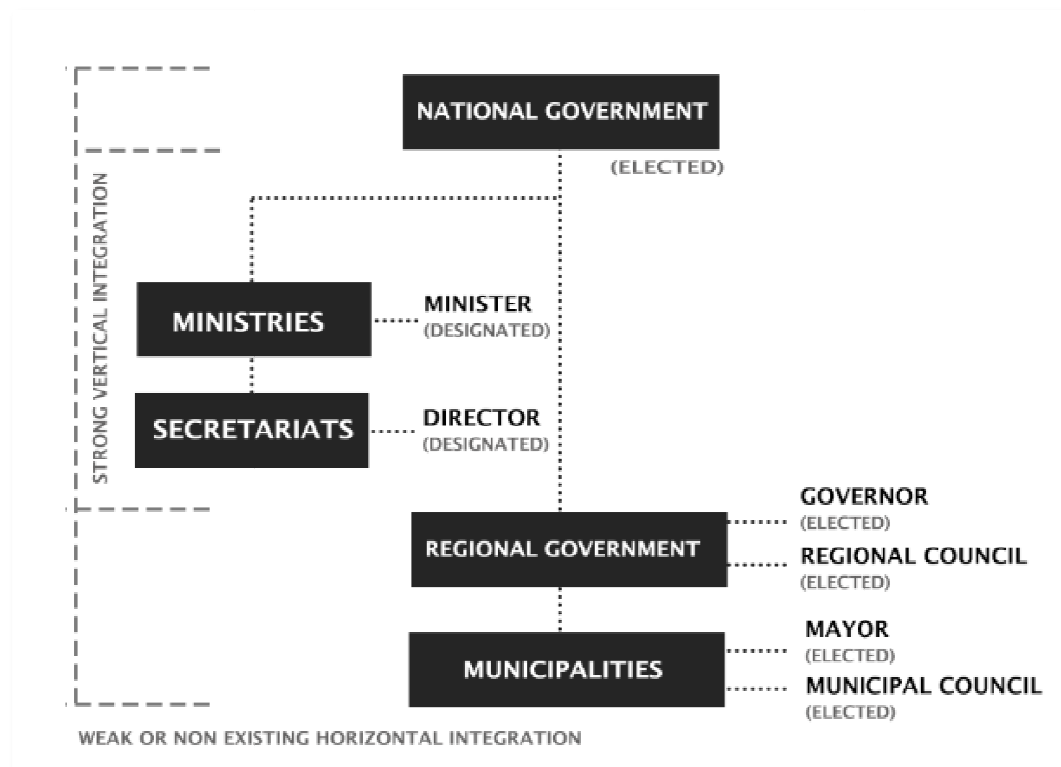


Figure 4.10: Current urban central government and governance institutions at different levels. Source: Made by the author.



National Government

At the macro level, during the dictatorship until 1989 Paraguay had a centralized tradition, but with the beginning of the democratic era the government developed more decentralized strategies specially delegating responsibilities to the Regional Government and the Municipalities, so as to alleviate the work of the Ministries and Secretariats. Paraguay has created a very developed vertical integration between the Government and the Ministries. Yet, in matter of horizontal integration there is low dynamics within institutions and organizations. For instance, no ministry has the authority, or the willingness to push or pull other ministries into an integrated urban development process. Hence, transportation, housing, environmental and finance concerns are all disconnected hampering a successful project management. This concerns also to non-governmental stakeholders, the lack of participation and accountability by stakeholders has reinforced a lack of an integral perspective over urban matters (National Government, 2014).

Actor: National Government.

Ministries and Secretariats

Due to National elections that happen every 5 years, disruptions to the stability and the continuity of policy implementing processes happen often, especially in a country like Paraguay where there is no culture of long-term plans implementation.

The Secretariats are aligned and perform activities that are related to specific Ministries, they prioritize ministries' agenda in order to achieve a certain degree of political stability. In addition, the in-definition of some roles such as the one of the Regional Governor is unclear as far as the degree of influence of the office in decision making (National Government, 2014).

Actor: Ministries: Ministry of Interior (MI), Ministry of Foreign Affairs (MRE), Ministry of Finance (MH), Ministry of Education and Culture (MEC), Ministry of Agriculture and Livestock (MAG), Ministry of Public Works and Communications (MOPC), Ministry of National Defense (MND), Ministry of Health and Welfare (MSPyBS), Ministry of Justice (MJ), Ministry of Labor, Employment and Social Security (MTESS), Ministry of Industry and Commerce (MIC), Ministry of Women (MM).

Secretariats: Technical secretariat of planning for economic and social development (STP), National Secretariat of Tourism (SENATUR), National Anti-Drug Secretariat (SENAD), Social Action Secretariat (SAS), Secretariat of the Environment (SEAM), Secretariat of the civil service, National Secretariat for Children and Adolescents, Development secretariat for returnees and refugees nationals, National secretariat of sports, National Secretariat of Culture, Ministry of Information and Communication for Development (SICOM), National secretary of housing and habitat (SENAVITAT), Secretariat language policies, National Emergency Secretariat (SEN), National secretary for information technology and communication (SENATICS), National Secretary for human rights of persons with disabilities (SENADIS), Secretariat money laundering prevention (SEPRELAD), National anti-corruption secretary (SENAC), National Secretary of Youth.



Municipalities

The municipalities do not depend on the Regional Government, but sometimes they work together to execute projects that involve many cities. Municipalities have autonomy in their urban management. Every city has a different legislation regarding building permits. The municipalities are dependent on Macro-level funds to execute their competences, but they also collect money from the tax payers of their city, and have royalties and money from the National Fund for Public Investment and Development (Fonacide). Because the National Government do not have a National Agenda for the implementation of big projects, the different cities are not bound to follow the rules. Many projects face difficulties in the process of construction because of the lack of coordination between the various levels of government. Moreover, the lack of continuity of key players such as the Mayor of every city, only serves 5 years (with the possibility of a re election). This generate disruptions to the stability and the continuity of policy implementing processes (National Government, 2014).

4.1.7. Laws to accelerate the process of project implementation in Paraguay.

According to Curtis et al. (2009), in order to implement integrated plans a coordination between different sectors of land use, planning and transport, across multiple levels of authorities and scales is required. Therefore, it is important to understand the process of the implementation of infrastructure projects in Paraguay. First the project is developed either by the Ministry of Public Works and Communications (MOPC) or a private company wishing to invest in the country. When the final project is ready, it follows the steps of a law. First it goes to the Congress for approval of Senators, then Deputies and finally to the Executive. If the executive approves the plan it runs. On the other hand, if there is a full veto the project is filed. Yet, if it is a partial veto the project will be reviewed and the process begins again.

Paraguay experiences infrastructure and strategic integral plans implementation setback regardless of the various national, regional and local policies and master plans. Because of this problem, in the last couple of years the National Government approved two important laws (see figure 4.11). The goal is to avoid the time consuming bureaucracy by accelerating the process of approving and executing infrastructure projects. On October 28th, 2013 the project called "Promotion of investment in public infrastructure and expansion and improvement of goods and services by the State" was approved. It establishes a legal regulation that facilitates the realization of investment in public infrastructure projects. The amendments made in the Senate provide that the law can also be applied to goods and services in general. One of the most controversial points of the Public Private Partnership, is that it gives the Executive the power to authorize investments without the application of the Public Procurement Act nor the intervention of the legislature, which should only receive reports of approved projects (STP, 2013).

United Nations (2014) states that Paraguay presents challenges regarding its infrastructure gap, which influence prospects for economic and social development. These challenges are expected to generate opportunities for the construction sector in the next years but require increased levels of investment. The National Government of Paraguay is planning a number of development and regulatory improvements in order to support such investments. Examples of these improvements include the approval of a Law



on Public Private Partnerships (PPPs). This law guarantees certain public works to be financed by the private sector with sovereign bonds, promotes the establishment of foreign investment in Paraguay, and the formation of consortiums among local and international companies. At the institutional level, this interest is also reflected in concrete actions to optimize the management capacity of the Ministry of Public Works and Communications (MOPC), to support the management of infrastructure projects.

On the other hand the approval of the law generated a series of demonstrations in various departments and a large mobilization in the center of the capital. Protesters question that the law would focus only on the Executive, thus undermining democracy. They also argue that it would cause a privatization of state entities. Although President Cartes ensured that it is not the essence of the project. The president insisted repeatedly that he is considered enemy of privatization (Public Private Partnership, 2013).

The second law that was approved in order to speed the process of infrastructure implementation is called "Law of Capital". The law recognizes extra benefits for Asuncion as a city that hosts the different branches of the State. The legislation dispose that Asuncion is subject to political, administrative and fiscal regime stated in the Constitution, this law and special laws for its organization and operation are dictated. In addition, an Inter-Agency Council on Capital is created, which will be conformed with a representative of the Municipality of Asuncion, the Municipal Council of Asunción, the Ministry of Finance and a representative of the Ministry of Public Works and Communications, who will act as coordinator. This committee will be responsible for implementing projects relevant to the infrastructure of the city (Law of Capital, 2009).

These laws are an example of the efforts from the National Government to try and solve the implementation gaps that exists in Paraguay. Contrary to common discourses, it is important to emphasize that the main problem regarding the urban challenges of Asunción and the Paraguayan cities, does not refer to the lack of projects, technical limitations or the shortage of funding, but the low capacity that exists to implement, evaluate and manage a master plan over time. Identification of context-specific barriers is therefore necessary, so as to find context specific ways of overcoming them.

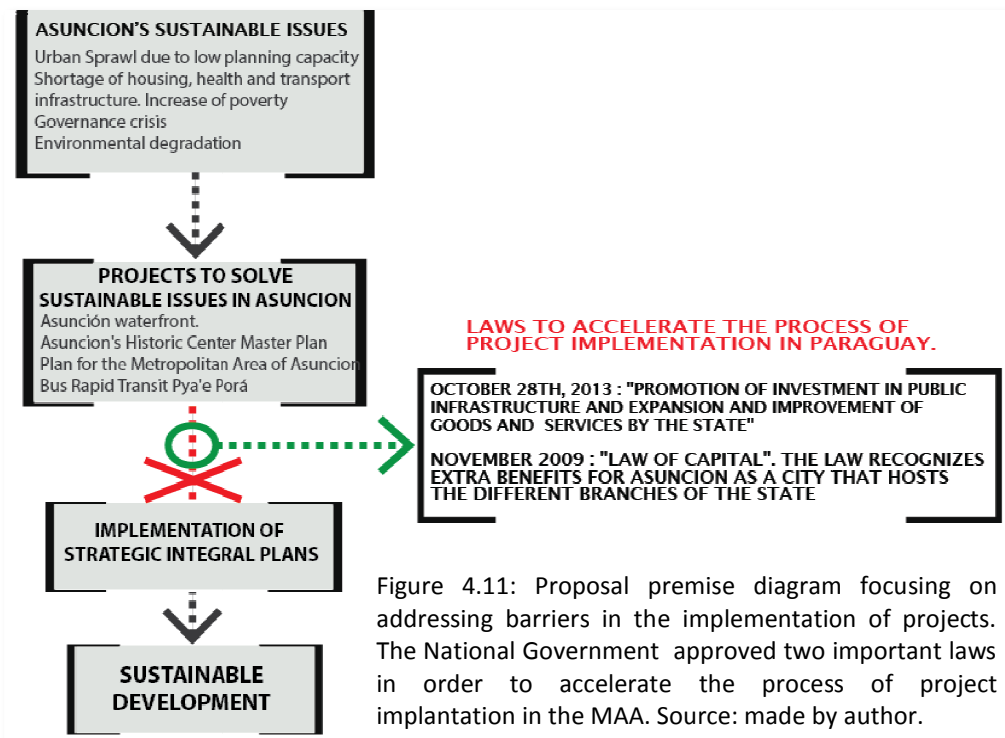
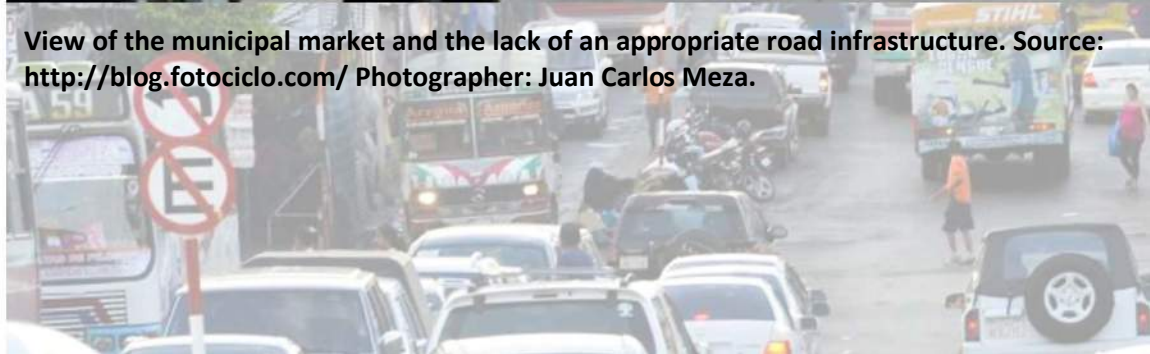


Figure 4.11: Proposal premise diagram focusing on addressing barriers in the implementation of projects. The National Government approved two important laws in order to accelerate the process of project implantation in the MAA. Source: made by author.

CHAPTER 5



View of the municipal market and the lack of an appropriate road infrastructure. Source: <http://blog.fotociclo.com/> Photographer: Juan Carlos Meza.





IDENTIFICATION OF CONTEX-SPECIFIC BARRIERS

Past experiences had shown that there is something impeding plans from implementation in Asunción. In the last 25 years of democratic government in Paraguay there has been a series of projects related to Strategic Integral Plans, but with the exception of a few plans most of them have not put into practice. Plan CHA (2014) explains that Asunción has various urban projects developed since the 90's, for example the Action Plan for a Sustainable Metropolitan Area of Asunción developed by the Inter-American Development Bank (ICES, 2014). The problem is not a lack of project or the financial and technical limitations of the Government, but the low capacity to implement, evaluate and manage them over time.

There is little discussion on how to implement these projects; therefore, the aim of this research is to tackle this gap by first identifying the context-specific barriers in the realization of projects. As stated by Tan et al. (2014, p. 2) "*Context-specific barriers need to be identified, in order to then look for context-specific ways of overcoming them*".

Three research methods: literature review, policy analysis and interviews, have been used in parallel to identify barriers in the implementation of projects. The three methods, their results and the way they influence each other will be described.

5.1 Literature review.

Identification of context-specific barriers.

The literature review begins with an analysis of the concept, implications and benefits of urban sustainability and strategic integral plans as a tool to achieve a sustainable city. The problem then arise, if Asunción has various projects regarding urban development and infrastructure improvement then why are them not being implemented. Therefore, an analysis of barriers to sustainable development is conducted. Clifford et al. (2005) summarized these barriers in land use and transport integration as: legal (L), financial (FI), political/cultural (PC), institutional/territorial (IT) and practical/technological (PT) barriers. Thus, institutional/ territorial indicates organizational divisions (Clifford et al., 2005, p. 17) instead of institutions from the sociological perspective.

As explained by Tan et al. (2013) a further difference can be found between formal and informal institutional barriers. "*Formal institutional barriers are thus legal, financial and practical impediments within formal institutions that manifest as regulatory guidelines, documentation and policies. Informal barriers are obstacles stemming from political and cultural attitudes and institutional and territorial divisions. Informal barriers are difficult to identify, usually observed as social trends and behavioral tendencies*" (Tan, 2013, p 76). The five types of barriers described by Clifford et al. (2005) will be used to classify barriers within data from the interviews.



This section is framed in the first part of the cycle towards change as illustrated in the theoretical model (see figure 5.1). The conceptual model shows the of cycles of non-sustainable and sustainable development. In order to move from a negative towards a positive path, an intervention is needed so as to find the barriers impeding the process of change. The three major components of this model are Sustainable Development, Institutional Barriers, and the policy analysis. In this chapter, the Institutional Barriers will be analyzed in a series of research strategies such as policy analysis, interviews, and literature review. The aim in this section is to provide a set of planning criteria that will foster plans to be implemented.

The literature review of documents from Paraguayan institutions, news papers and articles shows that until the end of the 1980s the country's population was mostly rural, while almost countries of the region had already experienced the urban transition. Many cities such as Buenos Aires, Santiago de Chile, and San Paulo grew at a rapid pace; thus invested in public policies to incorporate migrants from rural areas. In this cities the policy of industrial substitution development fueled a modified model of urban life (Bozzano, 2007) . On the contrary, Paraguay was not able to organize and manage migration to the cities because of its low planning capacity, and a safe and sustainable growth policy. The disorganized and poorly planned expansion did not allow the emergence of sustainable urban models. As a consequence of the lack of urban planning, economic, social and environmental guidelines, informal settlements have densified urban areas of the MAA, infrastructure does not cover a large extension of the metropolis, mobility becomes a problem because of traffic, sanitation is deficient and safety is low (ICES, 2014). The intensity of the economic, social, urban and environmental transformations contemporary Paraguay needs, requires a clear and proactive positioning towards more sustainable forms of territorial occupation, where cities play a renewed role in economic growth and social interaction. In order to do so, the MAA requires policies that ensure a desirable quality of urban life by the implementation of Strategic Integral Plans. The policies proposed should develop a framework of context-specific advice in order to ensure adequate levels of sustainability. According to the theory this can be done by applying a series of strategies in order to analyze the context for the identification of these barriers (Tan, 2013).

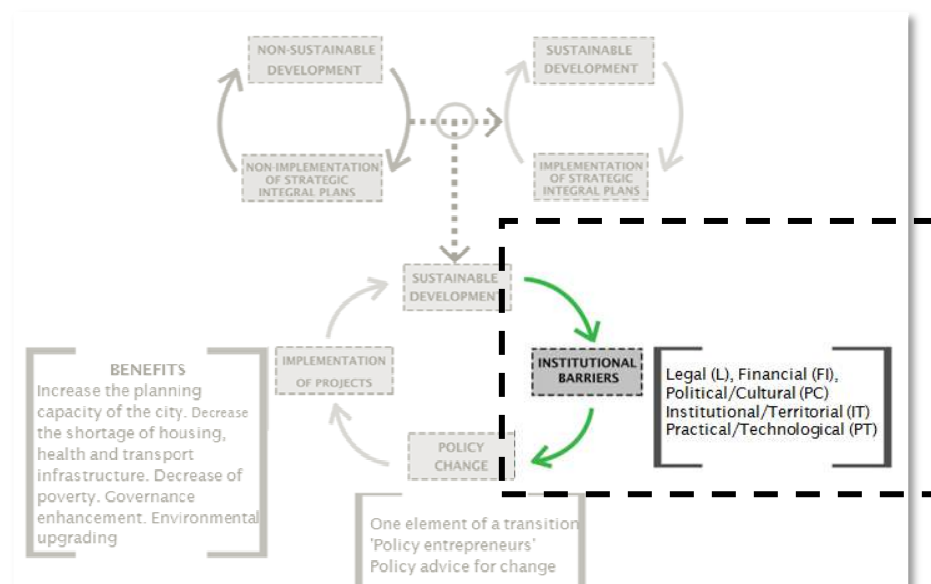


Figure 5.1: According to the Theoretical framework, the research is in the stage of analyzing the context-specific barriers to the implementation of Strategic Integral Plans. Theory describes series of steps to follow in order to identify the barriers. Source: made by author.



5.2. Policy Analysis

A research of policy documents of 18 of the most important projects such as The bus rapid transit 'Pya'e Porá' project, Action Plan for the Metropolitan Area of the City of Asuncion, Bicentenario Bridge, and the Master plan to build houses in Chaco'i will be analyzed. A list of the projects in a timeline can be seen in figure 5.2. These projects are all related to urban sustainability in Asuncion from the last two decades. The selection was based on their importance and range of impact for the citizens of the MAA. The projects selected were developed after the end of the dictatorship period in Paraguay (1989). Before that year, the execution of projects was determined based only in the interest of the president and the main authorities of the different ministries. After 1989 a period of enlarging and enhancing the infrastructure network was carried out in Paraguay. The selection of 18 projects are mainly representative of the period starting from year 2000, because starting from that year Paraguay and the Metropolitan Area of Asuncion began to develop projects that had bigger relevance in terms of investment, private consortiums and public participation for accountability of projects.

After collecting information about the projects a fact sheet was done for every one of them with all the necessary information (see appendix 4, policy analysis). After that, a multicriteria analysis table was created; in order to analyze the data the categories were done based on founding, year of implementation, year of conclusion, proponent Institution, implemented by whom, investment, beneficiaries, media diffusion of the project, public involvement in the process of development or implementation of the project, reason for non-implementation (see appendix 4, policy analysis). Moreover, the projects were categorized by type in Master plans, transportation , infrastructure projects, green infrastructure, and land use projects. A shorter version of the table can be seen as follow in table 5.1.

The analysis of these plans set a reference of the possible causes for the non-implementation, and the success of others. The policy analysis serves to understand the planning context of Asuncion and from there search the possible causes of the problem. The most important results will be developed further in this paper to describe the planning and policy issues, as well as conflicts in the implementation of projects for the case of Asuncion Paraguay. The policy analysis will also help to relate the literature review to the context of Asuncion; thus, set the questions for the interviews about the perception of experts on the issue of non-implementation of strategic integral plans; it also showed specific stakeholders to address the interviews.

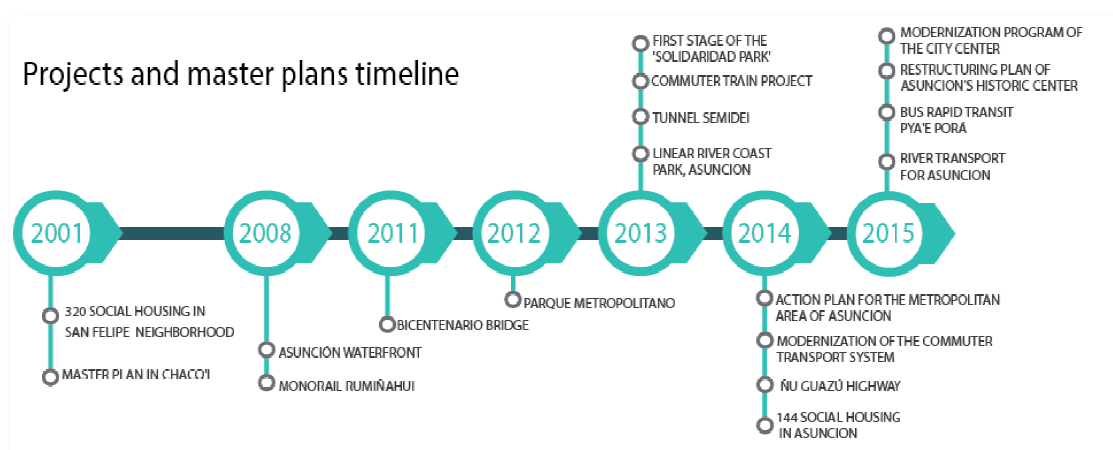


Figure 5.2: Timeline of year of initiation of projects. Source: Made by author.



Evaluation table: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

In the last column 'Status of Implementation' color green refers to projects and plans that were implemented, while red refers to projects and plans that were not implemented.

Area	Name of the project	Year	Investment	Public involvement	Reason for non implementation	Status
Master plans	Modernization Program of the city Center.	2015-2018	125.000.000 USD	No	Partially implemented	Green
	Restructuring Plan of Asuncion's Historic Center	2015-on going	20.000 USD	Yes	Currently being implemented	Green
	Action Plan for the Metropolitan Area of the City of Asuncion	2014-on going	not known yet	No	Lack of organizational skills	Red
	Asunción waterfront	2008-2018	25.000.000 USD	Yes	Implemented and finished	Green
Transport	Bus Rapid Transit Pya'e Porá	2015-2018	125.000.000 USD	No	Lack of organizational skills	Red
	Commuter Train Project	2014-2015	50.000.000 USD	No	Lack of organizational skills	Red
	Modernization of the Commuter Transport System	2014-2016	30.000 USD	No	Currently being implemented	Green
	River transport for Asuncion	2015-2017	Not specified	No	No political support	Red
Infrastructure	Bicentenario Bridge	2011-2013	100.000.000 USD	No	No political support	Red
	ÑU GUAZÚ Highway	2014-2016	22.000.000 USD	No	Currently being implemented	Green
	Tunnel Semidei	2013-2014	7.000.000 USD	No	Implemented and finished	Green
	Monorail Rumiñahui	Not specified	276.000.000 USD	No	No political support	Red
Green	First stage of the 'Solidaridad Park'	2011-2013	900.000 USD	No	Implemented and finished	Green



Infrastructure	Linear river coast park, Asuncion	2013-2014	6.000.000 USD	Yes	Currently being implemented	-
	Parque Metropolitano	2012	300.000 USD	No	Implemented and finished	-
Land use	144 Social housing in the coastal strip of Asuncion	2014-2015	6.000.000 USD	Yes	Implemented and finished	-
	320 social housing in San Felipe neighborhood	2001-2002	2.000.000 USD	Yes	Implemented and finished	-
	Master plan in Chaco'i	Not specified	Not specified	No	No political support	-

Table 5.1: A shorter version of the multicriteria analysis table shows the categories and implementation status of various projects and master plans developed for the Metropolitan Area of Asuncion. An extended version of the table plus individual fact sheets of every project can be found in the appendix. Source: Made by author.

5.3. Interviews

For this research series of semi-structured interviews were performed in order to identify context-specific barriers to strategic integral plans in the Metropolitan Area of Asuncion. As described by Tan (2013) the sampling consisted of representative stakeholders from various levels and different projects. In this study the different stakeholders were selected from the analysis of policy documents. Experts from different levels (local and national), sectors (land use, transport, academia) and organizations (private or public) were identified. The aim is to interview at least one stakeholder per category.

A list of questions or rather specific topics were covered during the interview; nevertheless, the interviewee had a great deal of flexibility in how to respond. Questions did not follow an exact outline or schedule (Bryman, 2012). In addition, questions that were not included in the guide were also asked. Emphasis was given on how the interviewee structured and understood the problem and what the interviewee saw as relevant in clarifying the event, patterns, and forms of behavior (Bryman, 2012).

These experts selected for the interviews featured in key policy documents or had key roles in important organizations as shown by the literature review and policy analysis. A minimum of one interview per category was performed. Collection of interview ended when repeated viewpoints took place and saturation was achieved (Bryman, 2012; Tan, 2013). In total, six interviews with relevant stakeholders who are experts on Strategic Integral Planning in Paraguay was conducted.

The interviewees were presented with an interview request (see appendix) and shared experiences through video calls, phone calls and electronic mail. Interviewees were asked to explain in detail, their responsibility in the implementation of a project or master plan. Moreover, they had freedom to relate any relevant experiences from their own viewpoint with minimal indications during the open interview (see table 5.2). This method as explained by Tan (2013), generates narration of personal experiences allowing



for externalization of implicit information. Therefore, interviewees were not asked specifically about barriers in order to widen the range of understanding. "A *question about barriers would guide to what the interviewee assumes was a barrier instead of the actual barrier and related processes*" (Tan, 2013, p. 77).

Questions	Answers Interviewee: Int. 06
1) Please describe the project you were working on.	320 social housing in San Felipe neighborhood: the plan consisted in coordinating and implementing 320 social houses for families living in informal settlements of the capital of Asuncion. The plan was articulated with other public, private and national agencies so as to ensure an improvement in the living conditions of the most vulnerable citizens.
2) Please describe the position, duration and function you carried out. Briefly explain any positive or negative experience in the realization to the project.	2000 / 2005: Private secretary SENAVITAT The experience was both situations, positive; because we had the ability to reach more poor families in the country, Negative; because having <u>no sufficient budget</u> we were always limited and we had to <u>fight against the bureaucratic structure</u> and the <u>low organizational skills</u> .
3) Who according to you were key stakeholders involved in the project you were part of?	The Minister of the SENAVITAT, the Ministry of Public works and communications, the families of the San Felipe neighborhood, and the community church.
4) What kind of setbacks could you perceive while trying to implement the project? which impediment would you consider to be most relevant in the execution of the plan?	The major setback was the <u>limited budget</u> we had, then the line of political thought, the failure to distinguish between public policy and party politics, the <u>lack of coordination between different secretariats</u> created friction between sectors. Moreover, the <u>lack of continuity of the plans after every new municipal and national elections</u> .
5) How were these setbacks overcome? If the answer is negative, please describe why the problem could not be solved.	The impediments remains; after the impeachment of President of the Republic Fernando Lugo, <u>all the projects that had been carried out were disrupted and disjointed</u> .
6) In your personal experience, what is necessary to overcome the setbacks that arise before and during the implementation of projects?	Working as a public servant is very difficult when you do not understand how the Public Policy works, once the concept is clear and can think of <u>projects that endure over time</u> , perhaps then the consolidation of a State for everyone can begin.

Table 5.2: Shows an example of the kind of questions and answers given by the interviewees during the semi structure interviews. The most relevant setbacks mentioned by every expert were underline and analyzed in order to find a pattern in similar answers. All the interviews can be found in the appendix. Source: Made by author.

Interviews were conducted in Spanish to guarantee the comfort and ease of communication. Anonymity was guaranteed to allow the experts to talk freely without feeling pressure of giving a positive feedback of their organization. Later, interviews were transcribed and then analyzed and categorized according to the similarities in the description of the possible barrier. the categories were informed by the current literature review. Table 5.2 serves as an example of the interview questions and answers.



The answers were examined and frequently used words or definitions were put in the same group. Words or phrases often mentioned together or inferred as related during the interview were; 'complexity of process', 'lack or low public participation', 'lack of continuity of projects', 'lack of accountability', 'fight against bureaucracy' and 'lack of organizational skills'.

The frequently mentioned issues resulted in the following five commonly recurring barriers in the form of the following Interview Statements from IS1 to IS5 (see figure 5.3):

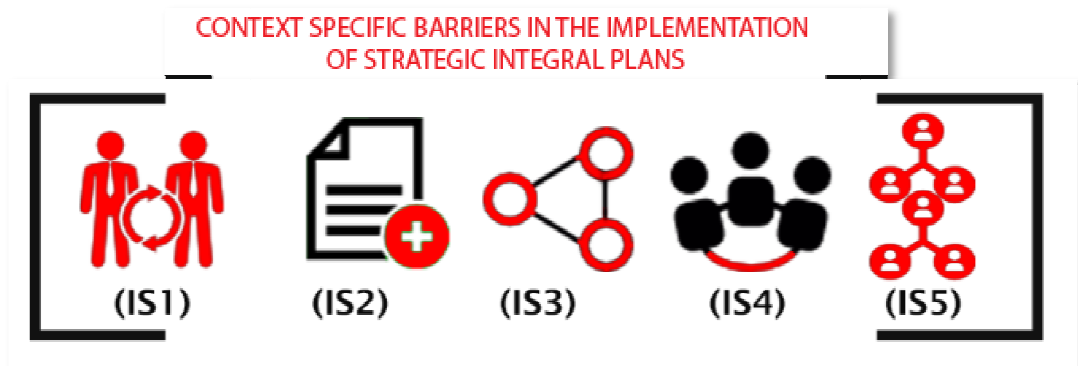


Figure 5.3: Scheme of the context specific barriers found in the implementation of Strategic Integral Plans in the Metropolitan Area of Asuncion. Source: Made by author.

- (IS1)** Lack of continuity of the plans after every new municipal and national elections.
- (IS2)** Lack of transparency before, during and after the implementation of projects.
- (IS3)** Lack of coordination between different ministries and organizations. Lack or low organizational skills.
- (IS4)** Lack of consensus and public participation in the development and decision making of projects and strategic integral plans.
- (IS5)** Complexity and bureaucratic processes that delay the implementation of projects.

5.4 Context specific barriers in Asuncion. Findings

An approach between theoretical concepts, observations and reflections was used for identification of barriers in the implementation of Strategic Integral Plans (see figure 5.4). From the literature review, barriers appear as various types (L, FI, PC, IT, PT) exposed both in formal and informal institutions. These helped in the assessment of the interviews and the multicriteria table.

From the policy analysis and the interviews it can be confirmed on basis of Asuncion case that financial barriers are not the mayor issue as mentioned in Tan (2013). There is a clear difference between implementing specific infrastructure projects, such as parks and roads, and implementing Strategic Integral Plans such as the Master plans for the MAA. In the latter case, the implementation of the plan finds more setbacks because coordination between different stakeholders, secretariats and ministries is needed. Moreover, the continuity over a long period of time that is required for the implementation of strategic integral plans (Curtis et al., 2009) are threatened by the constant variation of policy goals and policy authorities (Tan, 2013).

A lack of public involvement in the process of development and implementation of infrastructure project was assessed. In many cases the media diffusion of the projects were guaranteed by National programs of information of public works. On the contrary,



the diffusion of the projects had no relation with an intention from the Government to involve citizens in the process. Nevertheless, the approaches proposed by new master plans foresee the participation of the citizens in order to achieve the accountability and acceptance of the stakeholders.

The main reasons for non-implementation of projects and master plans were the lack of organizational skills to put the plans in action, lack of political support to maintain the project on track, lack of leadership roles, and a strong policy entrepreneur that guarantees the continuity of the program. Conclusions from the policy analysis helped validate the inter-relation and origin of barriers and identified expert stakeholders for the interviews. The interviews confirmed a similarity in common barriers mentioned in the policy analysis and literature review. The repetition and interrelation of answers were used to identify five common barriers and their dynamics (IS1-5). Lack of continuity of the plans after every new municipal and national elections, 'lack of transparency before, during and after the implementation of projects', 'lack of coordination between different ministries and organizations', 'lack of consensus and public participation in the development and decision making of projects and strategic integral plans', 'complexity and bureaucratic processes that delay the implementation of projects'.

The interviews provided a practical and efficient method to validate and triangulate barriers gathered from the literature review and policy analysis phases (Tan, 2013). This approach granted an insider view of the responsibility and relations among the stakeholders within the reality of Strategic Integral Plans implementation in the Metropolitan Area of Asuncion.

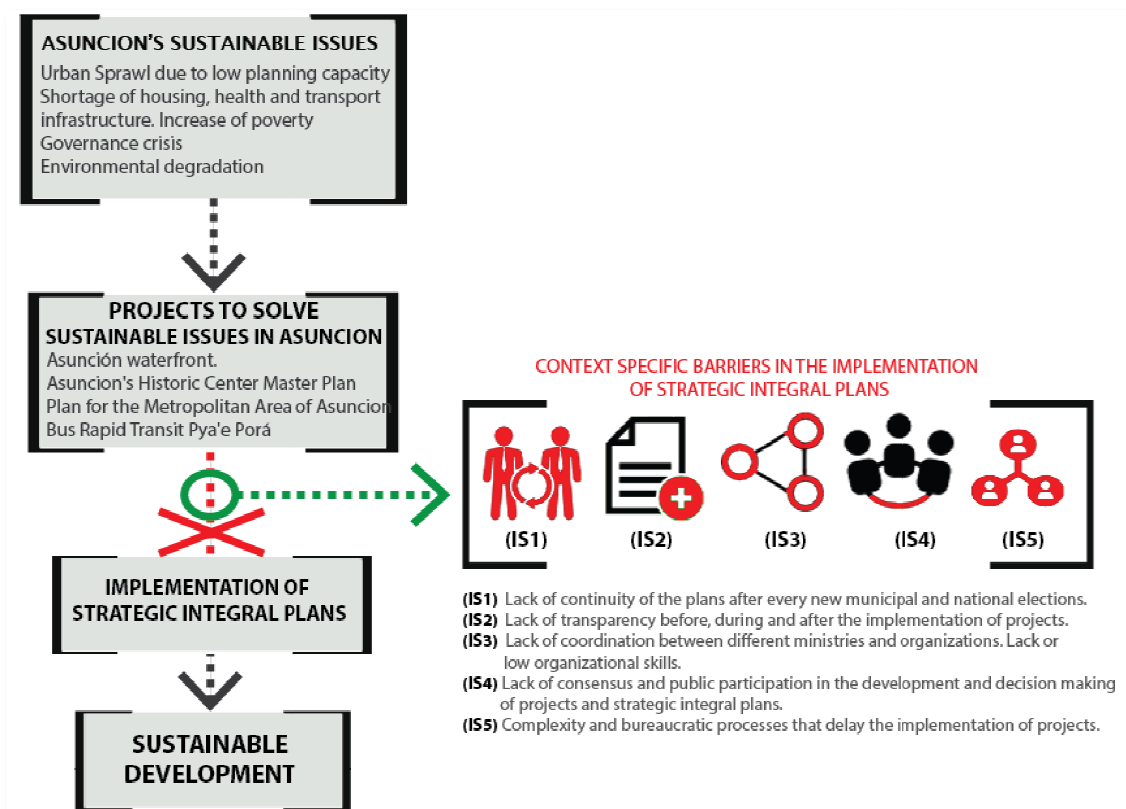
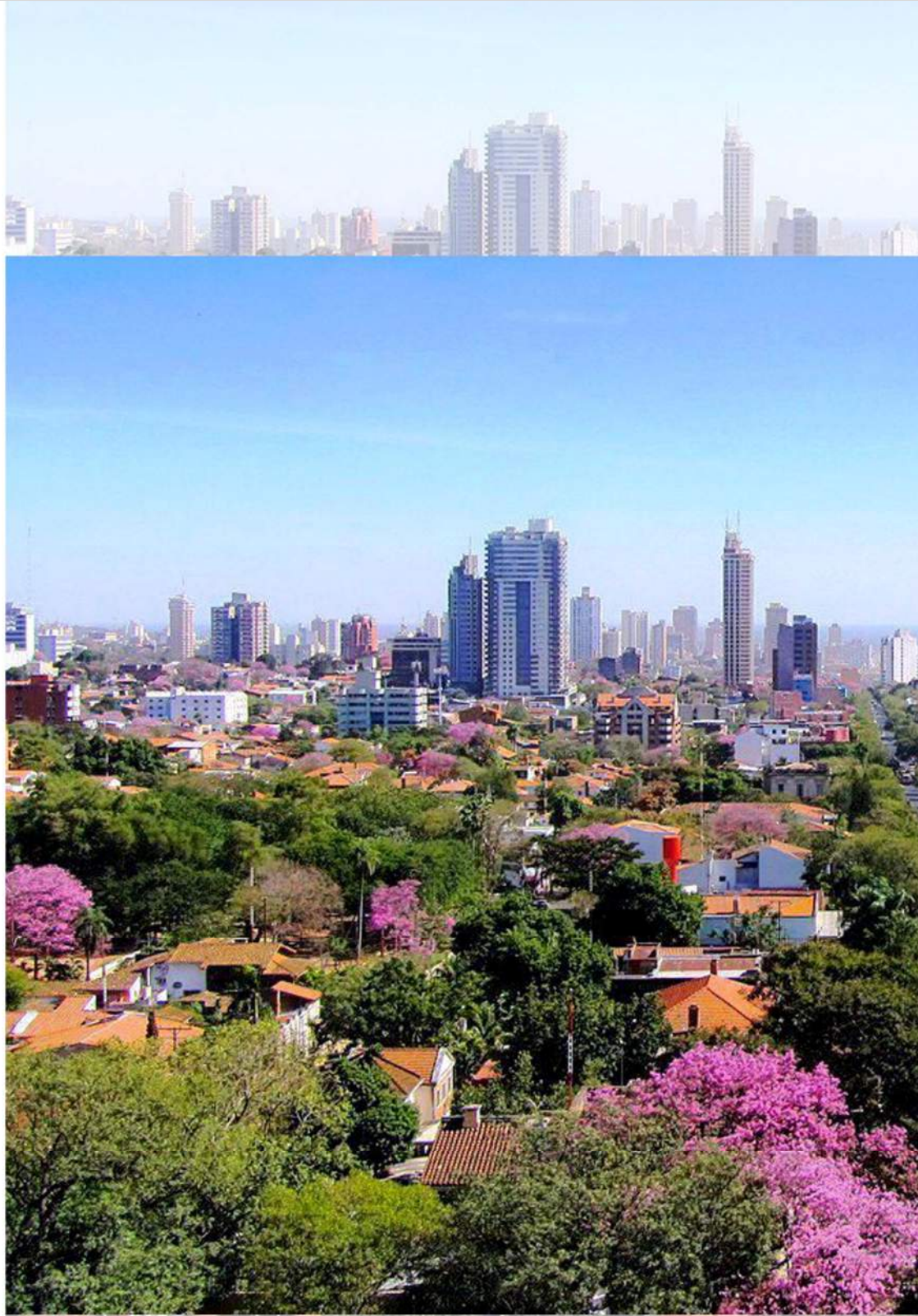


Figure 5.4: Proposal premise diagram focusing on addressing context-specific barriers in the implementation of projects. Source: Made by author.

CHAPTER 6



View of native trees of Asunción. The city has 26.03 square meters of public green space per inhabitant, which makes it the capital with the largest vegetation in Latin America (UCCI, 2014). Source: <http://www.skyscrapercity.com/showthread.php?t=1784843>. Photographer: Gonzalo Mereles.



INSTITUTIONAL CHANGE FOR SUSTAINABLE DEVELOPMENT

6.1. Policy change towards sustainability

Policy change is one element of a transition, yet an important one, even at a time when it has become common to speak of “governance” instead of “government” (Jordan et al. 2009). Infrastructure implementation and Strategic Integral Plans present difficulties in Asuncion, even though there are a few master plan projects to make a sustainable city, and the interest of local authorities and the community. One of the most critical issues identified in the metropolitan area of Asuncion is the lack of an integral vision of the area towards sustainability. The territory is divided in different jurisdictions, this works against the solution of common problems. Many of these issues are identified as priorities for the sustainable future of the city as, for example, urban sprawl, the lack of efficient infrastructure, environmental pollution, traffic congestion and quality of public transport. These are issues that have a direct impact on quality of life and welfare of the inhabitants of Asuncion.

Thus, for positive transformation from a non sustainable towards a sustainable future to occur, it will depend on the effort and cooperation of municipal governments, organizations of civil society, the citizens, and the private sector together with the support of the National Government. The process of formulating the action plan must seek to generate a process of dialogue, collaboration, and coordination between various metropolitan actors.

Asuncion faces the challenge of metropolitan governance. Urban sprawl have originated from rapid urbanization over the last 30 years and have created a new challenge to the governance of many cities in Latin America. The policies of municipalities do not usually take into account the effects of their decisions in neighboring jurisdictions and vice versa. However, utility networks, problems of insecurity or contamination of water or air, among many others, do not recognize the limits established for administrative purposes (ICES 2014).

These new regional realities demand innovative and efficient models of management on a metropolitan scale, an aspect in which Latin America has been delayed in relative terms. However, many experiences around the world show a growing trend toward less dependent handling and more integrated territorially administrative boundaries. The Metropolitan Area of Asuncion is a unified urban space: the social, economic and cultural interactions that occur there do not recognize administrative divisions. As discussed throughout this action plan, the solution to the main problems facing municipalities MAA as urban growth, transportation, and water management and the environment, inevitably require the development of strong cooperation schemes metropolitan level (Plan CHA, 2014).

It is therefore essential to change from a non-sustainable towards sustainable strategies that promote the creation of less bureaucratic management units and more



flexible metropolitan interactions; and therefore, enable a more efficient management of master plans for the territory. For these schemes to work properly it is also important that the government encourage cooperation between municipalities and consensus building among all stakeholders operating in the Metropolitan Area of Asuncion. An example of a good action plan towards continuity of master plans is the case of Curitiba, this paradigm shows how to improve decision making in a city with organizational skills issues.

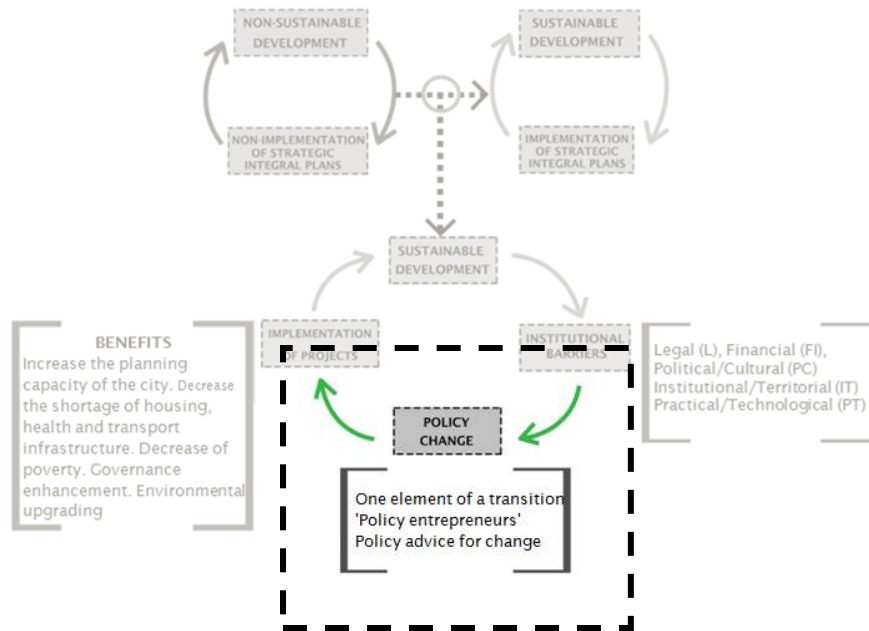


Figure 6.1: The policy change is framed inside the theoretical model, and is the section where policy advice is given in order to change from a non-sustainable towards a sustainable path. Source: Made by author.

This section is framed in the second part of the cycle towards change as illustrated in the theoretical model (see figure 6.1). The second action needed to move from a negative towards a positive path, is to examine the barriers and develop context-specific suggestions. The aim in this section is to provide a set of tailor made policy advice to foster the implementation of Strategic Integral Plans in the MAA. This can also be achieved by analyzing a case of success such as Curitiba, so as to understand what strategies were applied in order to encourage urban sustainability.

6.2. Case of success in creating a policy change: Curitiba

Curitiba is a good reflective example on how to improve decision making in Asuncion. This because of the role of a policy entrepreneur to induce change, the integral vision was proposed by its visionary former mayor Jaime Lerner who led the transformation of the city's governance approach. The city of Curitiba is the capital of the state of Parana in Brazil (see figure 6.2). It has approximately 1,760,500 habitants, being the most populated city. The Curitiba Metropolitan area comprises 26 municipalities with a total population of over 3.2 million (Census, 2010).

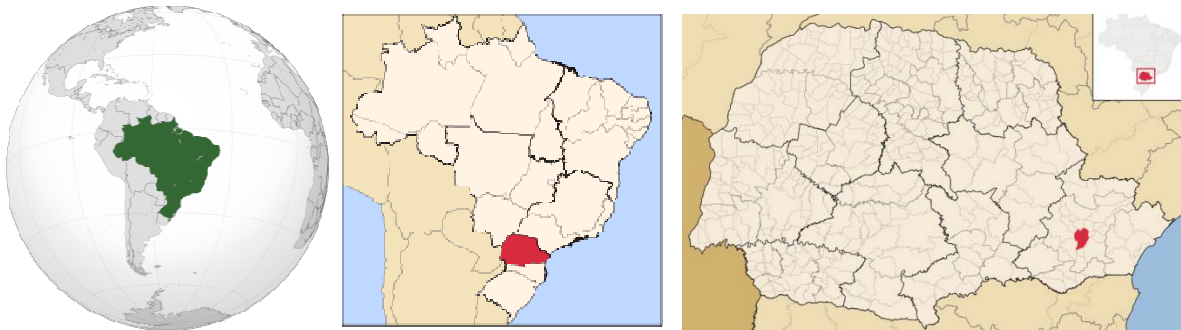


Figure 6.2: Location of Curitiba, Brazil. (Source: www.googlemaps.org)

It has developed urban and environmental sustainability through an holistic urban planning approach, this shows that cost is no barrier to ecological and economic urban plans, development, and management. The master plan proposed to concentrate shops and facilities in the city center and along dense axes, the central city zone became more walkable, lively, and attractive to citizens, affordable and innovative bus system were also implemented. Integrated land use, public transportation, and street network plans facilitated the social and economic development, as well as fostering an environmental sustainable city (Suzuki, et.al., 2010).

As Macedo (2004) explains, the city of Curitiba became internationally known primary for its initiatives in planning, and in particular for its transit system. Later on, these efforts earned international renown and became an example of urban development, and the ideal image of how a sustainable city should be.

Urban Planning in Curitiba, the role of a policy entrepreneur to induce change.

Curitiba is more than a city that has a number of outstanding projects. The key to its success is the underlying, cohesive strategy—with a focus on improving life for residents and on integrated planning—that underpins all of its projects (MacLeod, 2012). The strategic vision that informs all aspects of Curitiba is articulated by its visionary former mayor, Jaime Lerner, who led the city's transformation: *"There is no endeavor more noble than the attempt to achieve a collective dream. When a city accepts as its mandate its quality of life; when it respects the people who live in it; when it respects the environment; when it prepares for future generations, the people share responsibility for that mandate, and this shared cause is the only way to achieve that collective dream"* (MacLeod, 2012, p 2).

Strong political leadership and continuity has been essential to long-term implementation of the city's plan. Lerner, now governor of the State of Paraná, was involved in the city's 1965 Master Plan as an architect; helped found and worked for the Urban Planning Institute of Curitiba (IPPUC); served as the city's mayor three times; and was president of IPPUC for many years. Similarly, the city's current mayor, Cassio Taniguchi, was a senior IPPUC official for seven years (MacLeod, 2012).

The Urban Planning Institute of Curitiba (IPPUC) is a second key element that guaranteed long-term implementation of city plans. In 1965, Lerner and his colleagues realized that continuity would be a problem and established IPPUC as an independent agency to supervise and implement planning. The combination of core values expressed in



the city plan and IPPUC's creation allowed planning to be efficient and sustainable even in difficult circumstances. For instance, during the military dictatorship, times of economic crisis in Brazil, and in spite of high numbers of poor migrants flowing into the city.

"A clear strategy and vision of the future in Curitiba and creation of an agency to make sure it was implemented has meant that smaller decisions made over the course of years and in many individual programs have added up to a city that's a model of ecological, people-centered urbanism" (MacLeod, 2012, p 2).

6.3. Policy advice: Strategies for the implementation and continuity of strategic integral plans in the Metropolitan Area of Asuncion.

As a proposal to solve the problem of lack of integrated management of the metropolitan area, it is necessary to have a governance scheme that promotes and coordinates several common themes and link to institutions in the Metropolitan Area of Asuncion. There are several international examples that aim to solve the problems of governance at the metropolitan level such as Curitiba. Moreover, there also exist agencies such as mixed or public metropolitan development, institutes of metropolitan policy, planning councils or specialized agencies with metropolitan authority that address issues such as transport, solid waste, environment and urban planning. The MAA needs strategies for the implementation of plans, a model that best suits its metropolitan reality. Therefore, the priority is to create a strategic vision and ensure an integrated urban management service (ICES 2014).

It is recognized that within the complexity of the city, the absolute consensus of the various actors is impossible, yet, it is fundamental to make an effort in order to align to various initiatives, so that these work will yield benefits for all parties involved. Paraguay is a country with abundant resources, but are often lack of organizational skills to work in accordance with various stakeholders and government agencies. As explained by Huitema and Meijerink (2010) policy change is carried out by people who endeavor to create and offer alternative approaches. Furthermore, is important to understand *"the role of 'policy entrepreneurs' in instigating, implementing, and sometimes blocking policy change"* (Huitema and Meijerink, 2010, p. 1). Thus, policy entrepreneurs have the power to instigate policy change, this by using a set of strategies which are available to policy entrepreneurs.

As Bachrach and Baratz (1970) show, change can be initiated both from within and from outside of government. "Within government, the individuals seeking change may be politicians or bureaucrats. Outside of government, they can be representatives of non-governmental organizations (NGOs), academics, or individual citizens. Working to achieve policy change obviously involves different challenges for different types of policy entrepreneurs. For instance, the political leader may have a political party and a bureaucracy to back him or her, which the employee of a small NGO probably does not" (Huitema and Meijerink, 2010, p. 4). Independent agencies can help coordinate and with a visionary character which is a policy entrepreneur that is able to pursue the goal. In order to ensure continuity of strategic integral plans a set of context specific strategies for the Metropolitan Area of Asuncion is formulated (see figure 6.3):



1) Set up an independent organizations:

In Asuncion the 'Restructuring Plan of Asuncion's Historic Center' foresees the problem of the lack of continuity of projects. Therefore, they created an independent organization called 'Ecosistema Urbano' that coordinates actions between the different stakeholders of the plan. They have proposed an innovative management model that will channel development and implementation of the actions of revitalization.

In addition to develop shared visions, the organization will provide a dynamic process towards continuous improvement of this area and encourage the active participation of all development actors committed to the future of downtown Asuncion.

The Master Plan will define the objectives and initiatives for short, medium and long term that must be implemented by various actors in a coordinated manner. Furthermore, the formulation and implementation of the Master Plan of the Historic Center, will give continuity to the Comprehensive Action Plan of the Citadel Cultural Asuncion.

2) Policy entrepreneur as individuals seeking change:

Curitiba is a good reflective example on how to improve decision making in Asuncion. This because of the role of a policy entrepreneur to induce change, the integral vision was proposed by its visionary former mayor Jaime Lerner who led the transformation of the city's governance approach. In Paraguay we can refer to the "Integral Plan and Executive Project of the Urban Rehabilitation and enhancement of Barrio San Jeronimo", in this case Minister of Tourism Liz Cramer, with great interest, formed a group of technical specialists in the tourism sector and developed a new approach to the enhancement of the picturesque village of San Jeronimo neighborhood; the idea was to transform the area into a similar style of the populous area "Caminito" in Buenos Aires. The initiative started by the Minister of Tourism had great success and impact on the city of Asuncion. The realization of the project would have not being possible without the intervention of the Minister Liz Cramer; who despite setbacks and political interests of the moment, managed to transform the Barrio San Jeronimo into a tourism product.

3) Policy entrepreneur as NGO's:

Currently in Asuncion the Paraguayan Network for Sustainable Cities (RED) is working in order to develop a Sustainable Cities Program to inspire good practices and sustainable urban civic culture; inform outcome indicators on the quality of life of the people and municipal management; and influence local authorities, creating technical capabilities and systems of transparency and accountability in municipalities.

In April 2014, the Network organizes the Sustainable Culture Month, a communications campaign to promote sustainable habits among citizens, businesses, organizations and public and private institutions, and the first Sustainable Expo, a space that brings together companies and organizations whose projects and actions of corporate social responsibility are aimed at creating a sustainable Paraguay. Here the Paraguayan Network for Sustainable Cities acts as a policy entrepreneur because they induce a policy change.

4) Establish a Monitoring System:

The monitoring system seeks to promote citizen participation in supervising the implementation of Strategic Integral Plans. The main objective is to generate standardized measures on the state of progress on the proposed actions and their impact on key issues affecting the sustainability of the city, ensuring the objectivity and



impartiality in the exercise of monitoring. The conceptual framework of the monitoring system is based on the principles of the programs "Cómo Vamos?", which is a program created in Colombia and has 10 years of activity; it is characterized by its interest of the public, objectivity, impartiality and independence. Various cities in Latin America are implementing similar monitoring systems, led by civil society. One example is the "Nossa" movement in Brazil, which has developed a network that acts as a citizen observatory on issues of the environment and quality of life in many cities of the country.

In the Metropolitan Area of Asuncion, the implementation of the national monitoring system will be provided by the Paraguayan Network for Sustainable Cities (RED). The organization, will survey the relevant and appropriate indicators of Asuncion and its metropolitan area, conduct a survey of public perception, it will be responsible for encouraging and participating in activities and initiatives that promote the acquisition of capacity at local level as tools for sustainability in cities, and articulation of different sectors by the consultant.

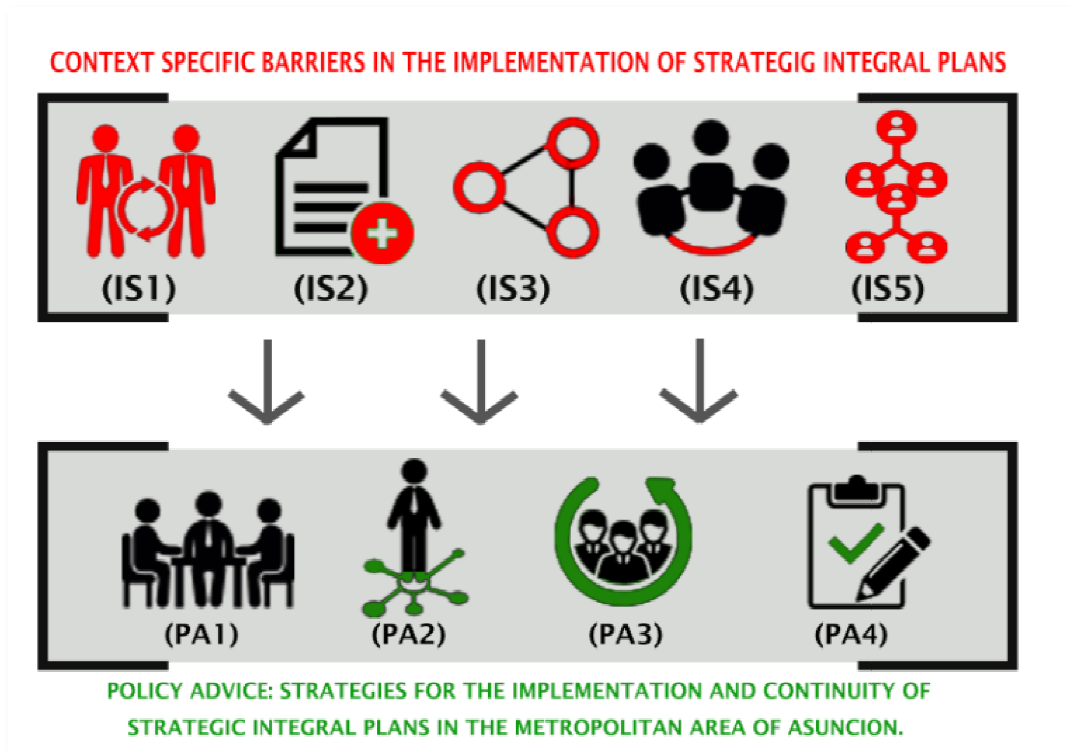


Figure 6.3: The context-specific barriers to the implementation of strategic integral plans are symptomatic of a lack of a regional planning culture and a low organizational skill within the Metropolitan Area of Asuncion. These major planning issues found in the previous analyses serve as the starting point for a diagnosis, which introduces four major strategic planning goals. Said goals aim to directly improve the existing weak planning system in the MAA. Source: made by author

CHAPTER 7



View of Asuncion at night. Source: <http://blog.fotociclo.com/>
Photographer: Juan Carlos Meza.

CONCLUSION

This master thesis situated itself in the broader debates concerning, on the one hand sustainable development of our cities, and on the other hand the mechanisms to achieve such goal by analyzing Institutional barriers to the implementation of projects. This can be done by proposing an Institutional change through a tailor made policy advice. The goal of this research was to demonstrate that the same methods to find context-specific barriers (Tan, 2013) can be applied to a developing country in order to overcome its sustainability issues. To achieve this goal this master thesis has been divided in two main parts. The first part has presented the theoretical framework (chapter 2) and methodology (chapter 3) of this master thesis defined the strategies to carried out in order to answer the research questions. The second part of this work was a context, literature and policy analysis that focused on the Metropolitan Area of Asuncion (chapter 4), moving to the next section where the context-specific barriers to implementation of projects were analyzed (chapter 5). Finally a set of policy advice strategies was develop in order to overcome the setback in the execution of projects (chapter 6).

The societal relevance of the research is based on how it offers a way to change the current planning and governance system in Asuncion so as to implement Strategic Integral Plans, and by doing so enhance the capacity of the civic participation for the accountability of the implementation of these projects. This is important for a city facing current economic and environmental un-sustainability such as the Metropolitan Area of Asuncion. This research aims to address urban problems in the hopes of ensuring access to better housing, public spaces, mobility, security, and a healthy environment for the citizens of the AMA. Moreover, the scientific relevance of the thesis lies in how it recognizes the challenges that a developing country has to confront when moving from a non-sustainable to a sustainable path. The goal is to demonstrate that the identification of context-specific barriers (Tan, 2013) can also be applied to identify context-barriers in the implementation of Strategic Integral Plans in the Metropolitan Area of Asuncion, so as to enhance the capacity of the current governance system to execute projects. The thesis will formulate sustainable strategies to address the specific barriers by proposing Institutional change through a series of context-specific recommendations based on the results of policy analysis, literature review and interviews. Drawing on the concepts presented in the first theoretical and contextual part, the next sections have tried to answer the main research questions concerning the MAA.

First research question: What are the necessary planning context and processes for implementing Strategic Integral Plans for urban sustainability in the metropolitan area of Asuncion?

The necessary planning context to implement Strategic Integral Plans in the MAA is one where Master Plans are designed by professionals and experts of multidisciplinary background. Moreover, it is necessary to overcome context-specific barriers so as to execute the projects that are design so as to foster a more sustainable future. Thus, to achieve this goal a set of strategies are develop in the form of a policy advice that aims to induce a change in the current planning context of the cities conforming the metropolis of



Asuncion. In Paraguay informal settlements and densification of the traditional areas are due to the lack of urban planning, economic, social and environmental guidelines. As a consequence of the disorganized and poorly planned expansion did not allow the emergence of sustainable urban models. The intensity of the economic, social, urban and environmental transformations contemporary Paraguay, requires a clear and proactive solution towards more sustainable forms of territorial occupation. To do so, context-specific solutions are required to ensure a desirable quality of urban life. Public order or territorial policies proposed development should build the framework of specific intervention to implement the system of cities which will not only grow better, but above all ensure adequate levels of sustainability.

Theory tells us that (after the publication of Brundtland report in 1987) there have been an increasing demand for systems of governance capable of leading society on a more sustainable track (Jordan, 2007). As explained by Curtis et al. (2012) in a world looking to confront global environmental issues, it is critical to pursue the local and national institutional change in order to tackle the problem more effectively. This research aims to address the challenges of change towards sustainability and does so by answering the following sub questions.

Second research question: What are the context-specific barriers to strategic integral plans implementation in Asuncion?

This question was answered by exploring through literature. Also by interviews, and policy analysis. An approach between theoretical concepts, observations and reflections was used to identify barriers in the implementation of Strategic Integral Plans. The literature review shows that barriers can appear as various types (L, FI, PC,IT, PT) exposed both in formal and informal institutions (Clifford et al., 2005). The policy analysis and the interviews confirmed on the basis of Asuncion case that financial barriers are not the mayor issue, as mentioned in Tan (2013). Moreover, there is a difference between executing specific infrastructure projects, such as parks and roads, and implementing Strategic Integral Plans such as the Master plans for the MAA. Master plans finds more setbacks in its implementation because of the lack of coordination between different stakeholders, secretariats, and ministries. These plans require continuity over a long period of time (Curtis et al., 2009) but are constantly threatened by the variation of policy goals and policy authorities (Tan, 2013).

The analysis shows that a lack of public involvement in the process of development and implementation of infrastructure project is a constant. Media diffusion of the projects were guaranteed by National programs of information of public works. By contrast, the diffusion of the projects did not reflect an intention from the Government to engage citizens in the process. Nevertheless, new master plans envision public participation in order to achieve the accountability and acceptance of the projects. The lack of organizational skills to put the plans in action is the main reasons for non-implementation of projects and master plans. Furthermore, the lack of political support to maintain the project on track, lack of leadership roles, and a strong policy entrepreneur that guarantees the continuity of the program are secondary reasons for the setback of projects.

The interviews confirmed a similarity in common barriers mentioned in the policy analysis and literature review. This helped validate the inter-relation and origin of barriers and identified expert stakeholders for the interviews. Thus, the repetition and interrelation of answers served to identify five common barriers and their dynamics (IS1-



5). These context-specific barriers are as follows (see figure 5.3): **(IS1)** 'Lack of continuity of the plans after every new municipal and national elections', **(IS2)** 'lack of transparency before, during and after the implementation of projects', **(IS3)** 'lack of coordination between different ministries and organizations', **(IS4)** 'lack of consensus and public participation in the development and decision making of projects and strategic integral plans', **(IS5)** 'complexity and bureaucratic processes that delay the implementation of projects'. The interviews served as an efficient method to validate and triangulate barriers gathered from the literature review and policy analysis phases (Tan, 2013). This approach offered an insider view of the responsibility and relations between the stakeholders within the reality of Strategic Integral Plans implementation in the MAA.

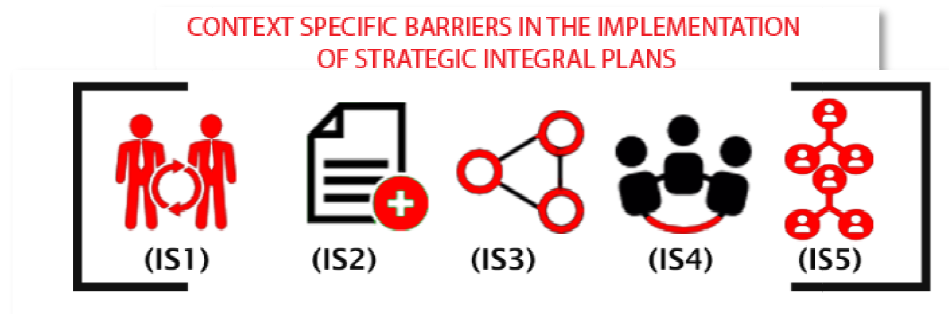


Figure 5.3: Scheme of the context specific barriers found in the implementation of Strategic Integral Plans in the Metropolitan Area of Asuncion. Source: Made by author.

Third research question: What successful policy change and strategic integral plans implementation are there in the region to be use as an example?

This was answered by examining information on policy change and urban sustainability master plan implemented in Curitiba Brazil. It is a good reflective example on how to improve decision making in Asuncion. This because of the role of a policy entrepreneur to induce change, the integral vision was proposed by its visionary former mayor Jaime Lerner who led the transformation of the city's governance approach. Some of the key elements of the success of the plan were the strong political leadership and the continuity of the long-term projects. Lerner helped found and worked for the Urban Planning Institute of Curitiba (IPPUC), served as the city's mayor three times, and was president of IPPUC for many years. The second key element that guaranteed long-term implementation of city plans is the Urban Planning Institute of Curitiba (IPPUC). In 1965, Lerner and his colleagues recognize that continuity of integral urban plans would be a problem and established IPPUC as an independent agency to supervise and implement planning. The combination of core values expressed in the city plan and IPPUC's creation allowed planning to be efficient and sustainable even in difficult circumstances. For example, during the military dictatorship, times of economic crisis in Brazil. Therefore, we can argue that the MAA can learn from this experience and incorporate the strategies in the context-specific policy advice.

Fourth research question: What strategies can be used in order to implement strategic integral plans in Asuncion?

This question was answered by analyzing literature on policy change, and by examining the context-specific barriers to the implementation of strategic integral plans from the previous chapters. These barriers are symptomatic of a lack of a regional



planning culture and a low organizational skill within the MAA. The main planning issues served as the starting point for the diagnosis, which introduced four major strategic planning goals. Said goals aim to directly improve the planning system of the area by developing strategies that best suits the context. Therefore, the priority is to create a strategic vision and ensure an integrated urban management service (ICES 2014). Paraguay is a country with abundant resources, but are often lack of organizational skills to work in accordance with various stakeholders and government agencies. Thus, it is recognized that the absolute consensus of different stakeholders is impossible, yet, it is important to make the effort and align to various initiatives to generate greater social benefits. Independent agencies can help coordinate and with a visionary character which is a policy entrepreneur that is able to pursue the goal. In order to ensure continuity of strategic integral plans a set of context specific strategies for the Metropolitan Area of Asuncion is formulated (see figure 6.3):

1) Set up an independent organizations: In Asuncion the 'Restructuring Plan of Asuncion's Historic Center' foresees the problem of the lack of continuity of projects. Therefore, an independent organization called 'Ecosistema Urbano' was created in order to coordinate actions between the different stakeholders of the plan. They developed an innovative management model that will channel implementation of the projects of renovation. In addition to develop shared visions, the organization will provide a dynamic process towards constant enhancement of this area and encourage the active participation of all development actors committed toward the sustainable future of downtown Asuncion.

2) Policy entrepreneur as individuals seeking change: This refers to specific people inducing the change. A good example in the MAA is the case of the Minister of Tourism Liz Cramer. She formed a group of technical specialists in the tourism sector and developed a new approach to the enhancement of the village of San Jeronimo neighborhood. The initiative developed by the Minister of Tourism had big impact in the city of Asuncion. The Minister Liz Cramer managed to transform the Barrio San Jeronimo into a tourism product, despite setbacks and political interests of the moment.

3) Policy entrepreneur as NGO's: In Asuncion the Paraguayan Network for Sustainable Cities (RED) is working to develop a Sustainable Cities Program to inspire good practices and sustainable urban civic culture, inform outcome indicators on the quality of life of the people and municipal management, and influence local authorities, creating technical capabilities and systems of transparency and accountability in municipalities. The organization also launches communications campaign to promote sustainable habits among citizens, businesses, organizations and public and private institutions. Therefore, the Paraguayan Network for Sustainable Cities acts as a policy entrepreneur because they induce a policy change.

4) Establish a Monitoring System: In the Metropolitan Area of Asuncion, the implementation of a national monitoring system will be provided by the Paraguayan Network for Sustainable Cities (RED). The monitoring system seeks to promote citizen participation in supervising the implementation of Strategic Integral Plans. The main objective is to generate standardized measures on the state of progress on the proposed



actions and their impact on key issues affecting the sustainability of the city, ensuring the objectivity and impartiality in the exercise of monitoring.



Figure 6.3: The major planning issues found in the previous analyses serve as the starting point for a diagnosis, which introduces four major strategic planning goals. Said goals aim to directly improve the existing weak planning system in the MAA. Source: made by author

This policy advice summarizes the main results of the assessment of the most urgent barriers to overcome for the future sustainability of the Metropolitan Area of Asuncion. The research proposes a number of strategies to address these challenges and to lay the foundations of a new regional model for sustainable development of the MAA, this will serve as a roadmap to intervene the context-specific barriers to the implementation of Strategic Integral Plans that have been identified. The positive transformation of the territory will depend essentially, however, on the effort and cooperation of municipal governments, citizens, organizations of civil society, their employers, together with the support of the National Government. The process of finding barriers and formulating an set of policy strategies has sought to contribute to this process of dialogue, collaboration and coordination among various stakeholders of the cities in order to generate a greater sense of a shared and common goal beyond the diversities, thus construct a better and more sustainable city for the sake of future generations.



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APPENDIX 2: LIST OF INTERVIEWEES

Anonymity was guaranteed to all interviewed. This was essential to ensure that all interviewees could share their opinion and experiences without restrictions outside of organizational boundaries. The selection of the interviewees was based on their expertise and involvement in the projects. In each case consideration was paid to complete every scale, type and sector; depending on access and availability.

Expert 01. Urban scale, Public stakeholder in land use sector.

Expert 02. Urban scale, Public stakeholder in land use and urban planning.

Expert 03. Urban scale, Private stakeholder in urban planning and transport sector.

Expert 04. Local scale, Private stakeholder in land use and infrastructure.

Expert 05. Urban and local scale, NGO stakeholder in urban planning and sustainable development of cities in Paraguay.

Expert 06. Local scale, Public stakeholder in land use and social housing.

Table 3.1: Selection of interviewees per category			
Interviewee	Sector	Public/Private	Urban/Local
Int. 01	Master plan	Public	Urban
Int. 02	Master plan	Public	Urban
Int. 03	Transportation	Private	Urban
Int. 04	Infrastructure	Private	Local
Int. 05	NGO	NGO	Urban and local
Int. 06	Land use	Public	Local



APPENDIX 3: INTERVIEWS

Questions	Answers Interviewee: Int. 01
<p>1) Please describe the project you were working on.</p>	<p>Restructuring Plan of Asuncion's Historic Center. The formulation and implementation of the Master Plan for the Historic Center is the main pillar for the positive transformation of the center with the active participation of the community. Integrated planning based on a vision that defines the way in the empowerment as civic, cultural, commercial and economic center of the MAA.</p>
<p>2) Please describe the position, duration and function you carried out. Briefly explain any positive or negative experience in the realization to the project.</p>	<p>2015-on going: Coordinator of the Master Plan. The positive part is that the plan is using a new strategy of public participation to integrate the citizens in the decision making of the city, an aspect that the government almost never took into account. The negative part is that, because is a very innovative strategy we still have to deal with the bureaucratic structure that is not able to change so easily.</p>
<p>3) Who according to you were key stakeholders involved in the project you were part of?</p>	<p>The Municipality of Asuncion, the Ministry of Public works and communications, the families of the informal settlements, the community's church. Asuncion's citizens. Urban Lab, an organization that works as a coordinator of the different stakeholders. International experts in urban planning.</p>
<p>4) What kind of setbacks could you perceive while trying to implement the project? which impediment would you consider to be most relevant in the execution of the plan?</p>	<p>The major problem was the lack of coordination between different ministries and organizations and the low organizational skills of the institutions. Moreover, the complex and bureaucratic processes delayed the implementation of the plan.</p>
<p>5) How were these setbacks overcome? If the answer is negative, please describe why the problem could not be solved.</p>	<p>The Master plan created an independent organization that coordinates different stakeholders; thus, ensure the continuity of the plan over a long period of time.</p>
<p>6) In your personal experience, what is necessary to overcome the setbacks that arise before and during the implementation of projects?</p>	<p>In addition to developing a shared vision, the plan should provide a dynamic process towards continuous improvement and encourage the active participation of all stakeholders committed to the future of Asuncion.</p>



Questions	Answers Interviewee: Int. 02
<p>1) Please describe the project you were working on.</p>	<p>Asunción waterfront. Due to the advanced stage of deterioration of the populous neighborhood of Chacarita, the master plan developed a specific project for the enhancement of the informal settlement.</p>
<p>2) Please describe the position, duration and function you carried out. Briefly explain any positive or negative experience in the realization to the project.</p>	<p>Architect in the urban design department. In 2011, I was hired by an architectural firm as a urban designer to participate in the consultancy that developed the Urban Rehabilitation Project Executive and enhancement of Barrio Chacarita of Asuncion, which is one part of the Master plan of Asunción waterfront.</p>
<p>3) Who according to you were key stakeholders involved in the project you were part of?</p>	<p>The Ministry of Public works and communications, the Municipality of Asuncion, the families of the informal settlements neighborhood, the citizens in general, the Faculty of Architecture of the National University of Asuncion. Ministry of Tourism.</p>
<p>4) What kind of setbacks could you perceive while trying to implement the project? which impediment would you consider to be most relevant in the execution of the plan?</p>	<p>One of the major problems encountered in the implementation of this project was the political interests, and the complexity of the process like requesting funds. Furthermore, the particular interests of certain social groups in the neighborhood, in a way, negatively influenced the development of the work. Moreover, the lack of accountability by public institutions made the implementation process less transparent.</p>
<p>5) How were these setbacks overcome? If the answer is negative, please describe why the problem could not be solved.</p>	<p>This project had no immediate results, although it served as the basis for another project undertaken by the Ministry of Tourism, during the mandate of the Minister Liz Cramer, with a group of skilled technicians in the tourism sector, a new approach was taken in order to enhance this picturesque village, transforming it in the style of the populous neighborhood "Caminito" in Buenos Aires, with great success and impact on the city of Asuncion. This action SENATUR had not been successful without the policy entrepreneurship of the Minister of tourism.</p>
<p>6) In your personal experience, what is necessary to overcome the setbacks that arise before and during the implementation of projects?</p>	<p>In the case of Chacarita neighborhood, in my opinion, the project was faced by the Ministry of Public works merely as a technical work, which sounds good, but the focus should be more holistic including tourism product and working with people; therefore there was a need for organizational skills and cooperation between different ministries. This project would not have been possible without the vision from the SENATUR as a policy entrepreneur.</p>



Questions	Answers Interviewee: Int. 03
<p>1) Please describe the project you were working on.</p>	<p>Bus Rapid Transit Pya'e Porá. It is a project of the Ministry of Public Works and Communications of Paraguay, in partnership with the municipalities of Asuncion, Fernando de la Mora and San Lorenzo, and a private consortium GSD to implement a bus rapid transit system BTR type in the metropolitan area of Asuncion.</p>
<p>2) Please describe the position, duration and function you carried out. Briefly explain any positive or negative experience in the realization to the project.</p>	<p>2012/2018: Coordinator of the design department of the private consortium GSD. I worked as an architect and coordinator of the technical team. The final product was positive, but it <u>was complicated to receive on time the work of the multiple parties</u> involved in the project, as well as managing the <u>state bureaucracy.</u></p>
<p>3) Who according to you were key stakeholders involved in the project you were part of?</p>	<p>The Ministry of Public works and communications, Municipality of Asuncion. Private consortium GSD.</p>
<p>4) What kind of setbacks could you perceive while trying to implement the project? which impediment would you consider to be most relevant in the execution of the plan?</p>	<p>The major setback were the complexity of the implementation process, the <u>lack of coordination between different stakeholders</u> and <u>the lack of continuity of the plans.</u></p>
<p>5) How were these setbacks overcome? If the answer is negative, please describe why the problem could not be solved.</p>	<p>The impediments remains; after the approval of the budget the project is still not being implemented because of <u>the complexity in the process, bureaucracy, lack of coordination between municipalities, and political interests</u> that delay the execution <u>affecting the continuity of the plan.</u></p>
<p>6) In your personal experience, what is necessary to overcome the setbacks that arise before and during the implementation of projects?</p>	<p>I think every master plan should <u>designate a representative of the project</u> that can lead comprehensively all aspects of the plan, whether technical or management of the personnel. In addition we need <u>a new law that suit this type of work.</u></p>



Questions	Answers Interviewee: Int. 04
<p>1) Please describe the project you were working on.</p>	<p>Bicentenario Bridge. Urbanize Chaco'i and turn it into an extension of Asuncion is the project developed by URBA Real Estate. The firm proposes the early construction of the Bicentenario Bridge to access the capital's downtown from Chaco'i.</p>
<p>2) Please describe the position, duration and function you carried out. Briefly explain any positive or negative experience in the realization to the project.</p>	<p>2011-2013 Coordinator of the Engineering department. The experience was both situations, positive; because we worked on a type of infrastructure that is not commonly built in Paraguay. Negative; because having no political support can make a project of months of hard work just end in nothing.</p>
<p>3) Who according to you were key stakeholders involved in the project you were part of?</p>	<p>The Ministry of Public works and communications, Municipality of Asuncion, private Asian consortium Dong Ah Construction</p>
<p>4) What kind of setbacks could you perceive while trying to implement the project? which impediment would you consider to be most relevant in the execution of the plan?</p>	<p>In year 2011 the law of Public Private Partnership was not approved yet, therefore even though the private consortium offered to invest in the construction of the bridge, the national government was not acquainted with the PPP system. Therefore, the bureaucracy and lack of management skills made the project not viable.</p>
<p>5) How were these setbacks overcome? If the answer is negative, please describe why the problem could not be solved.</p>	<p>The impediments remains; many years after the proposal of the plan, we are still working on finding support from the national government.</p>
<p>6) In your personal experience, what is necessary to overcome the setbacks that arise before and during the implementation of projects?</p>	<p>In order to overcome complex processes that delay the implementation of projects it is important to sell the idea in the right time and to the right people.</p>



Questions	Answers Interviewee: Int. 05
<p>1) Please describe the project you were working on.</p>	<p>ONG RED PARAGUAYA POR CIUDADES SUSTENTABLES (Paraguayan Network for Sustainable Cities). In April 2014, the Network organizes the Sustainable Culture Month, a communications campaign to promote sustainable habits among citizens, businesses, organizations and public and private institutions, and the first Sustainable Expo, a space that brings together companies and organizations whose projects and actions of corporate social responsibility are aimed at creating a sustainable Paraguay.</p>
<p>2) Please describe the position, duration and function you carried out. Briefly explain any positive or negative experience in the realization to the project.</p>	<p>I working as the Executive Assistant of the Paraguayan Network for Sustainable Cities since 2013. Currently we constitute the main organization of civil society for sustainable cities in Paraguay. The positive part is that we work to inform and teach citizens about how to <u>demand transparency from their municipalities</u>. The negative part is that <u>not every city is willing to cooperate</u>.</p>
<p>3) Who according to you were key stakeholders involved in the project you were part of?</p>	<p>The organization itself and the citizens that demand the transparency and accountability of the administration of the municipalities.</p>
<p>4) What kind of setbacks could you perceive while trying to implement the project? which impediment would you consider to be most relevant in the execution of the plan?</p>	<p>The major setback is <u>the lack of continuity of the plans</u> after municipal and national elections, the <u>lack of coordination between different secretariats and municipalities</u>, and the <u>need of transparency and accountability</u> of the management of the municipalities.</p>
<p>5) How were these setbacks overcome? If the answer is negative, please describe why the problem could not be solved.</p>	<p>We intend to develop a Sustainable Cities Program to <u>inspire good practices and sustainable urban civic culture</u>; <u>inform outcome indicators on the quality of life of the people and municipal management</u>; and influence local authorities, <u>creating technical capabilities and systems of transparency and accountability in municipalities</u>.</p>



Questions	Answers Interviewee: Int. 06
<p>1) Please describe the project you were working on.</p>	<p>320 social housing in San Felipe neighborhood: the plan consisted in coordinating and implementing 320 social houses for families living in informal settlements of the capital of Asuncion. The plan was articulated with other public, private and national agencies so as to ensure an improvement in the living conditions of the most vulnerable citizens.</p>
<p>2) Please describe the position, duration and function you carried out. Briefly explain any positive or negative experience in the realization to the project.</p>	<p>2000 / 2005: Private secretary SENAVITAT The experience was both situations, positive; because we had the ability to reach more poor families in the country, Negative; because having no sufficient budget we were always limited and we had to fight against the bureaucratic structure and the low organizational skills.</p>
<p>3) Who according to you were key stakeholders involved in the project you were part of?</p>	<p>The Minister of the SENAVITAT, the Ministry of Public works and communications, the families of the San Felipe neighborhood, and the community church.</p>
<p>4) What kind of setbacks could you perceive while trying to implement the project? which impediment would you consider to be most relevant in the execution of the plan?</p>	<p>The major setback was the limited budget we had, then the line of political thought, the failure to distinguish between public policy and party politics, the lack of coordination between different secretariats created friction between sectors. Moreover, the lack of continuity of the plans after every new municipal and national elections.</p>
<p>5) How were these setbacks overcome? If the answer is negative, please describe why the problem could not be solved.</p>	<p>The impediments remains; after the impeachment of President of the Republic Fernando Lugo, all the projects that had been carried out were disrupted and disjointed.</p>
<p>6) In your personal experience, what is necessary to overcome the setbacks that arise before and during the implementation of projects?</p>	<p>Working as a public servant is very difficult when you do not understand how the Public Policy works, once the concept is clear and can think of projects that endure over time, perhaps there the consolidation of a State for everyone can begin.</p>



APPENDIX 4: POLICY ANALYSIS

POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

A fact sheet was done for every project in order to give detailed information about the objectives of the plans, and the source of the data. The information can be found in the appendix.

The answers drawn from the policy analysis will be described in chapter 5 as part of the barriers in implementation of strategic integral plans.

In the last column 'Status of Implementation' color green refers to projects and plans that were implemented, while red refers to projects and plans that were not implemented.

Area	Fact sheet N	Name of the project	Proponent Institution	Implemented by whom	Year of initiation of the project	Year of conclusion	Source of founding	Investment	Who benefits	Media diffusion of the project	Public involvement in the process of development of the project	Reason for non implementation	Status of implementation
Master plans	1	Modernization Program of the city Center, public transport and government offices.	MOPC	Technical Implementation Unit under the Directorate of Public Works	2015	2018	IDB	125.000.000 USD	Citizens of the metropolitan area of Asuncion	Radio, Tv, newspapers, magazines, and web pages	No public participation	Partially implemented	
	2	Restructuring Plan of Asuncion's Historic Center	International contest of ideas. Secretariat of Culture	Private consortium Asu Lab	2015	on going	National Government	20.000 USD	Citizens of the metropolitan area of Asuncion	Magazines, radio, Tv, newspapers, and web pages	Public participation during the process of development of the master plan	Currently being implemented	
	3	Action Plan for the Metropolitan Area of the City of Asuncion	IDB	Not yet implemented	2014	on going	not known yet	not known yet	Citizens of the metropolitan area of Asuncion	No promotion	No public participation	Lack of organizational skills to put the plan in action	



	4	Asunción waterfront	Private consortium FLACAM/CEPA ordered by the Municipality of Asuncion	MOPC	2008	2018	IDB	25.000.000 USD	Paraguayan citizens	Radio, Tv, newspapers, magazines, and web pages	Public participation for resettlement of informal neighborhoods	Implemented and finished	
Transportation	5	Bus Rapid Transit Pya'e Porá	Ministry of Public Works and Communications	Private consortium	2015	2018	IDB	125.000.000 USD	Commuters of the MAA.	Magazines, radio, Tv, newspapers, and web pages	No public participation	Lack of organizational skills to put the plan in action	
	6	Commuter Train Project	Paraguayan Railroads SA (Fepasa)	MOPC & Fepasa	2013	2015	National Government	50.000.000 USD	Commuters of the MAA.	Newspapers, magazines, and web pages	No public participation	Lack of organizational skills to put the plan in action	
	7	Improvement and modernization of the Commuter Transport System	National Government	MOPC	2014	2016	National Government	30.000 USD	Commuters of the MAA.	Radio, Tv, newspapers, magazines, and web pages	No public participation	Currently being implemented	
	8	River transport for Asuncion	Private consortium	Public private partnership	2015	2017	Public private partnership	Not specified	Commuters of the metropolitan area of Asuncion	Tv, newspapers, magazines, and web pages	No public participation	Lack of political support	
Infrastructure	9	Bicentenario Bridge	Korean private consortium	Korean private consortium & MOPC	2011	2013	Public private partnership	100.000.000 USD	Paraguayan citizens	Newspapers, and web pages	No public participation	Lack of political support	
	10	ÑU GUAZÚ Highway	MOPC	Public private partnership	2014	2016	Public private partnership	22.000.000 USD	Commuters of the metropolitan area of Asuncion	Newspapers, Radio, Tv, and web pages	No public participation	Currently being implemented	



	11	Tunnel Semidei	MOPC	MOPC	2013	2014	National Government	7.000.000 USD	Commuters of the metropolitan area of Asuncion	Radio, Tv, newspapers, and web pages	No public participation	Implemented and finished	Green
	12	Monorail Rumifahui	Private consortium	Public private partnership	Not specified	Not specified	Public private partnership	276.000.000 USD	Commuters of the metropolitan area of Asuncion	Radio, Tv, newspapers, and web pages	No public participation	Lack of political support	Red
Green	13	First stage of the 'Solidaridad Park'	MOPC	Public private partnership	March 2011	March 2013	IDB and local founding	900.000 USD	Citizens of the metropolitan area of Asuncion	Radio, Tv, newspapers, magazines, and web pages	No public participation	Implemented and finished	Green
	14	Linear river coast park, Asuncion	MOPC	Public private partnership	2013	2014	IDB	6.000.000 USD	Paraguayan citizens	Radio, Tv, newspapers, magazines, and web pages	Public participation during the development of the master plan	Currently being implemented	Green
	15	Parque Metropolitano	MOPC	MOPC	2012	2012	National Government	300.000 USD	Paraguayan citizens	Radio, Tv, newspapers, and web pages	No public participation	Implemented and finished	Green
Land use	16	144 Social housing in the coastal strip of Asuncion	SENAVITAT & MOPC	Public private partnership	2014	2015	National Government	6.000.000 USD	Informal settlement inhabitants	Informational workshops for the affected communities	Public participation for resettlement of informal neighborhoods	Implemented and finished	Green
	17	320 social housing in San Felipe neighborhood	SENAVITAT	MOPC	2001	2002	Taiwan Republic donation	2.000.000 USD	Informal settlement inhabitants	Informational workshops for the affected communities	Public participation for resettlement of informal neighborhoods	Implemented and finished	Green
	18	Master plan in Chaco'i	Private consortium	Public private partnership	Not specified	Not specified	Private investment	Not specified	Citizens of the metropolitan area of Asuncion	Radio, Tv, newspapers, and web pages	No public participation	Lack of political support	Red



APPENDIX 5: FACT SHEETS

POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Modernization Program of the city Center, public transport and government offices.

Master Plan



Description of the project

One of the main features of the Metropolitan Area of Asuncion is the growth of suburban cities, with is clearly higher than Asuncion's rhythms. This, coupled with a suburban towns motorization rate higher than the metropolitan area as a whole (160 vehicles per thousand inhabitants) explain a dispersed urban development, which requires heavy investment in infrastructure and services that will provide coverage.

Objectives

. The proposed program aims at the rehabilitation and improvement of urban infrastructure and transport, contributing to increasing the quality of life of the population of the area of intervention. The main objectives of this operation are: 1) the revitalization of the central area of Asuncion, through the implementation of pedestrian and bike paths, renewal and creation of parks, construction of rainwater drainage and sewerage construction a building to enable the State to provide services to the public; and 2) the gradual establishment of an integrated transport system for the orderly and efficient, rapid and massive mobilization of the population between the center of the city of San Lorenzo and downtown Asuncion.

Proponent Institution: MOPC

Implemented by whom:
 Technical Implementation Unit under the Directorate of Public Works

Year of initiation of the project:
 2015

Year of conclusion: 2018

Source of founding: IDB
Investment:
 125.000.000 USD

Who benefits:
 Citizens of the metropolitan area of Asuncion

Media diffusion of the project
 Radio, TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
 No public participation

Reason for non implementation:
 Partially implemented

Source:

- <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=35109799>
 - www.mopc.gov.py -[www. www.mca.gov.py/](http://www.mca.gov.py/)

FILE N° **1**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Restructuring Plan of Asuncion's Historic Center.

Master Plan



Description of the project

Traditional Urban Planning has developed a series of tools and strategies to transform the urban space where the social activity of the city develops. It is intended that a full understanding of conflicts leads to a set of coherent projects and mechanisms that should be implemented to achieve success.

The Plan for the Historic Center of Asuncion (CHA) imply the complete reformulation of all current legislation and the drafting of proposals in all aspects of reality, from improving infrastructure to heritage conservation techniques.

It proposes a different approach. Not just a master plan but a master process supported by a set of strategies that are specific but also flexible so as to enable the progressive implementation in the plan in the time.

Proponent Institution: International contest of ideas. Secretariat of culture.

Implemented by whom: Private consortium Asu Lab

Year of initiation of the project: 2015
Year of conclusion: on going

Source of founding: National Government
Investment: 20.000 USD

Who benefits: Citizens of the metropolitan area of Asuncion

Media diffusion of the project Magazines, radio, tv, newspapers and web pages

Public involvement in the process of development or implementation of the project: Public participation during of the process of development of the master plan

Reason for non implementation: Currently being implemented

Source:
- Plan CHA (2014). Master plan for the historic city center of Asuncion. Laboratorio Abierto en Asuncion. - www.mopc.gov.py -www. www.mca.gov.py/

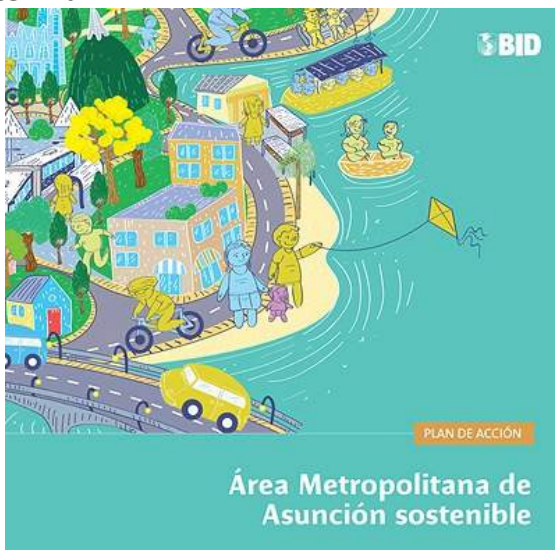
FILE N° **2**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Action plan for the Metropolitan Area of the City of Asunción

Master Plan



Description of the project

In 2013, the ICES identified Asunción and its Metropolitan Area (AMA) as one of the emerging cities with the highest potential to promote sustainable urban development in Paraguay, and began analytical work with local authorities to identify, prioritize and structure projects to improve the sustainability of this territory. The Action Plan is a document prepared and agreed between various local actors, in which a number of strategic actions and projects to address priority problems and transform Asuncion Metropolitan in a true model of sustainable and competitive city are proposed. Among the main actions proposed are:

- The improvement of public transport
- A higher priority to mobility on foot or by bicycle
- The system of urban growth and densification based transport

These actions also seeks to promote the revitalization of the inner cities of the AMA, including the historic center of Asuncion.

Proponent Institution: IDB

Implemented by whom:
Not yet implemented

Year of initiation of the project: 2014
Year of conclusion: on going

Source of founding: not known yet
Investment: Not known yet

Who benefits:
Citizens of the metropolitan area of Asunción

Media diffusion of the project
No promotion

Public involvement in the process of development or implementation of the project:
No public participation

Reason for non implementation:
Lack of organizational skills to put the plan in action

Source:

- <http://www.iadb.org/es/temas/ciudades-emergentes-y-sostenibles/plan-de-accion-asuncion,17953.html>
- www.mopc.gov.py -www.mca.gov.py/

FILE N° **3**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Bus Rapid Transit Pya'e Porá

Transportation



Description of the project

The Metrobus is the most important project in the history of mobility in the Metropolitan Area of Asunción, is part of the "Restructuring Program and Urban Modernization of Public Transport Passengers and Government Offices ". The chaotic traffic in the metropolitan area of Asuncion involves a number of difficulties and damaging consequences for productivity, welfare of people and environmental preservation. The main features of the current situation are summarized in a public transport fleet absolutely oversized, many companies competing with low indices of comparative profitability, disorder and chaos in the road traffic, low speed and high transportation time required for the transfer of people, both at public and private transport. It is a project for the people and therefore it must be done with the people. A work of this magnitude has to be discussed looking for solutions that do not harm anyone. Therefore, the project takes a social character as an important part of the process of negotiation, people will be listen to, and together find viable solutions, reach agreements, make general and temporary commitments.

Proponent Institution: Ministry of Public Works and Communications

Implemented by whom: Private Consortium

Year of initiation of the project: 2015
Year of conclusion: 2018

Source of founding: IDB
Investment: 125.000.000 USD

Who benefits: Citizens of the metropolitan area of Asuncion

Media diffusion of the project
 Radio, TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
 No public participation

Reason for non implementation:
 Lack of organizational skills to put the plan in action

Source:

- <http://www.mopc.gov.py/el-proyecto-metrobus-no-se-limita-a-la-problematica-de-los-mercados-n1987> -<http://www.sibrtonline.org/>

FILE N° **5**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Commuter Train

Transportation



Description of the project

The project of the train will run from Asunción to Ypacarai, Luque and Areguá. Asuncion access and records daily an entrance of about 1.9 million people, from which at least 900,000 do it using the existing public transport. Commuter Train Project was designed to cover an area where 1.6 million people live. According to Roberto Salinas, head of Ferrocarriles del Paraguay SA (Fepasa), an institution that works in coordination with the Ministry of Public Works and Communications (MOPC), the fuel type to be used is still to be defined, as well as the total investment and the cost the passage.

The project would be integrated with Metrobus and the circuit will run from the center to the Botanical Garden of Asuncion, then it will run parallel to the Artigas street; from there the train will go through Luque Avenue; and from Areguá and Luque to Ypacaraí will flow through the previously used rail named Carlos A. Lopez. As estimated, the commuter train will transport 250,000 passengers per day.

Proponent Institution: Paraguayan Railroads (Fepasa)

Implemented by whom: MOPC & Fepasa

Year of initiation of the project: 2013
Year of conclusion: 2015

Source of founding: National Government
Investment: 50.000.000 USD

Who benefits: Commuters of the metropolitan area of Asuncion

Media diffusion of the project
 Newspapers, magazines and web pages

Public involvement in the process of development or implementation of the project:
 No public participation

Reason for non implementation:
 Lack of organizational skills to put the plan in action

Source:
 - <http://www.skyscrapercity.com/showthread.php?t=1694128>
 - www.mopc.gov.py

FILE N° **6**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Improvement and modernization of the Commuter Transport System

Transportation



Description of the project

President of the Republic, Mr. Horacio Cartes has already signed four decrees to start the process of modernization of the public transport system in Paraguay. The main objective is to ensure the quality, safety and comfort in the services. After decades of a conflicting relationship with transportation businessman for the first time, with the current government they reached a consensual plan so as to promote a new model of work, professional, efficient, honest, and people-oriented. Regarding the ticket price, is set at 2400 Gs. (0.50 USD) and a subsidy regime is established at 100Gs (0.02 USD) for each ticket issued by authorized companies. On the other hand, the decree establishes the binding of the bus companies to modernize its fleet; moreover, the state regulates the contribution per unit of 0km buses to be introduced.

Proponent Institution: National Government

Implemented by whom: MOPC

Year of initiation of the project: 2014
Year of conclusion: 2016

Source of founding: National Government
Investment: 30.000.000 USD

Who benefits:
 Commuters of the metropolitan area of Asuncion

Media diffusion of the project
 Radio, TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
 No public participation

Reason for non implementation:
 Currently being implemented

Source: - <http://www.mopc.gov.py/oldpol/vmt/wp-content/uploads/2014/05/DECRETO-2130-RENOVACION-DE-FLOTA.pdf>
 - <http://www.mopc.gov.py/gobierno-inicia-reforma-del-transporte-publico-garantizando-calidad-seguridad-y-comodidad-en-los-servicios-n1307>

FILE N° **7**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: River transport for Asuncion

Transportation



Image used as reference. Source:
<http://www.noticierodigital.com/tag/ferry/>

Description of the project

Asuncion, bordered by the Paraguay river, intends to use the waterway to install a system of river passenger transport to ease the chaotic traffic road which every day collapses the metropolitan area.

The idea, contained in a plan presented to the Municipal Board shows that a million and a half vehicles enter each weekday to Asuncion, which has half a million inhabitants. According to the last census (2014) 80% of these vehicles comes from the metropolitan area of the city, which has a total population of about two million and a half people. In response, project creators direct their view of the river Paraguay and its use as alternative transportation to the people around the city.

"We want to take the water that bypasses the city to decongest the chaotic and stressful traffic of Asuncion" explained Victor Sanchez, councilor in charge of proposing the project.

The river transport service proposed covers the banks of the Paraguay river in the section between the cities of Lambaré and Mariano Roque Alonso, both in the Gran Asuncion. In order to implement this project it requires the political will of the municipal authorities, to strengthen port structure and provide the boats.

Proponent Institution: MOPC

Implemented by whom:
 Private consortium

Year of initiation of the project: 2015
Year of conclusion: 2017

Source of founding: Public private partnership
Investment: Not specified

Who benefits:
 Commuters of the metropolitan area of Asuncion

Media diffusion of the project
 TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
 No public participation

Reason for non implementation:
 Lack of political support

Source:
 - <http://m.ultimahora.com/transporte-fluvial-asuncion-n864129.html>
 - http://www.prensa.com/mundo/Transporte-aliviar-congestionamiento-vehicular-Asuncion_0_4126837403.html

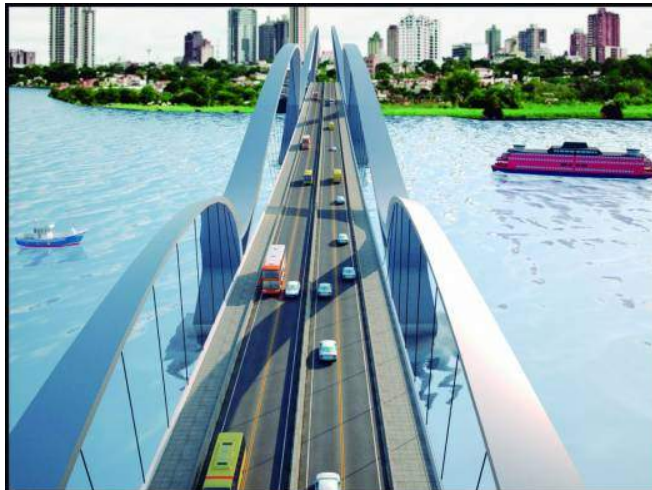
FILE N° **8**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Bicentenario Bridge

Infrastructure



Description of the project

The mayor of Asuncion, Arnaldo Samaniego, during the election campaign to hold the commune chief, promised to build a "bridge Bicentennial" in Asuncion to expand to the other side of the river. The plan is being studied by the technical team of the district capital, as indicated.

Samaniego said the bridge would link Itapytapunta with Lower Chaco. Additional works, such as terrain elevation, paving, port facilities for industrial and commercial part, among others will also be developed. With the new bridge, the border with Argentina would be a few eight kilometers from the downtown area of the capital. According to preliminary studies of the project. "We do not want a city that turns its back to the river," quoted the mayor.

Proponent Institution: Korean private consortium

Implemented by whom: Korean private consortium & MOPC

Year of initiation of the project: 2011
Year of conclusion: 2013

Source of founding: Public private partnership
Investment: 100.000.000 USD

Who benefits: Paraguayan citizens

Media diffusion of the project
 Newspapers and web pages

Public involvement in the process of development or implementation of the project:
 No public participation

Reason for non implementation:
 Lack of political support

Source:

- <http://www.abc.com.py/edicion-impresa/economia/proyecto-de-puente-del-bicentenario-579486.html>
- <http://www.ultimahora.com/proyecto-quiere-extender-asuncion-chaco-in469824.html>

FILE N° **9**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: ÑU GUAZÚ Highway

Infrastructure



Project design



Current traffic

Description of the project

SECTION 1: It starts at the intersection with Route No. 9 "Don Carlos Antonio Lopez" and the street Itapúa, to Prog 3 + 200 in the Arroyo Itay a bridge H ° A ° of 45 meters in length.. At Av. Semidei the construction of a tunnel 50 meters long along the same is planned. The road includes the construction of six roads.
 LENGTH: Highway 3.20 Km more 1.6 Km = 4.8 Km side streets..
 BRIDGES: 45 m.
 TUNNEL 80 m.

Source:

- <http://mopc.gov.py/construcci-n-de-la-autopista-nu-guaz-p4>

Proponent Institution: MOPC

Implemented by whom:
Public private partnership

Year of initiation of the project: 2014
Year of conclusion: 2016

Source of founding: Public private partnership
Investment: 22.000.000 USD

Who benefits:
Commuters of the metropolitan area of Asuncion

Media diffusion of the project
Radio, TV, newspapers and web pages

Public involvement in the process of development or implementation of the project:
No public participation

Reason for non implementation:
Currently being implemented

FILE N° **10**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Tunnel Semidei

Infrastructure



Description of the project

This is the first urban road tunnel for public access in Asunción. The overpass will be one-way and facilitate the shift to the left of the come shot by Transchaco highway towards Madame Lynch avenue. The work wants to guarantee the usage of more than 40,000 vehicles passing through the area daily.

According to the Minister of Public Works, Ramón Jiménez Gaona, there is a need to modernize the country through the development of infrastructure, taking into account the growth of our economy. The needs are urgent and in the case of the MOPC, the results should be concrete and visible. "The challenges are huge, yet urgent projections in time. We are aware that our field is the space of the concrete, and the increased demand for citizenship and the overall national activity" he quoted.

Proponent Institution: MOPC

Implemented by whom: MOPC

Year of initiation of the project: 2013
Year of conclusion: 2014

Source of founding: National Government
Investment: 7.000.000 USD

Who benefits:
 Commuters of the metropolitan area of Asuncion

Media diffusion of the project
 Radio, TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
 No public participation

Reason for non implementation:
 Implemented and finished

Source:

- www.mopc.gov.py
- <http://www.ultimahora.com/el-tunel-semidei-ya-esta-habilitado-n771269.html>
- <http://www.paraguay.com/nacionales/tunel-de-semidei-es-seguro-103603>

FILE N° **11**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Monorail Rumiñahui

Infrastructure



Description of the project:

The project is called "Monorail Rumiñahui" (in guarani) which is a means of mass transportation that will provide the city with electrical urban trains. The wagons passing through its own path on a concrete elevated monorail without occupying the space of road avenues, moving passengers safely and efficiently.

The monorail system provides many benefits to users, from safety, comfort on the trip, easy access to the embarking and disembarking, and a very important issue for business in front of the avenues: urban surplus value throughout the monorail system . This means that the buildings have a maximum value for the development of urban or large-scale business ventures. The monorail also has a lot social benefits that are synthesized in saving time, transport capacity, environmental care and safe transportation.

Proponent Institution: Private consortium

Implemented by whom: Public private partnership

Year of initiation of the project: Not specified
Year of conclusion: Not specified

Source of founding: Public private partnership
Investment: 276.000.000 USD

Who benefits: Commuters of the metropolitan area of Asuncion

Media diffusion of the project
 Radio, TV, newspapers, and web pages

Public involvement in the process of development or implementation of the project: No public participation

Reason for non implementation: Lack of political support

Source:
 - www.mopc.gov.py
 - <http://www.abc.com.py/edicion-impres/politica/monorriel-es-lo-mas-ventajoso-para-los-pasajeros-de-asuncion-454970.html>

FILE N° **12**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: First stage of the 'Solidaridad Park'

Green infrastructure



Description of the project

National Bidding 205/10.

It is the most emblematic work of the three other planned within the Restructuring Program of the Center, modernization of public transport and government offices. The other two are Arroyo Jaén and Sanitation Rehabilitation Avda. Stella Maris.

Filling of two platforms: 46,650 m3 of washed sand, protection gabion walls, railings, reinforced concrete pedestrian bridge of 43.00 meters x 15.00 meters linking both platforms, portal access, guardhouse , wide area for parking, pedestrian areas with plaster, concrete paving tiles and ecological cobblestone, sandboxes for children's, playground, drinking fountains, trash cans, benches, lighting.

Proponent Institution: MOPC

Implemented by whom:
Public private partnership

Year of initiation of the project:
March 2011
Year of conclusion:
March 2013

Source of founding:
IDB and local founding
Investment: 900.000 USD

Who benefits:
Citizens of the metropolitan area of Asuncion

Media diffusion of the project
Radio, TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
No public participation

Reason for non implementation:
Implemented and finished

Source:
- <http://mopc.gov.py/parque-de-la-solidaridad-1ra-etapa-p15>

FILE N° **13**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Linear river coast park, Asuncion

Green infrastructure



Description of the project:

The area comprises three kilometers long and 40 meters wide. It also has gardens, banks, medical facilities, and little stores. Bicycle paths and sidewalks also are planned along three kilometers.

It is a flood prone area which has been filled. The project will require an investment of 6.000.000 USD. This amount will be paid to the company T and C, through a Public Private Partnership.

Moreover, the project will require the relocation of at least eight families installed in the area. The linear park will be the second green area built in the Bay of Asuncion. The first was the Bicentennial Park, opened in 2011 by the MOPC, coinciding with the celebrations for the 200th anniversary of National Independence.

Proponent Institution: MOPC

Implemented by whom:
Public private partnership

Year of initiation of the project:
2013

Year of conclusion: 2014

Source of founding: IDB
Investment: 6.000.000 USD

Who benefits:
Paraguayan citizens

Media diffusion of the project
Radio, TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
Public participation during the process of development of the master plan

Reason for non implementation:
Currently being implemented

Source:

- <http://www.mopc.gov.py>

- <http://www.abc.com.py/nacionales/costanera-para-el-2016-1347680.html>

FILE N°

14



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Parque Metropolitano

Green infrastructure



Distribution of the park

Description of the project:

The Guasu Metropolitan Park was executed by the Ministry of Public Works and Communications. An investment of 300.000 USD was required. The work began in the year 2010 and ended in 2012. The place is ideal for those who like cycling, hiking and runs within a secure perimeter with natural landscape.

With respect to the circuits, the sidewalk will be separated from the bike paths for better circulation. In this way, the riders will have their own space. The project has a second stage where the lighting will be implemented, as well as parking.

Proponent Institution: MOPC

Implemented by whom: MOPC

**Year of initiation of the project: 2012
Year of conclusion: 2012**

**Source of founding: National Government
Investment: 300.000 USD**

Who benefits: Paraguayan citizens

Media diffusion of the project
Radio, TV, newspapers, magazines, and web pages

Public involvement in the process of development or implementation of the project:
No public participation

Reason for non implementation:
Implemented and finished

Source:

- <http://www.mopc.gov.py>
- <http://www.abc.com.py/edicion-impresa/economia/mopc-habilita-hoy-el-parque-metropolitano-453464.html>

FILE N° **15**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: 144 Social housing in the coastal strip of Asuncion

Land use



Proponent Institution: MOPC

Implemented by whom:
SENAVITAT & MOPC

Year of initiation of the project: 2014
Year of conclusion: 2015

Source of founding: National Government
Investment: 6.000.000 USD

Description of the project:

The National Government provided 144 social housing in the coastal strip of Asuncion, built in the Bicentennial Park as part of the compensatory measures for the people affected by the project. The work was carried out by the Ministry of Public Works and Communications. The Minister of Works, Ramón Jiménez Gaona, explained that the social aspect is a priority of President of the Republic. The premise is to create sustainable development as well as the fair distribution of wealth. The Government is determined to reduce poverty. The investment for these homes worth over 6.000.000 USD and includes the filling area and the construction of housing, as well as the urban intervention. The houses are two storey buildings with a kitchen, toilet, laundry room and two bedrooms. Each house had an average cost of 28.400 USD .

Who benefits:
Informal settlement inhabitants

Media diffusion of the project
informational workshops for the affected communities

Public involvement in the process of development or implementation of the project:
Public participation for resettlement of informal neighborhoods

Reason for non implementation:
Implemented and finished

Source:
 - <http://www.mopc.gov.py>
 - <http://www.mca.gov.py/>
 - <http://www.ip.gov.py/ip/?p=3156>

FILE N° **16**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: 320 social housing in San Felipe neighborhood

Land use



Aerial view of the 320 new social houses.

Description of the project:

The Paraguayan government has opened 320 social housing in Asuncion. The new neighborhood is located in the vicinity of the Av. Artigas and Peru, close to the railway. In addition to the 320 houses (that will accommodate 1,600 people) the neighborhood has a new community center and a school. The work demanded 2.000.000 USD donation of the Republic of China (Taiwan). It should be noted that this work has materialized through the joint participation of neighbors and community strengthening. As stated by one of the beneficiaries " *We are the new citizens who now have a better quality of life. This was a unique opportunity that will benefit, especially our children* ".

Proponent Institution: SENAIVAT

Implemented by whom: MOPC

Year of initiation of the project: 2001
Year of conclusion: 2002

Source of founding: Taiwan Republic donation
Investment: 2.000.000 USD

Who benefits: Informal settlement inhabitants

Media diffusion of the project:
 Informational workshops for the affected communities

Public involvement in the process of development or implementation of the project:
 Public participation for resettlement of informal neighborhoods

Reason for non implementation:
 Implemented and finished

Source:

- <http://www.mopc.gov.py>
- <http://www.mca.gov.py/>
- <http://www.abc.com.py/edicion-impresalocales/habilitaron-320-viviendas-de-caracter-social-en-asuncion-676795.html>

FILE N° **17**



POLICY ANALYSIS: Most important projects in Asuncion and the metropolitan area, from the beginning of the democratic period in 1990.

Name of the project: Master plan in Chaco'i

Land use



Description of the project:

URBA Real Estate has developed a urban proposal for Chaco'i as an extension of Asuncion. After the construction of the Bicentennial Bridge (which would connect downtown Asuncion with Chaco'i) the proposed residential houses can be built in the Occidental region and the ride to the city center would only take five minutes.

The development was based on an analysis of the expansion of the city. The capital will not grow vertically to the extent that it does horizontally because the Paraguayan culture values to live in a house with a courtyard rather than in apartments. In addition, extending the territory of Asuncion can also extend the mass of taxpayers.

Proponent Institution: Private consortium

Implemented by whom: Public private partnership

Year of initiation of the project: Not specified
Year of conclusion: Not specified

Source of founding: Private investment
Investment: Not specified

Who benefits: Citizens of the metropolitan area of Asuncion

Media diffusion of the project: Radio, TV, newspapers, magazines, and web pages.

Public involvement in the process of development or implementation of the project: No public participation

Reason for non implementation: Lack of political support

Source:
 - <http://www.mopc.gov.py> - <http://www.mca.gov.py/>
 - <http://www.ultimahora.com/proyecto-quiere-extender-asuncion-chaco-i-n469824.html>

FILE N° **18**