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**At the Margin of the Park: Social Inequality in Urban Environmental
Planning in the Santo Domingo Greenbelt**

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Planning in the Santo Domingo Greenbelt**

by

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Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Science in Community and Regional Planning

The University of Texas at Austin

August 2012

Dedication

This professional report is dedicated to the men, women and children of Los Platanitos in recognition of their inexhaustible strength.

Acknowledgements

I would like to thank Bjørn Sletto, for being the best professor I have ever had; his guidance, patience, and advice have been essential pillars in developing this work. I also would like to thank Bob Paterson for his support and open attitude. To Juan Torres, the Dominican Encyclopedia, for sharing all his knowledge about Dominican Republic with me, and helping me during my field research. My greatest thanks are to the people of Los Platanitos for always welcoming me into their homes and hearts.

I would also like to thank my family for their inexhaustible support and love. To Josh for kindly helping me throughout my studies, to Laura and David for their encouragement and care, and to my parents Peque and Alfonso, and my brother Ivan for always believing in me.

Abstract

At the Margin of the Park: Social Inequality in Urban Environmental Planning in the Santo Domingo Greenbelt

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The University of Texas at Austin, 2012

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Greenbelts have been used around the world to control urban growth and to enhance the natural environment of cities since the last century. However, some Latin American governments, influenced by urban renewal principles and modern planning, have implemented greenbelts to beautify and order cities. Much criticism has arisen about the social repercussions of using greenbelts as a way to control citizen behavior, which in many cases has resulted in exclusionary practices, especially of low-income populations. Based on a case study that documents and analyzes the uses and perceptions of residents of the informal settlement, Los Platanitos, of the Parque Nacional Mirador Norte, my research attempts to illuminate the political and social processes shaping urban environmental planning in Santo Domingo in order to understand practices of exclusion and marginalization in contexts marked by socioeconomic inequalities.

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Introduction

Since the end of the 19th century, greenbelts have been used around the world to control urban growth and to enhance the natural environment that surrounds cities. The implementation of greenbelts and their purpose have changed according to the evolution of environmental planning theory around the world.

In general terms, environmental planners have used greenbelts to implement land use policies in order to maintain areas of largely undeveloped, wild, or agricultural lands that surround or border cities. Some of the most common objectives of implementing greenbelts have been preserving rural areas, conserving wilderness, implementing farming and forestry land, creating open spaces, parks or recreational trails, separating urban areas, and, more recently, protecting ecological services. Historically, however, greenbelts have been used principally to control urban growth. Currently, greenbelts are defined as “linked networks of protected natural or working lands that surround a city and buffer areas beyond the city for urban and suburban growth” (Benedict M & McMahon E, 2006: 282).

Implementing greenbelts has been shown to be a practical solution to urban sprawl and land conservation; however, many cases have revealed that greenbelt success depends in great part on proper management and maintenance. The administration of greenbelts is usually regulated through government ownership, government zoning regulations, or the acquisition of development rights to privately owned land by governments or private nongovernmental organizations (Daniels & Bowers, 1997). However, including people in decision-making processes related to the management and maintenance of greenbelts has generated good results in recent years. Furthermore, greenbelts that are dynamic spaces with diverse land uses and flexible roles that vary

according to changing local circumstances and public assessments have been maintained more successfully (Amati & Taylor, 2010: 148).

Latin American cities also started using greenbelts to control urban growth. Influenced by modern, and Western planning, some Latin American governments implemented greenbelts to beautify and organize cities. Much criticism has arisen about the social repercussions of using greenbelt planning as a way to control citizens' behaviors, which in most cases has resulted in exclusionary processes (Outtes, 2002; Fernandez & Carre, 2011).

SANTO DOMINGO GREENBELT

Because of the socio-political complexity of Santo Domingo, the capital city of the Dominican Republic, the implementation of its greenbelt has evolved in interesting and complex ways. During the last century, the Dominican Republic has experienced significant urban growth. The proportion of the urban population in the Dominican Republic has increased from 24% in 1950 to 66% in 2001. That same year, 38% of the urban population was living in informal settlements (United Nations, 2008).

In an attempt to control this process of urban growth, the Dominican government created a greenbelt for the city of Santo Domingo in 1993. With an extension of almost 15.000 hectares, the greenbelt was defined according to the local fluvial systems, and its main goals were to stop urban growth, to control the expansion of informal settlements, and to improve the urban natural environment of Santo Domingo (Presidential Decree, 1993).

Currently, six urban parks are part of the greenbelt. The biggest of these parks is the Parque Nacional Mirador Norte (National Park Mirador Norte), which was created in 1992 as an example of how the greenbelt of Santo Domingo should function in the future.

However, since it is partially privately managed, concerns have been raised about access and use of the park by residents of informal settlements that surround it. Both projects, the Parque Nacional Mirador Norte and the greenbelt of Santo Domingo, were created during Joaquin Balaguer's second presidential period from 1986 to 1996 as part of an aggressive infrastructure expansion policy based on modern urban planning principles.

Balaguer, one of the most loyal advisers of Rafael Leonidas Trujillo, governed the Dominican Republic twice. After the death of Trujillo, one of the cruelest dictators of Latin America (1930-1961), the Marxist Juan Bosch won the presidential elections with a large majority. However, he was soon overthrown by a military junta, which governed until 1965 when the U.S. government imposed new presidential elections. After a fraudulent electoral process, and supported by the Trujillistas and the US government, Joaquin Balaguer assumed the presidency of Dominican Republic for the first time in 1966. He governed until 1978, and then returned to power in 1986 (Rosenfeld, 1992).

Though Balaguer proclaimed a progressive and democratic political project during his two presidential periods, he pursued an authoritarian form of governance based on clientelistic and corrupt practices, and giving government assistance to people in return for political support was a very common practice (Cassa, 2001; Gallego, 2008). Furthermore, both Trujillo and Balaguer's urban planning approaches were based on authoritarian decisions to develop huge urban projects without taking into account their social implications. Based on principles of urbanism, the main goals of urban planning were to beautify and sanitize the city. Informal settlements were looked at as the reflection of a disorderly, dirty, and vicious society that needed to be addressed through physical planning and design interventions. As Balaguer highlighted in a speech he delivered at the Inter-American Savings & Loan Conference in Santo Domingo in 1969.

Our ideal should not be that tourists visit Santo Domingo as they would to a part of Africa, attracted to this corner of the continent because of its primitive ways or its ridiculously picturesque appearance and the anarchy of its constructions, but because of its cleanliness, the order and symmetry of its residential suburbs, and the absence, in the areas covered by the regulating plan, of the insulting spectacle of poor housing in which our worst social vices are nakedly displayed. The magic word for every Latin American country is therefore: 'Construct' (Balaguer, 1969: 328).

The main goal of these building policies was the elimination or concealment of the informal settlements, which were considered the principal reason for the underdevelopment of the Dominican Republic. Furthermore, inhabitants of informal settlements were seen by the government as negative influence on the economy of the country because of their living conditions: "a man deeply involved in promiscuity, surrounded by a vicious moral and economical atmosphere in which only misery and abjection are breathed, is a 'lost dollar' to the economy of a country" (Balaguer, 1969).

The evictions and relocation processes were also marked by acts of corruption. Based on clientelistic practices, sometimes the new places created to relocate people were given to other groups in clear acts of patronage. For example, relocating people from La Zurza, an informal settlement next to the Isabela River, was impossible because the Municipality gave the new apartments to the Syndicate of Lottery workers to win votes in election times (Torres, pers. int. May 2012).

In other words, neither the greenbelt nor the Parque Nacional Mirador Norte represented an exception to the tradition of authoritarian planning. Both projects included evictions and relocations of entire informal settlements in order to beautify and organize the city. Moreover, the Parque Nacional Mirador Norte also included the building of a fence in order to avoid future occupations from inhabitants of surrounding popular settlements.

METHODOLOGY

I became interested in my research during my first visit to Santo Domingo in January 2012. I worked in the informal settlement of Los Platanitos for two weeks as part of a group of University of Texas at Austin students, who collaborated with community members to research challenges facing the community and to develop and implement possible solutions to their principal problems. As with many informal settlements in Latin American cities, Los Platanitos lacks most basic public services. Located in a valley and next to a *cañada*¹, the lack of garbage collection service has increased environmental and social risk and vulnerability in Los Platanitos. Based on participatory planning, we developed a vermiculture project in order to reduce organic waste in the community, but most importantly, the main goal of our work was to increase the social capital in Los Platanitos through the inclusion of women, youth, and children in the project.

The first day we arrived to Los Platanitos, we walked through the community to become familiar with our new working environment. The lowest area of Los Platanitos, called La Piscina, is located just in front of Gate Four of the Parque Nacional Mirador Norte. However, after informal conversations with some residents and leaders of Los Platanitos, I found out that many of them had not visited the park in their entire lives. This situation became even clearer in March, when during my second visit to Los Platanitos we carried out a participatory workshop in the park as part of the vermiculture² project. The group was enthusiastic about going to the park for the workshop, because the Parque Nacional Mirador Norte normally has an entrance fee, but in this case they were allowed to enter for free (although we had to complete a lot of paperwork and go to the

¹ The term *cañada* is used in Dominican Republic for “little stream,” or “creek.” Also it could be used to refer to informal settlements located in steep canyons.

² Vermiculture is composting sped up by worms.

administrative offices a number of times in order to get the authorization). It then became clear that visits to the park were not an everyday, or even infrequent, activity, which in turn led me to ask why residents do not use the park, and furthermore, to wonder about their perception of the park.

The research questions for this study were:

1. How has greenbelt planning influenced planning policies, and the urban spatial configuration of Santo Domingo?
2. What were the reasons and justifications for creating the greenbelt of Santo Domingo and the Parque Nacional Mirador Norte?
3. How do people from Los Platanitos perceive and use the Parque Nacional Mirador Norte?
4. How do people from Los Platanitos envision future policies and uses of Parque Nacional Mirador Norte?

I used four research methods to pursue my inquiry: review and analysis of literature and official documents, field observations and informal conversations, interviews with key actors, and focus groups.

In order to understand the principles that guided the creation of the greenbelt in Santo Domingo I analyzed secondary data about urban environmental planning theory in general, and greenbelt principles in particular. To delineate the context in which the greenbelt of Santo Domingo was created, I also collected and studied official, legal, and historical documents about its implementation and maintenance.

Field observations and informal conversations were very important research methods for my study. I visited the park two times with residents of Los Platanitos, one in March to develop a participatory workshop for the vermiculture project, and the other in June to conduct a visioning activity for my research. Since I had worked for three weeks

with residents of Los Platanitos in connection with the vermiculture project, and since I had visited Los Platanitos during one week for preliminary research, I already had many informal conversations with residents and community leaders. Furthermore, the fact that I was part of a third group of students that went to Los Platanitos to collaborate with residents through participatory planning facilitated my building of relationships in the community. It is well known that creating credibility and trust is a key factor when developing research that seeks to document people's perceptions. I had the advantage of the good relationships that previous students built with community members. Furthermore, because of the very participatory and collaborative approach of the vermiculture project, my relationship with community leaders from Los Platanitos grew very quickly each day, which gave me the confidence to talk with them about almost any topic. Field observations and informal conversations were complemented with photographic representations. Photos, which serve to give context to places, perceptions and narratives, are presented throughout this document.

Interviews with key stakeholders were conducted at two distinct levels. First, I interviewed Dominican urban planners and policy makers with the most knowledge of the topic, in order to analyze the institutional discourse about the role of the greenbelt and Parque Nacional Mirador Norte in Santo Domingo. I interviewed the Planning Director of the Municipality of Santo Domingo Norte, the Director of the Evaluation Department of the General Direction of Land Use and Development, the Participatory Budget Director of the National District of Santo Domingo, the Director of the Parque Nacional Mirador Norte, and two members of the Council Board of the Parque Nacional Mirador Norte, one of whom was the builder of the park in 1992. Second, I decided to work with community leaders of Los Platanitos. Community leaders could be seen as "key actors" for research. According to Fetterman, key actors can provide detailed historical and

contemporary data, knowledge about local political context and also details about everyday life in the community (1998). Key actors are typically informal or formal leaders in the community, but they may belong to different socioeconomic and age groups (Ibid). Furthermore, I consider that community leaders of Los Platanitos have an important level of representativeness that makes their statements more powerful. I applied semi-structured interviews with nine community leaders of Los Platanitos.

Finally, I used focus group —a participatory technique based on brainstorming processes— to develop a visioning exercise with residents and community leaders of Los Platanitos. The focus group was conducted in the Parque Nacional Mirador Norte, and 11 participants gave their opinions about how they envision the park in order to improve access to it.

Drawing on different urban environmental planning perspectives that have influenced greenbelt policies, Chapter 1 explores the origins of greenbelt theory, its influence on urban planning of Latin American cities, and the principal critiques of the social dimensions of greenbelt development. Considering the Dominican political context, Chapter 2 analyzes the local rationality behind the creation of the greenbelt of Santo Domingo and the different approaches to maintain the greenbelt. Chapter 3 focuses on the history of the Parque Nacional Mirador Norte, exploring how Dominican planners and policy makers perceive the relationship between the greenbelt in general, and the park in particular, with the city and especially with informal settlements. In Chapter 4, I present my findings from interviews with community leaders and informal conversations with residents from Los Platanitos in order to explore their perceptions about the uses of the Parque Mirador Nacional Norte, and I also detail their recommendations to improve their access to the park.

Chapter 1: Theoretical Background

At the beginning of the twentieth century, western cities experienced significant population increases, which caused overcrowding and unplanned growth. Efforts to improve the urban environment started with innovative planning proposals such as the “City Beautiful” and the “Garden City;” both projects expected to improve the quality of the environment and the public health of cities through urban physical design (Daniels, 2009).

For the first time, planning attempted to solve health and urban environmental problems, which in many cases arose due to the emergence of slums. Slums at that time were acknowledged as threatening to people’s health and quality of life, and overcrowding was seen as the principal reason for the lack of potable water and clean air, which directly affected human health (Hall, 2002: 13). Planners from Chicago stated, “slums exist today only because of the failure of the city to protect itself against gross evil, all of which can be corrected by enforcement of principles of sanitation” (Burnham, 1909: 100, 108). Based on sanitation measures, planners proposed to provide adequate air-light space and promote cleanliness in order to improve the quality of people’s environment. These cleanliness procedures were the first attempts to include environmental constraints as essential issues to take into account in urban planning. Furthermore, this sanitation approach was complemented by the inclusion of nature conservation issues in planning. Even though the word “environment” was never used in any plan at that time, the word “nature” was commonly used to highlight healthy urban environments, while the creation of parks started gaining importance in planning.

The “Burnham Plan 1909 for Chicago,” inspired by the “City Beautiful” movement, considered the establishment of a complete park system as a “precaution

measure” to avoid the “disorder, vice, and disease” caused by a high population density (Burnham, 1909: 47). Considering nature as a recreational space through the creation of parks, Burnham attempted to make people’s lives healthier and more pleasant. Specifically, the Burnham Plan encouraged the acquisition of land with “wild forests, filled with such trees, vines, flowers, and shrubs as will grow in this climate and all should be developed in a natural condition” (Ibid: 54). These features were then presented within a conceptual framework in which nature was the “normal condition” to which human beings are restored:

All of us should often run away from the works of men's hands and back into the wilds, where mind and body are restored to a normal condition, and we are enabled to take up the burden of life in our crowded streets and endless stretches of buildings with renewed vigor and hopefulness (Burnham, 1909: 53).

Looking at natural amenities as an essential part of the solution for urban problems favored the inclusion of green infrastructure in planning. Land conservation through the implementation of park systems and open public spaces started to be very common tools in planning in order to improve urban environments. On the other hand, limiting urban growth was another issue that planners started taking into account when planning “better” cities at that time. One of the most innovative proposals was the “Garden City” movement developed by Ebenezer Howard, which suggested a radical reconstruction of cities and included for the first time an “agricultural greenbelt.”

THE ORIGINS OF GREENBELT PLANNING

Some authors agree that Howard’s garden cities proposal represent the origin of the concept of “greenbelts” as a planning tool to control urban growth (Amati, 2008; Daniels, 2009; Llanos & Almandoz, 2008). Howard extended the thinking of his time with innovative social and environmental ideas such as urban decentralization, commonwealth, integration of nature in cities, and the implementation of greenbelts.

Howard proposed the creation of new communities outside of the overcrowded central cities. Howard's ideal city resulted from his revolutionary ideas for social justice, and his visionary wish for a new kind of society based on the "democratization of wealth and power" and the "decentralization of cities" (Fishman, 1977: 33).

In his unique book "To-Morrow: a Peaceful Path to Real Reform," published in 1898, and best known under its 1902 version: "Garden Cities of To-Morrow," Howard proposed the creation of a new kind of community based on the combination of urban and rural amenities, "the town-country magnet," which would keep the best of both worlds. The Garden City would have many social and environmental advantages such as low rents, high wages, low prices, freedom, cooperation, beauty of nature, pure air and water, bright homes and gardens, and easy access to parks (Howard, 1898). Including nature and open spaces was very important for Howard, as he explains: "human society and the beauty of nature are meant to be enjoyed together" (Howard, 1898: 317).

Howard proposed limiting the urban area and its population; therefore each Garden City should be a concentric ring of 6,000 acres with a total population of 30,000 people, but most importantly, it should include a permanent greenbelt of 5,000 agricultural acres to limit its expansion. However, implementing his ideas did not have the expected results.

Two experiments, Letchworth and Hampstead towns, were built following Howard's principles. The Garden City Association created in 1900 formed the First Garden City Company in 1903 with a capital of £ 300,000 to buy 3,818 acres 34 miles from London and contracted architects Unwin and Parker; however, no dividend was paid until 1913 (Hall, 1932: 98-99). The lack of resources, the demand of the housing market, and investors' demand for profits led the development of these two garden cities to focus more on aesthetic issues and the beautification of the houses in order to attract

possible buyers, which in turn led to high production cost and high prices. Despite Howard's wishes, "the Garden City could not create its own oasis of social justice in an unjust society" (Fishman, 1977: 52).

It has been said that Letchworth and Hampstead were the first so-called "garden suburbs," since they had no industry and were completely dependent on "commuting from an adjacent tube station, which opened just as it was being planned" (Hall, 1932: 104). Smaller developments were also inspired by the garden city movement and were modified to allow for residential "garden suburbs" without the commercial and industrial components of the proposed garden city. However, the environmental approach of the garden city movement inspired other internationally renowned planners, such as Unwin and Abercrombie, to develop greenbelts and open space projects in Europe.

Preservationist approach

Before World War II, many planners used greenbelts as a way to preserve the landscape that surrounded cities, thus reinforcing preservationist values in environmental planning. From a preservationist approach, planners Unwin and Abercrombie saw the implementation of greenbelts as a way to protect rural areas from urban sprawl. This situation generated an "urban-rural polarity" between the landscaping features of urban fringe suburbs and rural zones (Amati, 2008: 3). Greenbelts started to be included as important components in a "universal planning canon" focused on protecting rural areas from urban sprawl.

Raymond Unwin, a member of the Greater London Regional Planning Committee, supported the creation of the greenbelt for London in the 1930s. The principal objective of the London greenbelt was to provide open space and stop urban sprawl, highlighting the idea of preserving the existing countryside. Because the proposed greenbelt emphasized the importance of preserving the beauty of the

countryside, it was called the “country belt.” This separation of city and country “reflected the preservationist aversion towards hybrid landscapes but also overlapped with the modernist predilection for order” (Amati, 2008: 7). Furthermore, even though one of the objectives of the London greenbelt was to provide “recreational space” for the poor, when the London County Council finished purchasing greenbelt land in 1938, signs indicating the greenbelt location were built but they never were put in place. According to Amati and Yokohari (2007), this situation could be understood as reluctance to convert the greenbelt area into public space. It could be said that the aesthetic purpose remained the most important argument when defining greenbelt areas at that time.

After WWII, greenbelts were implemented in many cities such as Frankfurt, Vienna, Sydney, and Berlin, broadening the objectives of environmental planning as a discipline and spreading the greenbelt concept quickly around the world (Amati, 2008: 5-6). On the other hand, the emergence of regional environmental planning, the evaluation of environmental impacts, and the incorporation of ecological principles into environmental assessment characterized the environmental planning era from 1920 to 1969 in the United States (Daniels, 2009). Modern planning increasingly included greenbelts in order to achieve different goals such as land conservation, controlling urban sprawl, separating urban communities, and providing open space or parks, but the central focus remained on creating order.

GREENBELT PLANNING IN THE MODERN ERA

Modern environmental planning

During the 1970s modern environmental planning grew to include many regulations and controls to clean up the environment, and many local governments adopted master and comprehensive plans, in which the protection of air, water, coasts and

other natural resources were important aspects (Daniels, 2009: 182-185). Greenbelts became central to a normative policy that served modern planning objectives by uncovering “the internal logic of social systems through the application of rational analysis” (Amati, 2008: 7-8). Cities must have a determined size in order to be well managed and economically efficient. Furthermore, based on modernist planning principles, master plans included the implementation of greenbelts in order to rationally organize the cities. These master plans were mostly created by a small number of technicians based on top-down and state-led planning decision processes (Amati et al., 2010: 144). This situation led to the use of greenbelts for often-unpopular objectives, such as in the case of Japan and Korea, where greenbelts were implemented for strategic and military purposes (Kim & Kim, 2008; Watanabe et al., 2008).

On the other hand, the environmentalism that characterized the 1960s also influenced environmental planning. Recognizing that nature could be extremely vulnerable to human actions favored the regulation approach of environmental planning at that time, and for the first time industries were regulated in order to protect the environment (Benedict et al., 2006: 32). With the growing industrialization of natural resources and unmitigated environmental impact, people started to become concerned about how human development activities were affecting the environment. In the 1960s many experts were vociferous in their concerns about species extinction, habitat loss and high levels of pollution around the world. This situation culminated with the elaboration of *The Limits to Growth* in 1972, a book modeling the consequences of a rapidly growing world population and finite resource supplies (Meadows et al. 1972).

During the following decade, with the emergence of the sustainable development concept proposed by The World Commission on Environment and Development in 1987, environmental planning theory immediately assumed the sustainability approach in the

1990s. Sustainable development was based on the concept of achieving equilibrium between environmental, economic, and social dimensions (Brundtland, 1987). Greenbelt planning was not immune to this new sustainability trend, and they started to be used in order to reinforce planning efforts aimed towards achieving for social, economic and environmental sustainability.

Based on sustainability principles, the logic behind the creation of greenbelts changed, going from the total prohibition of development to permissible scenarios for land use. Following these ideas of sustainability, green infrastructure emerged as a planning strategy in its own right. Green infrastructure looks at land “conservation in concert with land development and man-made infrastructure planning” (Benedict et al., 2006: 2). In this way, greenbelts and green infrastructure were combined, allowing planners to argue that some planned development based on sustainability principles could be acceptable. This situation, according to Amati et al., represented “an opportunity to re-appraise greenbelts” (2010: 153). Furthermore, because the concept of sustainability included social issues as an important component to achieve sustainable development, the restrictions on using land for social projects such as affordable housing in greenbelts began to be questioned. Some planners argued that greenbelts could negatively affect social conditions by limiting land supply and raising land values in reserved urban areas (Amati et al., 2010: 144).

On the other hand, based on environmental and climate change concerns, the so-called “evolutionary-ecological land ethic” perspective, proposed by Aldo Leopold in the 1920s, was reinforced by the new environmentalism. Looking at nature “as a complicated, interconnected, functional system that is the result of long-term evolutionary change” provided a renewed urgency on the need of land conservation (Meffe, 2002: 57-58). This new conception of nature and the development of the new

discipline of conservation biology during the 1980s influenced the theories of environmental planning, and “added scientific rigor and new philosophical dimensions to [it]” (Meffe, 2002: 58).

In the 1990s, environmental scientists focused on the implementation of so-called “ecosystem management”, which includes new environmental perspectives based on “increasing sophistication and understanding in the ecological sciences, as well as on changing societal priorities” (Ibid: 59). Environmental planning was influenced by this ecological vision and many planning policies started to include ecosystem analysis when applying planning tools such as greenbelts.

Ecological approach

Even though Mumford and Geddes were aware of the ecological view of cities and its function as generators and dissipaters of energy in the 1920s, it was not until the 1990s that urban environmental planning added ecological science to its tools to improve the natural environment of cities. Soon, using greenbelts for enhancing ecological networks was implemented as an important strategy to create linear green-spaces that will serve to protect and enhance ecosystems (Amati, 2008: 13). Furthermore, some planners argue that, considering the urban effects of climate change, such as the “heat island” effect, connecting greenbelts could provide corridors for ecological restoration and mitigate negative consequences of climate change (Amati et al., 2010: 152). Recognizing the ecological functions that greenbelts could provide became crucial in planners’ attempt to prevent development in hazardous areas and to protect fragile ecosystems.

This ecological framework was reinforced by the use of technical tools such as Geographic Information System software, which could be used to show and analyze different ecosystems that surround and constitute greenbelts. The development of GIS contributed to the creation of ecological networks based on the recognition of

environmental services, the protection of fragile ecosystems and endangered species, and avoiding development in flooding and hazard areas. The Florida Ecological Network is an example of using greenbelts to connect and conserve critical native ecosystems maintaining connectivity among ecological systems (Benedict, et al., 2006: 52). The environmental planning rationality changed from an aesthetical and economic approach of looking at nature to a more technical and sophisticated analysis based on ecological principles (Meffe 2002, Amati, 2008).

A good example of this situation is the Chicago Plan 2020, which also considers the beauty of nature, but it goes farther than the Chicago Plan 1909 by pointing towards a more complex conception of nature. The plan's inclusion of discussion about ecosystems, natural habitat, and biodiversity are good examples of this shift in perception, which becomes most evident when the Chicago Plan 2020 integrates itself with The Chicago Wilderness Program (Johnson, 2001:136). However, while the Chicago Plan 2020 analyzes the impact of the continuing expansion of development as "a significant threat to the natural systems of the region," it still focuses on this mythic "return to nature," by underscoring the effects these impacts have on "the ability of residents to find refuge in natural areas" (Chicago Technical Report, 2001: 30). However, this proposal is not free of the economic growth perspective, and we are trapped in a capitalist conception of nature: "the environment is protected, sometimes even enhanced; residents readily have access to open space from their back doors, and developers often get higher sales prices because of the added natural amenities" (Chicago Technical Report, 2001: 35). In other words, the importance of nature or the environment lies in its ability to increase land value.

From another critical perspective, these attempts at including ecological fundamentals into planning policies have prompted criticism from some ecologists. They

claim that from an ecological perspective, “cities are not environmentally sustainable: by definition, their territory is too densely populated with humans to be self-supporting” (Martinez A, 2003: 50). Another critical point is that when implementing greenbelts, there is always a level of uncertainty in drawing their boundaries. Defining greenbelts in master plans that will guide urban and regional development for more than 15 years as a permanent boundary is not appropriate, especially considering the unforeseen changes in the social and physical structures of cities over that will take place over that period of time (Amati, 2008: 8). Furthermore, different political contexts also will shape greenbelts. Decentralization, financial incentives, regulatory flexibility, or the application of different socio-economic policies will affect the management and maintenance of greenbelts. Finally, greenbelts are also sensitive to different socio-economic urban realities and public opinion.

GREENBELT PLANNING IN LATIN AMERICA

Latin American countries also started using greenbelts as planning tools to control urban growth. It is well known that since colonial times, European architecture influenced the building of cities in the New World. According to Hardoy, urban planning in Europe was transferred to Latin America during the last century, a process that was largely due to the opening up of Latin American countries to global commerce during that time (1992: 21).

At the beginning of the last century, the implementation of sanitation measures through environmental ordinances and local regulations were among the principal European influences on planning in Latin American cities. In Argentina, Brazil and Uruguay green areas were designated and expanded in order to provide fresh air to its principal cities. The creation of parks was a very important measure taken by local

planning authorities, which included in many occasions the importation of trees and plants, and the construction of artificial lakes in order to replicate European landscapes (Hardoy, 1992: 31; Outtes, 2002; Fernandez and Carre, 2011).

This European influence in Latin American urban planning was reinforced by the fact that many of the first urban planners in Latin American had studied in European cities, especially in Paris. The newly established planning agencies in Latin American cities hired famous experts, principally from Europe and the United States, to develop urban plans that reflected admiration for “Old World” culture and academia (Almandoz, 2010: 88). According to Hardoy, until the 1940s, Latin American architecture schools were under the guidance of the Ecole des Beaux Arts in Paris, which directly influenced the kind of urban projects implemented in Latin American cities (1992: 33). However, most of the projects followed only some of the European ideas and they did not implement complete urban solutions. For example, the self-sufficiency city garden idea was never implemented in Latin America, and the creation of garden suburbs or residential developments for middle classes was only applied in some cities.

The conception of garden cities in Latin America faced the same financial problems as when they were attempted in Europe (Hardoy, 1992: 27). As a result, the creation of new incomplete residential developments, most of them with only the most basic public services, contributed to the so-called “urban sprawl” process in Latin America cities. However, rich suburbs and travel by car did not characterize this Latin American version of “urban sprawl.” It was more a process of “peripherization” in which the income per capita in these areas was much lower than in the core area of the metropolitan region (Martinez, 2033: 47).

This situation worsened with the modernist trend that affected urban planning in Latin American cities during the 1970s. For example, following the idea of organizing

cities through rational approaches, the military dictatorship in Argentina implemented a greenbelt in Buenos Aires in 1977. Drawing on Foucault's theory of power, Fernandez and Carre (2011) analyzed the implementation of the Buenos Aires greenbelt as a way to control and discipline the urban population. Based on hygienic and aesthetic functions, they see the so called "green lung" in Buenos Aires as a bio-political measure where urbanism is implemented through the application of planning policies based on political power, and ultimately applied to change and control citizens' behaviors (Ibid: 122). In the same vein, Outtes concludes that in Argentina and Brazil the first "modern plans" emphasized "rationalism and scientific logic to regulate the attitudes and behaviors of society through the city" (2003: 148). Early urban planning was linked with projects for transforming the urban poor through the modification of their built environment, which responded to the needs of capital expansion (Ibid: 159).

Despite the attempts to control urban growth, according to the Global Report of Human Settlements, the urban population of Latin America and the Caribbean was 78.3% in 2009, while an estimated 70% of new housing production in Latin America and the Caribbean was informal. This development represented a significant threat to the green agenda of policy makers and environmental planners (2009: 127). The rapid urban growth in Latin American cities triggered spontaneous invasions of rural-urban migrants to the urban periphery, increasing the establishment of informal settlements with poor access to government services such as piped water, sewage treatment, and garbage disposal, which in turn threatened the natural environment that surrounds cities.

During the 1990s, ecological approaches based on sustainability concepts also influenced planning in Latin American cities resulting in a "boom" of land conservation in peri-urban areas and exacerbating the tension between conservation and development in the region (Zimmerer & Carter, 2002). Among the principal reasons for this boom in

conservation and sustainability concerns are the high deforestation rates in Latin America, new concerns about biodiversity conservation, the emergence of new technologies such as GIS and remote sensing that facilitated land use management. Also, the influence of NGOs and international organisms in conservation and sustainable practices, such as the IUCN (International Union for the Conservation of Nature), and the UNDP (United Nations Development Program), led to an increase in the number of urban parks, reserves and strictly protected areas. In 1997, approximately 45% of the Caribbean was under IUCN designation, compared to only 7% in Africa, 12% of Europe, and 8% of East Asia (Ibid: 208).

Going from sanitation measures to land conservation measures, the physical environment of Latin American cities has been increasingly modified in order to control urban sprawl and to enhance the natural environment of the cities. However, these processes have been accompanied by social injustices, especially affecting low-income neighborhoods. Environmental justice is a movement that has advocated the solution to urban environmental inequities. Even though the environmental justice movement was born in the First World (Cole and Foster 2001; Pellow and Brulle eds. 2005), its principles also apply to the Latin American reality (Carruthers ed. 2008).

Many cases have shown the existence of inequity in access to better quality of life and healthy environment for low-income people in cities. Pedlowski, Andrade, Corabi and Heynen (2002) present an example of urban forest inequality in Rio de Janeiro. According to Pedlowski et al., the relation between environment and social justice has grown contributing to “[unveiling] social segregation patterns” in many Latin American cities (2002: 12). Measuring tree abundance and species diversity in a medium-sized coastal city of southeast Brazil, Pedlowski et al. conclude that while high-income neighborhoods have access to a good quality of life, healthy environment, and ecological

services provided specially by trees such as “lower temperatures, landscape diversity, and ecological dynamism,” low-income neighborhoods have to face more dry landscapes and their environmental repercussions such as “higher annual temperatures and more degraded environments” (2002: 18). In this context, it is important to pay attention to the creation of greenbelts and its relationship with their adjacent neighborhoods, especially those which are low-income, and most importantly, the so-called informal settlements that have emerged as a response to unplanned urban growth and urban social inequities.

Originally, greenbelts emerged as planning tools to control urban growth and to improve the natural environment of cities in the early twentieth century. Later, the implementation of greenbelts contributed to the establishment of modern planning policies and land conservation measures. These different approaches also shaped urban planning policies in Latin American cities, which used greenbelts as planning tools to prevent urban sprawl, create order, preserve land, and discipline urban population. Santo Domingo, the capital of Dominican Republic, experienced its greatest population growth during the second half of the 20th century. In 1996, the Dominican government created a greenbelt for Santo Domingo as an effort to control urban sprawl and especially the expansion of informal settlements. Drawing on the urban planning trend in Latin America and the local political context of Dominican Republic, the following chapter analyzes the evolution of the greenbelt of Santo Domingo from its creation to the current date.

Chapter 2: The Santo Domingo Greenbelt

The Dominican Republic has not been an exception to urban growth processes during the last century. According to the United Nations, in 2001, 66% of the Dominican population was urban, and 38% of the urban population was living in slums (2008). Following the urban planning trend in Latin America, in 1993, the Dominican government created a greenbelt for the city of Santo Domingo in order to regulate urban growth, limit the expansion of informal settlements, and ensure the improvement of the quality of the urban natural environment (Presidential Decree, 1993). With eight environmental zones defined by principal fluvial systems, the Santo Domingo greenbelt surrounded the city and originally covered an area of approximately 15,000 hectares (CONAU, 2000a: 4). In addition, the Parque Nacional Mirador Norte was created as an example of how the greenbelt of Santo Domingo should function as a planning policy; however, its management has provoked concerns about its relationship with the informal settlements that surrounding it.

The proportion of urban population in Dominican Republic has increased from 24% in 1950 to 66% in 2001 (United Nations, 2008). Santo Domingo, as the political and economic capital of Dominican Republic, absorbed the majority of this urban population increase, and this urban growth proceeded without a comprehensive planning policy. During the first presidential period of Joaquin Balaguer, from 1966 to 1978, Santo Domingo experienced its major urban growth. Based on the idea of developing a “modern city” and continuing Trujillo’s plan to decentralize Santo Domingo, large public investments were made in the construction of new roadways, the building of major projects and the creation of industrial zones. This physical urban planning approach was intensified during Balaguer’s second presidential period (1986-1996), and despite a

national economic crisis due to low world prices of coffee, cocoa and tobacco, his government developed a more aggressive building infrastructure policy than it had in the 70s (Valdez, n/d). As a result of the physical approach of the urbanization policies, the migration from rural areas to Santo Domingo increased significantly, resulting in the emergence of informal urban settlements. By 2001, 38% of the Dominican urban population was living in slums, most of them without basic public services, which in turn directly affected the quality of the natural environment of Santo Domingo (UN, 2008).

Santo Domingo is surrounded by a fluvial system composed of many natural springs and aquifers, which constitutes the principal sources of water for the city. The rivers Ozama, Isabela and Haina flow through the city from East to West, providing a beautiful setting for the city. The basins of these rivers contain tropical and subtropical rainforest, wetlands and mangrove ecosystems, whose ecological functions are key in preventing flooding. However, interventions in these ecosystems have a long history, which has been marked not only by urban development but also by agricultural activities. It is easy to find pasture, cane plantations, orchards, and deforestation in these areas. Even though the river watersheds were included in the greenbelt, they have not been immune to the negative consequences of unplanned urban growth. Currently, the Ozama watershed is considered the most contaminated in the country and is characterized by urban, industrial, port, agriculture, recreational, and touristic uses (GEO, 2007:41).

Furthermore, greenbelt areas have also been affected by insufficient public services in the city. Only 27% of the population of Santo Domingo Province is connected to a sanitary sewer system and only 1% of sewage is treated, which directly affects the environmental quality not only of the greenbelt but also of all of the river system of Santo Domingo (OPS/OMS, 2000 cited by GEO, 2007:124). Additionally, deficient solid waste management in Santo Domingo directly affects the urban environment. Solid waste

doubled from 1700 tons in 1994 to 3500 tons in 1998-2000 (GEO, 2007: 129). The principal landfill of Santo Domingo, La Duquesa, received 9700 tons of trash per month in 2001, and in 2002, only 73% of households had garbage collection systems in Santo Domingo (Ibid: 130). According to Chalas 2002 (as cited by GEO 2007), there are 10 or 12 landfills, which are located in inadequate areas contaminating sources of groundwater and rivers in Santo Domingo (Ibid: 131). Furthermore, hazardous and industrial wastes drain to the principal rivers of Santo Domingo.

Now, 20 years later, big portions of the greenbelt have been occupied by new residential projects, informal settlements, and other “unauthorized” land uses. It is necessary to analyze the rationality behind the creation of the greenbelt of Santo Domingo, and the different approaches used attempts to maintain and restore the greenbelt, in order to understand why the greenbelt ultimately has not functioned as it was intended to.

DEVELOPMENT OF THE SANTO DOMINGO GREENBELT

Joaquin Balaguer governed the Dominican Republic during two decade-long periods, first from 1966 to 1978 and later from 1986 to 1996. During his first presidential period, Balaguer already showed his environmental concerns when he passed a law in 1967 that closed all the sawmills in the country in order to stop deforestation. However, due to the authoritarian character of this decision, it faced opposition by important economic groups from all around the country (Ramirez, n/d: 4). His environmental concerns came to the forefront during his second presidential period. Inspired by the environmental movement that characterized Latin American countries in the 90s, Balaguer adopted planning strategies that encouraged the conservation of natural resources, such as the organization and creation of new natural protected areas around the

country, the creation of a series of urban parks, and the signing of the United Nations Convention on Climate Change (Ibid). According to the Balaguer Foundation, which is an institution that still works in the city providing economic assistance to people, the creation of the greenbelt of Santo Domingo followed the principles behind the greenbelts in Washington, Paris and Buenos Aires, and one of the major goals of Santo Domingo was to become an example in natural conservation for Latin American cities (Ibid).

From a more technical perspective, some experts point out that the principal goal of the greenbelt creation was to protect the water sources of the city from urban growth. This could explain the configuration of the greenbelt, which follows the river system that runs through the city (CONAU, 2007). Most specifically, according to the decree that created the greenbelt, its principal purposes were:

- To regulate urban growth and the expansion of irregular settlements in order to ensure the improvement of the natural urban environmental quality in Santo Domingo,
- Protect the watercourses and the natural reserves that exist in Santo Domingo in order to guarantee a good quality of life for people, and
- Conserve representative endangered plant species from the tropical rainforest such as the evergreen trees *Mammea Americana*, *Guarea Guidonia*, and *Ceiba Peltranda*.

In addition to the purposes of the greenbelt, the decree set the following list of permitted land uses in the Greenbelt:

- Integral environmental conservation
- Protected areas to maintain genetic banks for main tree species
- Forest and natural reserves
- Areas to preserve forest, fluvial and lake ecosystems

- Experimental agricultural fields
- Water and wastewater treatment plants
- Landfill areas
- Recreational, educational and sport areas, and
- Low-density residential areas among others

This inclusion of different permitted land uses on the greenbelt reflects the prevailing urban planning trend of “green infrastructure,” which combines land conservation, land development, and man-made infrastructure development based on sustainability principles (Benedict et al., 2006).

Furthermore, in order to protect the watercourses, Article 6 of the decree calls for the preservation of the existent riparian forest through the creation of buffer zones of 100 meters on each side of the Haina, Isabela, Ozama, and other big rivers; 50 meters on both sides of streams; and 30 meters on smaller watercourses within the Ozama river basin and its tributaries. If the vegetation has been removed in these new protected buffer zones, the Forestry Department will immediately restore the forest cover (Article 7, Presidential Decree 183-93, 1993).

Finally, the decree created the National Commission of Urban Affairs (CONAU), which later in 2010 was renamed DGODT (National Direction of Development and Land Use). The DGODT (CONAU) would be the institution in charge of coordinating public actions and property surveys for the implementation of the greenbelt (Presidential Decree 183-93, 1993).

The huge extension of the proposed greenbelt, almost 15,000 hectares, did not make it easy to clearly define the parcels that it included, and even though the presidential decree 183-93 established the limits of the greenbelt, no study was conducted of the property status of the parcels located within it. In addition, the process to declare

private lands as public utility and to compensate or pay for them was not clear. At that time, using presidential decrees to declare private land as public utility was a common practice in Dominican Republic, largely because the dictatorial approaches to decision-making still remained from Trujillo's era.

These top-down practices had functioned in smaller areas, such as in the case of the creation of the Parque Nacional Mirador Norte with 670 hectares, which later was included in the proposed greenbelt as an example of how the greenbelt should be managed in the future. However, the presidential decree 381-92 declared of public utility 38 parcels located in the southeast of the city, which were defined as fragile cliff ecosystems in 1992. Currently, this area constitutes the Park of Americas, which has not evolved as successfully as the Parque Nacional Mirador Norte. The park is characterized by many, unpermitted land uses, which shows the importance of taking into account specific social conditions and local population dynamics when planning.

Many other specific actions were taken in order to improve the environmental and social conditions of specific areas of the greenbelt during Balaguer's government. In 1994, the project, "The Social, Urban and Ecological Restructuring of the Marginalized Neighborhoods along the Ozama and Isabela Rivers" (RESURE) was declared as national priority by presidential decree 76-94. Based on a risk analysis along the Isabela and Ozama rivers, this project aimed to improve the living conditions of people who settled in high natural risk areas. It could be said that RESURE become one of the first attempts to include social variables in urban planning in Santo Domingo. According to the RESURE reports, the neighborhoods included in this work were La Zurza, Capotillo, Simon Bolivar, Gualey, Los Guandules y La Cienega, all of which were located next to the Isabela and Ozama rivers, whose banks were part of the proposed greenbelt (CONAU, 1999: 5).

The main goal of RESURE was to improve these neighborhoods through the provision of basic public services. However, it also included the relocation of people from La Zurza and La Cienega based on the presidential decrees (358-91 and 359-91), which proposed the urban renewal of both informal settlements. In order to select the families that would be relocated, the project involved a socio-economic survey of the area conducted by the National Commission of Urban Affairs (CONAU/DGODT). However, the third report of RESURE concluded that despite the efforts to include community members in decision-making processes, their participation was limited by the complexity of implementing solutions to housing problems, especially in informal settlements (CONAU, 1999: 5).

The use of presidential decrees continued as a method to implement planning decisions. In 1995, the presidential decree 72-95 set a buffer of 200 meters around the Parque Nacional Mirador Norte, affecting all parcels located in the proposed buffer. According to its second article, only residential uses were permitted in the buffer areas and the minimum extension for the parcels was 1,000 meters, from which 40% must be reserved for gardens or parking. However, currently it is easy to find smaller parcels and other non-permitted land uses within buffer, including informal settlements. Creating this buffer zone in order to beautify the surroundings of the greenbelt could thus be understood as an attempt to separate the urban environment and the “country areas,” reflecting a preservationist reluctance towards hybrid landscapes but most importantly, an emphasis on the creation of order (Amati, 2008).

Furthermore, during Balaguer’s government, top-down planning decisions were common practices, and they were not only justified by environmental reasons but also by aesthetic and urban sanitation motives as in many Latin America cities at that time (Outtes, 2003). One example of this phenomenon was the building of the Columbus

lighthouse from 1987 to 1989 in order to celebrate the 500th anniversary of the Columbus voyage in October 1992. The reasons given to build the lighthouse included: to renew tourism and international investments, to contribute to the beautification of Santo Domingo, and finally to neutralize the reputation of past human rights abuses during Trujillo's era through a pompous inauguration. The lighthouse construction was part of an urban renewal process, which included slum clearance and the building of a wall to hide popular settlements that surrounded the lighthouse. Later, this large wall would be called the "wall of shame" by the Dominicans (Greene S, 2003). Moreover, the building of the Columbus lighthouse fits within the dominant planning ideology in Latin American cities at the time, which was based on the logic of urbanism. This project attempted to discipline and to control the attitudes and behaviors of the urban poor through the modification of their built environment (Outtes, 2003; Fernandez & Carre, 2011).

Decrees to transform private land into land of public utility reflects a centralized, presidential approach to environmental planning decision-making. This situation is reflected in Article 3 of the greenbelt creation decree, which declares that any settlements or productive activities in the greenbelt will not be permitted unless they were ordered by the presidency. Furthermore, these processes did not include opinions or participation by people who lived in the affected areas, limiting their actions in the best case to the possibility of negotiating the price for their land or to be relocated, and in the worst case to be evicted without any compensation. It seems that environmental planning was considered an issue independent from social structure, which decreased the possibility of creating sustainable environmental planning policies, and hence negatively affected the actual creation and maintenance of the "protected areas." As a result of this dictatorial style of making environmental planning decisions, planning in Santo Domingo was developed in a more centralized and top-down way than in other Latin American cities.

The environmental zones of the Santo Domingo Greenbelt

Based on the division of the greenbelt in eight environmental zones defined according to its ecological features, the National Commission of Urban Affairs (CONAU/DGODT) started to develop management plans for each zone. CONAU/DGODT was created in 1987 as an agency under the Presidency of the Dominican Republic to institutionalize national planning decisions. In 1993, CONAU (DGODT) was decreed the coordinating entity of all actions taken in order to implement and to protect the proposed greenbelt. In 2000, the Dominican government issued the law 64-00 about environment and natural resources, which reinforced urban environmental planning decisions, including the greenbelt decree, and also created the Ministry of the Environment and Natural Resources. Even though the creation of this new Ministry clearly supports the policymaking process, it also represented new challenges for inter-institutional collaboration, especially with existing institutions such as CONAU. Later, in 2010, CONAU was renamed the National Direction of Development and Land Use (DGODT).

The eight environmental zones of the proposed greenbelt were defined principally based on the fluvial system of Santo Domingo. The rivers that defined these environmental zones were Haina, Isabela, Ozama, the streams Guzman, Manzano, Cachon, and Oriental, and the Ozama Wetlands (CONAU, 2007: 41). In 2000, CONAU (DGODT) developed management plans for three of the eight environmental zones: Rio Haina, Arroyo Guzman, and Arroyo Manzano. According to CONAU (DGODT), the management plans were practical and technical tools to manage and conserve the natural resources of the greenbelt (2007: 45). These management plans emphasized the ecological services of the greenbelt, thus following the urban environmental planning

trend in the 1990s which included ecological sciences as one of its principal tools to develop urban environmental management plans (Amati, 2008).

Furthermore, each management plan would have three basic documents. First, the Informative document contains basic information about the natural and built environment of each zone based on specialized field research about socio-economic, botanic, hydrology, water quality, weather, geology, soils, archeology, and biodiversity issues. Second, the Ordination document includes the goals and criteria for the management plan formulation, and the land use categories for each environmental zone. Finally, the Policy document defines the norms that regulate the different land use categories in each environmental zone (Ibid: 47). Most importantly, the principal objective of the management plans is to redefine the limits of the Greenbelt based on the new urban and environmental reality, to address the pressures from urbanization processes in the areas, to give urban alternatives in order to avoid invasions of public lands, and to develop planning regulations (CONAU, 2000a: 3-4).

This attempt to redefine the borders of the greenbelt of Santo Domingo based on new urban realities makes clear that setting greenbelts as a permanent boundary is not always suitable. As Amati concludes, the establishment of greenbelts, as a long-term permanent urban boundary is not appropriate because social and physical structures of cities are constantly changing (Amati, 2008).

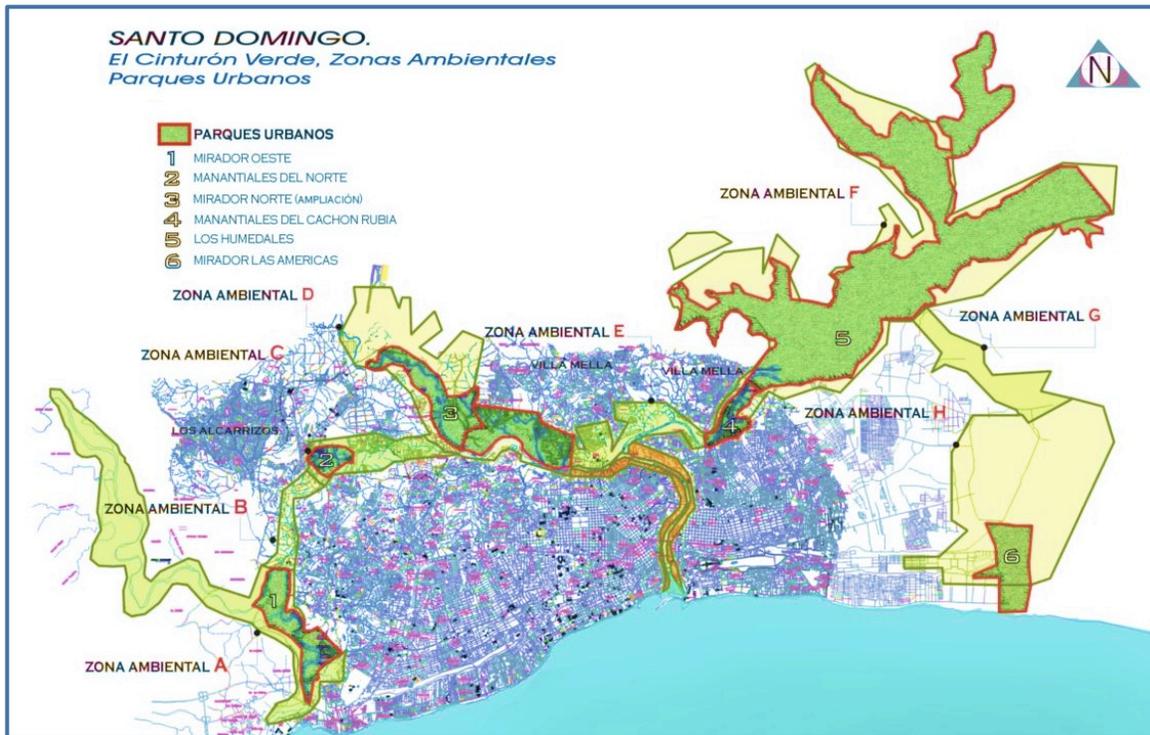


Figure 1: Environmental Zones and Urban Parks in the Santo Domingo Greenbelt.
 Source: CONAU/DGODT, 2002.

Environmental Zone A: Haina River

With 17.25 km², this environmental zone is located in the southwest of the proposed greenbelt, in the lowest part of the Haina basin, and includes the principal port of the country (GEO, 2007:41). The principal local vegetation corresponds to sub-tropical rainforest ecosystems, but the zone also includes agricultural areas, especially sugar plantations and grasslands. According to the management plan, there are approximately 90,000 people living in this area, most of them in conditions of poverty (CONAU, 2000a: 10). Some recommendations included the eviction and relocation of informal settlements, which are situated on the left bank of the Haina River, the elimination of local landfills, the development of an environmental educational program, and the socialization of the greenbelt (Ibid, 27). Additionally, the management plan developed a map of the zone

with zoning regulations, which limited the land use to “strictly protected land, common protected land, and protected land with tolerance”³ (Ibid, 5).

Environmental Zone B: Arroyo Guzman

The Guzman stream lies at the heart of this environmental zone, which goes from kilometer 14 of the road Duarte to the confluence between the Malanga stream and the Haina River. It covers approximately 2.17 km² and its vegetation is mostly subtropical rainforest. According to the management plan, this zone includes urbanizations, informal settlements, informal landfills, and agriculture areas (CONAU, 2000b: 21). The management plan recommended the eviction and relocation of informal settlements, which are situated on both banks of the Guzman stream, the elimination of informal landfills, the development of an environmental educational program, and the socialization of the greenbelt (Ibid, 41). Finally, the management plan developed a map of the zone with zoning regulations, which limited the land use to “strictly protected land, common protected land, and protected land with tolerance.”

Environmental Zone C: Arroyo Manzano

This environmental zone covers an area of 4.92 km², and follows the Manzano stream from its origins at Kilometer 13 of Duarte Avenue to its mouth in the Isabela River. The management plan does not contain the informative document. However, the principal recommendations for the area are the regulation of the construction of houses in the banks of the Manzano stream, the reforestation with native species in critic areas, and the conservation of the riparian forest of the Manzano stream (CONAU, 2000c: 23).

Environmental Zone D: Isabela River

³ Strictly protected land includes channels and creeks, cultural heritage, roads, and areas of high natural risk. Common protected land includes landscaping, environmental and ecological interests, scientific value, and agricultural uses. Protected land with tolerance includes residential, sport or educational, and controlled landfills uses.

This zone goes from the confluence between the Isabela and Higuero rivers to the confluence between the Isabela and the Ozama Rivers, covering an area of 24.19 km². This zone does not have a management plan. However, it is well known that the banks of the Isabela River contain many informal settlements and presents high contamination levels.

Environmental Zone E: Ozama River

Environmental zone E has an extension of 5.68 km² and extends from the confluence between the Ozama and Isabela rivers to the confluence of the Ozama River and the Dajao stream. This zone does not have a management plan.

Environmental Zone F: Los Humedales

With 68.30 km², this environmental zone covers a large area of lagoons, mangroves, rivers, streams, creeks, marsh and forest vegetation, gallery forest, which are located in the floodplains of the low Ozama basin. This zone does not have a management plan.

Environmental Zone G: Arroyo Cachon

This environmental zone covers 5.22 km², and it extends from the Ozama wetland to approximately Kilometer 16 of the Mella road. This zone does not have a management plan. Currently, the Ministry of Environment has rehabilitated this park, and many people visit it every week. The park has five sources of groundwater that are used by residents of the area. It is important to mention that the process of rehabilitation has taken into account the participation of residents in the maintenance of the park, and in various environmental programs such as reforestation, park security and cleanup activities.

Environmental Zone H: Oriental

This environmental zone has an extension of 21.09 km² and is located between Kilometer 16 in the Mella road and Kilometer 15 in the Las Americas road, including the Air Base of San Isidro. This zone does not have a management plan.

Even though the division of the greenbelt in eight environmental zones did not have the results expected by the governmental institutions in terms of implementing the proposed greenbelt, it definitely provided a better understanding of the social component in each analyzed area. However, because of political pressures, CONAU (DGODT) did not finish the development of the management plans for the other environmental zones. Thus in an attempt to “rescue” the areas of the greenbelt that were still relatively undisturbed, in 2002, presidential decree no. 207-02 created five urban parks and expanded the Parque Nacional Mirador Norte.

Parks in the Santo Domingo Greenbelt

The five urban parks established in 2002 are considered special units of the Greenbelt, whose main purpose is to protect the following areas within the greenbelt:

1. Mirador Oeste Park, which is located along the banks of the Haina River. It has an extension of 4.45 km². This park includes the historic ruins of the sugar mills Engombe and Palave.
2. Mirador Manantiales del Norte Park, which is located in the upper area of the Arroyo Manzano. It has an extension of 1.50 km².
3. Mirador Manantiales del Cachón de la Rubia Park, which is located in the Municipality of Santo Domingo Oriental. It has 1.75 km² and protects eight natural springs that feed the Ozama River.

4. Gran Parque de las Américas, which is located in the eastern zone of the greenbelt. It has an extension of 3.34 km² and includes a group of caves with petroglyphs.
5. Humedales del Ozama National Park, which was in better environmental conditions due to its far location from the city. It has an extension of 47.42 km². This park is part of the 86 protected areas of Dominican Republic, which covers 12,000 km²; i.e. 25% of the national territory (GEO, 2007:47).

In addition, the presidential decree no. 207-02 established the expansion of the Parque Nacional Mirador Norte in order to cover the banks of the Isabela River from the Isabela's ridge in the Avenue Jacobo Majlutato the Isabela aqueduct. The park has a total extension of 9.41 km².

Considering the total area covered by the new urban parks, it is obvious that the “protected areas” within the greenbelt have decreased significantly, going from almost 150 km² in 1993 to approximately 68 km² in 2002. This, in effect, represents a reduction of the greenbelt by more than 50% in nine years. This becomes clear when observing Figure 1, where the bright green areas marked by the numbers 1, 2, 3, 4, 5, and 6 represent the new parks while the dull green areas represent the original greenbelt (Fig. 1).

The creation of urban parks also included a new approach to define uses. Presidential Decree 207-02 from 2002 emphasizes the public uses of the new urban parks, and recreation, environmental education, and ecological tourism uses gain importance compared with ecological conservation approaches. Following the pattern of previous decrees, it called for the expropriation of all public and private lands to be declared as of public utility. Additionally, the decree recommends the creation of Boards to manage each park and the development of management plans. Furthermore, the decree

recommends community participation in the management of the parks, according to Article 36 of the Environmental Law 64-00⁴.

The implementation of the greenbelt of Santo Domingo has evolved according to different social and political urban dynamics since its creation, and its role and purpose has always varied according to changing local circumstances and political considerations. The reduction of its extension is the most palpable evidence of a very irregular planning process in which the last decision to create urban parks could be seen as a desperate attempt to control and order a growing and relatively chaotic city. Among the parks created in 2002, the Parque Nacional Mirador Norte has had a different dynamic. It was originally defined before the idea of the greenbelt developed, and later it was considered as an example of proper management of the Santo Domingo greenbelt. However, while Mirador Norte National Park could be seen as a successful project to slow urban growth and to conserve fragile ecosystems, important social concerns have arisen regarding its relationship with informal settlements that surround the park.

⁴ Article 36: The protected areas should be managed according to its categories, zoning and regulations, based on the management plans approved by the Ministry of Environment and Natural Resources with the participation of the communities and its organizations in the management of them (Law 64-00).

Chapter 3: Parque Nacional Mirador Norte

Parque Nacional Mirador Norte is the largest urban park in the Dominican Republic. It is located in Santo Domingo Norte in the center of the greenbelt. It protects an extension of approximately 9.4 km² parallel to the Isabela River, between the highway Villa Mella and the Avenue Charles de Gaulle. Its limits are the Avenue Mirador Norte in the North, the Isabela River in the South, the Avenue Hermanas Mirabal in the East, and the Avenue Jacobo Majluta in the West.

Given its huge extension, the park has six gates, each of which has different services and features. Gate One is next to the Avenue Hermanas Mirabal and is surrounded by small hills that permit a great view. This entrance also offers sports infrastructure such as basketball, tennis and volleyball courts.

Gate Two has playgrounds for children, pedestrian walkways surrounded by trees, and two ecological trails that lead to the banks of the Isabela River. Yaguaza Lake can be seen from Gate Three and its hills provide a view of the entire park. It also has a Restaurant called La Cotorra, which serves food from 9:00am to 5:00pm, and a Conference Center for 150 people with a parking lot for 200 cars. The principal service that this gate offers is the possibility of hosting social and formal events in its installations. The price for rent booths is approximately 3,000 pesos (U\$75.00), and it includes 50 entries and 30 chairs.

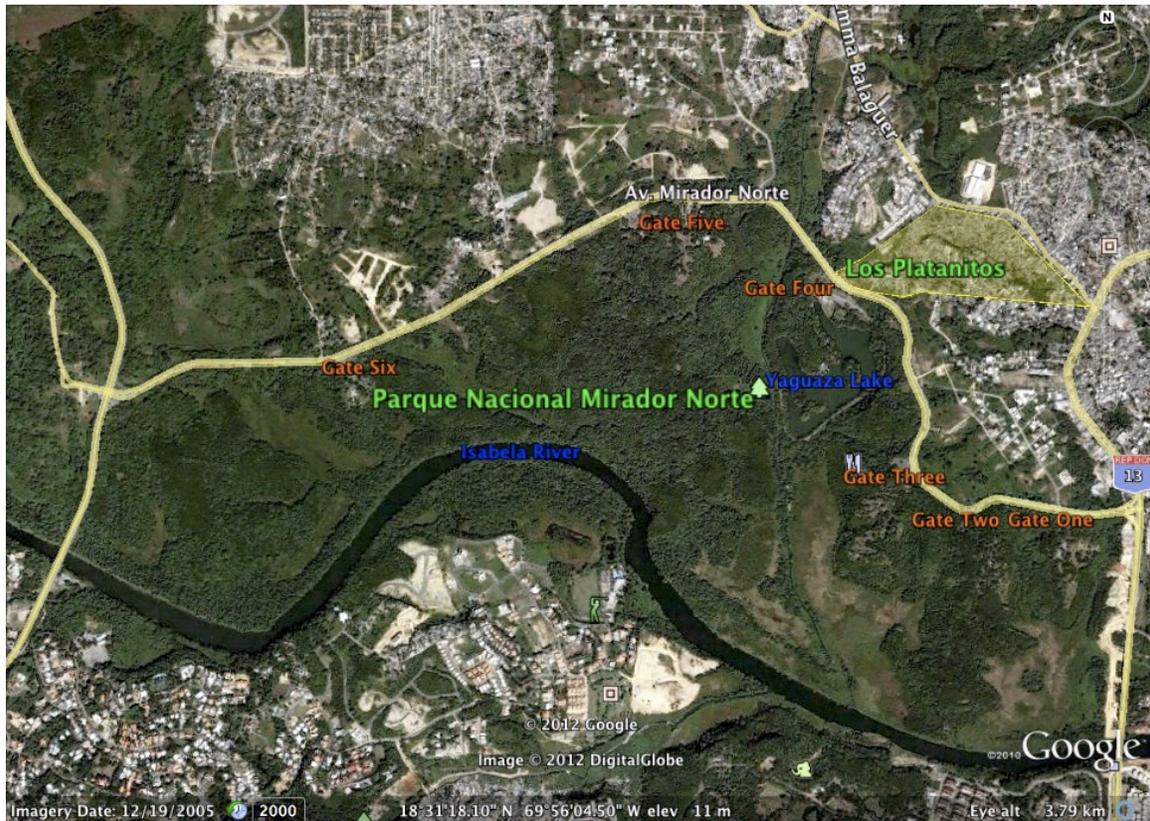


Figure 2: Map of the Parque Nacional Mirador Norte and Los Platanitos. Source: Google (2005).

According to the Director of the park, Gate Four is the most visited (Soriano, pers. int., June 19, 2012). It has an artificial lake called Yaguaza of more than 2,000 m² and offers canoe and paddleboat rentals for 40 (U\$1.00) and 60 pesos (U\$1.50) respectively each half hour. It also has bicycle rentals for 35 pesos (U\$0.88) each half hour. As is the case with the other entrances, this area has many trails that allow visitors to appreciate the biodiversity of the area (Fig 3).



Figure 3: Basketball courtyard and Yaguaza Lake in Gate Four. Source: Photo by Author (2012).

The administration of the park is located at Gate Five. This area also has playground for children, viewpoints, and some art monuments. A public health center works in this area from Monday to Saturday as an additional service provided by the park in partnership with the Municipality of Santo Domingo Norte. Finally, Gate Six has fruit trees, two ecological trails, playgrounds for children, and natural alleys surrounded by beautiful gardens.

HISTORY OF THE PARQUE NACIONAL MIRADOR NORTE

Located in the environmental zone D of the greenbelt, Parque Nacional Mirador Norte was created by a presidential decree in 1992 and its establishment process was based on the expropriation of private lands and the compensation for private investments in agreement with the expropriation law 344 from 1943. According to various interviewees and some informal documents, since the 1950s, Jose David Rodriguez, a

private rancher and farmer, was the owner of most of the land that today constitutes the park. Given the ecological characteristics of this area, the land was expropriated by Balaguer's government in 1992 and declared of national interest in order to conserve and rehabilitate it. At that time, the idea of creating the greenbelt for Santo Domingo had already been proclaimed by many urban planners and the Parque Nacional Mirador Norte emerged as a pattern, "an example of how the government wanted to preserve" the future greenbelt area (Hernandez, pers. int., June 20, 2012). Since it was developed as the nucleus from which the greenbelt would be created, the Parque Nacional Mirador Norte has been seen by many urban planners as Balaguer's personal desire.

In 1993, Balaguer delegated the construction of the park to the architect Tomas Hernandez Ramos, who immediately assumed the responsibility for the planning and building of the administrative and public infrastructure for the park. Rafael Hernandez was one of the principal collaborators of Balaguer and he was responsible for the building of many urban projects in Santo Domingo. Hence it is clear that Hernandez shared not only Balaguer's environmental concerns, but also his predilection for top-down approaches to planning.

Like Balaguer, Hernandez was "in love with the city" (*enamorado de la ciudad*), which is reflected in a speech he made as president of the CONAU (DGODT) in 1994. In this speech, *The Defense of the Urban Space: The Greenbelt of Santo Domingo*, Hernandez blames population growth and informal settlements or "invasions" as the main causes of the urban blight:

Urban space is mercilessly attacked by unscrupulous persons who occupy its land, in spontaneous and anarchic ways causing severe damage, which is often irreparable, to the urban structure (Society of Architects from the Dominican Republic, 1994: 3).

Hernandez' efforts to implement this vision of a new urban infrastructure included many evictions and relocations. As he affirms, "we took a series of measures in order to do what we thought was good and eradicate these type of constructions" (Hernandez, pers. int., June 20, 2012). The creation of the Parque Nacional Mirador Norte was no exception, and its construction included evictions of some informal settlements. As Hernandez maintains, "I had to evict in order to build the park, because the area that is in front to the Avenue Maximo Gomez was occupied" (Hernandez, pers. int., June 20, 2012). These "occupations" included not only homes but also commercial buildings, including a super market, which had to be relocated. However, even though there was some ongoing agricultural use, most of the selected area was still "green" and considered to have high ecological value.

According to Hernandez, Balaguer changed the concept of urban parks in Santo Domingo. In the 1960s, Balaguer proposed to Hernandez the construction of an urban park in Santo Domingo, which would be similar to the Central Park of New York, a green area in the middle of the city (Hernandez, pers. int., June 20, 2012). However, the political climate at the time was not amenable to such a large-scale project, and much of the designated area was already populated by informal settlements. Still, other green areas were created during this period, such as the Botanical Park, the Mirador Sur Park, the Zoo, and the Aquarium. This process laid the groundwork for a movement away from the concept of parks inherited from colonial times, i.e. those with a cathedral and public buildings, towards a new concept of peri-urban green areas (Hernandez, pers. int., June 20, 2012).

This new concept of the park culminated in the development and construction of the Parque Nacional Mirador Norte in the 1990s. After two years of work and with an investment of 40 million pesos (US\$1,000,000.00), the Parque Nacional Mirador Norte

was opened to the public on July 11, 1996, with a huge event where people had the opportunity to enjoy the park for free. Many of the interviewees in Los Platanitos remembered that day as a great event, especially because the entrance to the park was free and there were many activities.

Originally in 1992, the park had an extension of 4 km², duplicating the urban green area at that time (Hernandez, pers. int., June 20, 2012). Later, through decree 207-02 in 2002, it was enlarged to an extension of 9.41 km² as part of an attempt to protect areas of the greenbelt that were still in good environmental condition.

Justification or reasons to create the Park

Based on the Latin American context during the 1990s, the rationality behind the creation of the Parque Nacional Mirador Norte was defined by the ecological and environmental features of the selected area. This approach coincides with the urban planning trend in Latin American cities at that time, which included ecological principles in planning policies (Meffe 2002; Amati, 2008). The endemic vegetation that is found in the gallery forest along the Isabela River for approximately 5 km, including wetlands, humid forests, and dry forests, were some of the principal justifications for designating this area as national interest to be protected and conserved. However, some parts of this area were not in good condition because of agricultural uses and livestock grazing. In order to recuperate these intervened areas, the park was equipped with a nursery of native vegetation, and reforestation actions were taken.

Taking into account that the principal objective of the creation of the park was to conserve its natural resources and to recuperate the intervened areas, it was decided that the physical infrastructure of public services would occupy only 15% of the total area, while the remaining 85% would be preserved in its natural state (Martinez, pers. int., June 18, 2012).

The exaltation of the natural features of the area is still a very common discourse of many urban planners: “those groves along the banks of the Isabela River are truly amazing” (Martinez, pers. int., June 18, 2012). “The Isabela River during a sunset, in a little boat is a wonderful thing, that silence...” (Hernández, pers. int., June 20, 2012).

Despite efforts to recuperate the natural environment of the park, urban growth and the consequent creation of peripheral neighborhoods close to the park have affected its natural conditions. One of the principal sources of contamination in the park is the *cañadas* that flow into the park’s wetlands and the Isabela River. Because these *cañadas* are occupied by “informal settlements” that in most cases do not have basic public services such as garbage collection and wastewater, all of their waste is deposited into streams that flow into the park (Castillo, 2006: 25).



Figure 4: Polluted water of Yaguaza Lake. Source: Photo by Author (2012).

The artificial lake Yaguaza is one of the clearest examples of how the contamination has affected the natural resources of the park. It has heavy sedimentation and an unhealthy color. However, despite the environmental degradation of some areas of the park, the following formal principles of the Parque Nacional Mirador Norte show a strong focus on preserve its natural resources.

Mission, Vision and Objectives of the Park

The goals for the Parque Nacional Mirador Norte were developed in accordance with the rationality that guided the designation of this area as a national park. Based on ecological and conservation approaches, the new administrators defined the mission, vision, and objectives for the park as following.

Mission: Preserve the environment; promote the enjoyment, recreation, and ecological knowledge for everybody; protect flora, fauna, and hydrological resources.

Vision: Be recognized as the principal support for the preservation and conservation of the natural resources and ecological values of the country; to offer visitors the opportunity to participate in the mission of protecting the environment in order to successfully secure our reserves and natural heritage for a better future. This should be based on a culture of respect for the values of sustainable environmental, framed within the context of international environmental policy.

Objectives:

- Develop a nation-wide campaign promoting the ecological significance of the park.
- Incentivize activities that promote recreation, education, and culture in the protected area.
- Instruct visitors about the proper use of the park's installations as National Patrimony.

- Unify the efforts of the government, civil society, and private companies to implement new projects that make this natural wealth more attractive.
- Stimulate respect, admiration, and the engagement of the populace with the natural values of the park.
- Promote the study of the flora and fauna of the park, and the artistic creation that stimulates the elements and landscapes that constitute the park.
- Guarantee the preservation and protection of the areas and installations by maintaining them clean.
- Plan the development of the hydrological resources (PNMN, 2012 unpublished document).

After a brief analysis of the mission, vision, and objectives of the Parque Nacional Mirador Norte, it could be said that they reflect a mix of conservation and environmental education components, and this relates to the broader, current trend in greenbelt planning (Zimmerer & Carter, 2002; Meffe, 2002; Amaty, 2008). Furthermore, great emphasis is placed on the promotion of ecological values and also on the intrinsic value of nature, and the education of citizens about these values seems to be an essential objective. The message transmitted from this set of principles is that people need to be educated about the intrinsic value of nature in order to preserve and conserve the natural resources of the park. The park's director corroborates this observation when detailing the principal services that the park offers:

Our main service is to give environmental quality to people, i.e. people can come and stay in touch with nature, and from here they appreciate what God has given us... to preserve Isabela River, water resources, ensuring that many young people can get to the park and learn from nature... (Soriano, pers. int., June 19, 2012).

It could be said that public services, such as the recreational activities that the park is supposed to offer, are relegated to secondary consideration compared to the conservation and preservationist objectives.

Management of the Parque Nacional Mirador Norte

The administrative structure of the Parque Nacional Mirador Norte reflects the Latin American political context during the 1990s, which was characterized by processes of privatization of various public services. Based on the local context at that time, the current Director of the park points out:

At the time that president Balaguer created the park, it was the moment for *Patronatos*, it was believed at one point that *Patronatos* could correct the deficiency in the public administration and they were created for various things, the local media pushed hard for the creation of *Patronatos* (Soriano, pers. int., June 19, 2012).

In 1996 the administration of the Parque Nacional Mirador Norte was defined by the decree 132-96, which created a *Patronato*⁵ composed of at least 17 environmental experts and Dominican leaders and the following governmental institutions: Municipality of the National District, National Department of Parks, National Secretary of Forests, National Secretary of Sports and Recreation, National Secretary of Tourism, and the National Secretary of Public Projects and Communication. This administrative council has the responsibility of “operating, conserving and developing everything that was created by nature and by human ingenuity” in the Parque Nacional Mirador Norte (Article 2, Presidential Decree 132-96, 1996). This inter-institutional approach to managing the park is seen by some Dominican urban planners as a key factor that has ensured the economic resources for the maintenance of the park through the support of private companies, civil

⁵ *Patronato* refers to the combination of public and private companies in order to improve any company (generally implies the partial privatization of public services).

entities, international organizations and foundations, and ultimately the implementation of an entry fee.

Currently, ten members comprise the Board Council for the Parque Nacional Mirador Norte, and since 2007 the Director has been Reynaldo Soriano. It seems that the decision making process has not been very participatory. Because some of the Board Council's members are not living in the country and others have other occupations, reaching quorum for developing meetings is a challenge for the Soriano, the Director. It seems that the Director has the same power as the Board Council, and as he mentioned, he can issue any resolution about the park. Furthermore, according to Soriano, it has been a long time since the members of the Board Council have met: "I am not very persistent [in scheduling meetings], and if I call for a meeting three times and it falls, I lose interest, and I do not spend time on it" (Soriano, pers. int., June 19, 2012). The lack of participation of the Board Council's members has favored top-down decision-making processes in the administration of the park.

On the other hand, given the huge extension of the park and its limited yearly budget of 22 million pesos (U\$550,000.00), Soriano points out that sometimes he has to sacrifice some services that the park could be in capacity to offer to its visitants. However, according to Soriano, the park offers services in addition to its physical infrastructure, especially those related to environmental education (Soriano, pers. int., June 19, 2012).

Programs of the park

According to the web page of the Parque Nacional Mirador Norte, the last activity in the park was the reforestation day held in September 2009. According to Soriano, there is also a permanent program of reforestation in which high school students participate every year (Soriano, pers. int., June 19, 2012). As part of the high school curriculum,

students have to serve in 50 hours of social service, and they have the opportunity to choose to participate in reforestation programs in the park. Through this program, many young people are trained about the local ecology of Santo Domingo.

In addition, the park offers the opportunity to rent its physical installations for social activities. However, most of the interviewees believe that because of the limited budget and sometimes a lack of political will, the park is not offering all its potential services, especially those related to environmental education.

Hernandez, the architect of the park, says that the park has a lot of unrealized potential, and highlights that the original plan included the creation of two educational museums that have not been built. According to Hernandez, these museums do not require a big investment (one is about the Dominican stones, and the other is about the Dominican vegetation) and both of them would be easy to build and could be funded by the normal budget (Hernandez, pers. int., June 20, 2012).

Similarly, Soriano, the park director, points out the necessity of increasing the services that the park offers to its visitors, and highlights the disposition of his administration to develop more social events, recreational actions, and even religious activities. He feels it is important to combat the assumption that “in a park there are not only trees, this is a park not a jungle” (Soriano, pers. int., June 19, 2012). This affirmation contrasts with the principal objectives of the park, which are focused on conservation and nature preservation, and ultimately reveals a paradox in the discourse of the park’s administration.

USERS AND USES OF THE PARQUE NACIONAL MIRADOR NORTE

An average of 320 persons visit the Parque Nacional Mirador Norte per day, reaching the maximum of 1,500 persons on Sundays (Soriano, pers. int., June 19, 2012).

Contrasting this data with the population of Santo Domingo Norte, which is approximately 300,000 habitants, it means that only the 0.01% of the total population in Santo Domingo Norte is using the Parque Nacional Mirador Norte on an ordinary day.

All planners interviewed for this project concur that the park is under-used, but the reasons and possible solutions for this phenomenon vary according to their professional formation and ideology. The interviewed experts are unanimous, however, in pointing out the lack of education of people who live close to the park as the principal reason for their low presence in the park. In one of the more extreme expressions of this perspective, the Planning Director of the Municipality for Santo Domingo Norte states, referring to the neighborhood Los Guaricanos located close to the park: “citizens from marginal zones do not have culture to use the park” even if they “live on the edge of it” (ASDN, pers. int., June 19, 2012).

Implementing environmental educational programs, promoting the services of the park, and increasing activities to engage citizens are some of the alternatives suggested by urban planners from Santo Domingo in order to intensify the use of the park. More specifically, the Planning Director of the National District of Santo Domingo suggested a re-structuring of the administration of the park. Viewing the Municipality as the closest institution to people, he argues that the Municipality could give more life to the park through citizenship participation (Navarro, pers. int., June 19, 2012).

The principal questions that arise are, why are people not using the park and its installations? Which factors limit the use of the park? Is there a problem of access? Is there a problem of exclusion? The last question makes even more sense when looking closely at the urban reality of the informal settlements that surround the park.

Relation with informal settlements

Since its construction, the Parque Nacional Mirador Norte faced opposition and received a lot of criticism by citizens and some urban planners, principally because of social concerns. According to Hernandez, the architect who built the park, critics questioned the ethical principles of building a park, which cost 40 million of pesos (US\$1,000,000.00), while "having so many people living in poverty" in informal settlements such as La Cienega, an infamous informal settlement at that time. The park was built despite this opposition thanks to the tenacity and conviction of the Architect Hernandez, which is apparent when he says: "if the park was not built, there would be La Cienega and the park would be occupied by informal settlements today, this is how I see it" (Hernandez, pers. int., June 20, 2012).

In other words, the relationship between the park and the informal settlements was one of conflict or at least tension from the beginning. Furthermore, the Planning Director of the National District of Santo Domingo highlights an interesting paradox, comparing the fact that for many years the city of Santo Domingo was built facing away from the sea with the way that the current informal settlements face away from the park. This alienation from the park is hard to understand, especially when taking into account the lack of public spaces in most of the popular neighborhoods, where on many occasions the only public spaces are the *cañada*, alleys or streets (Navarro, pers. int., June 19, 2012). In the same way that the city of Santo Domingo was built with its back to the sea has not been explained yet, the relationship between informal settlements and the park has also not been explained.

Furthermore, this research explored the principal factors that influence the relationship between people, who live in informal settlements, and the Parque Nacional Mirador Norte. Some of the principal issues that were identified during my observations

as factors that could delineate this relationship are the entrance fee, physical facilities to access to the park, and security aspects into the park. I first asked urban planners about these factors to later compare their views with the community perceptions.

Entrance fee

Even though the Parque Nacional Mirador Norte is looked at as a relatively successful protected area in environmental terms, it is important to measure the social impacts of its partial privatization. Most importantly, if the original goal of the creation of this park and its administration was to “educate visitors about the value of a set of natural wealth, artistic creations, and the facilities built for joy of the spirit...” and “for the amusement of all humans,” the question is to what extent the implementation of a fee for the enjoyment of nature could discriminate against the low-income population that surrounding the park? (Article 1, Presidential Decree 132-96, 1996)

However, from the perspective of some urban planners including the Director of the Park, the entrance fee does not constitute an impediment to access the park for anyone. Affirming that the price is totally symbolic, they point towards lack of education as the principal reason for the low attendance to the park. Furthermore, the Director of the park mentions the premise that everything that is free could turn into something bad as a justification to implement the entrance fee, and he highlights the importance of having an entrance ticket as a way to control who enters to the park:

Whenever you put a price on something, provided that it is not exorbitant, you limit the entrance, and when a person in the park does not have a ticket, you can ask him or her to leave the park because you do not know why that person is there, but if the entrance is free, you have everybody in the park and you do not know what can happen (Soriano, pers. int., June 19, 2012).

Soriano goes on to say that the money raised by the entrance fee is so minimal that it is not enough to buy gasoline for the park’s vehicles. In addition, the entrance fee is

commonly waived when children, schools or organizations visit the park in order to encourage use of the park (Soriano, pers. int., June 19, 2012). Therefore, it could be said that from the perspective of the park's administration the entrance fee is more a measure to control access to the park, and to give a symbolic value to the attractiveness of the park.

The fees to enter the park are 30 pesos (U\$0.75) for adults and 20 pesos (U\$0.50) for children. It means that a family with four children, which is very common in popular settlements, needs approximately 140 pesos (U\$3.5) to spend a day in the park. Is this a lot of money for a low-income family? Here an urban planner compares this amount of money with the cost for a big beer Yumbo, which is 85 pesos (U\$2.13) in Santo Domingo. Based on the fact that many people drink beer every weekend in popular settlements, he concludes that the entrance fee to the park is not the factor that explains the low attendance to the park (Navarro, pers. int., June 19, 2012).

On the other hand, some planners look at the entrance fee as an important factor that could limit park use by low-income families. They claim that the entrance must be free for everybody or at least for people who live close to the park and especially in informal settlements. The builder of the park remembers the original idea of building the park as the "country club of the poor," and points out that he did not know about the entrance fee even though he is part of the Board Council of the park (Hernandez, pers. int., June 20, 2012). The ecologist Eleuterio Martinez also looked surprised when he heard about the entrance fee. He disagrees with the fact that people who live next to the park have to pay the entrance fee, and he makes an important comparison with the Parque Mirador Sur, which is free even though it is located close to high and middle-income neighborhoods (Martinez, pers. int., June 17, 2012). After a brief visit to the Parque

Mirador Sur, it is clear that there are a lot more people using its facilities than in the Parque Nacional Mirador Norte.

Physical facilities: the fence

An important feature that distinguishes the Parque Nacional Mirador Norte from other Dominican urban parks is the huge fence of iron and cement that surrounds the entire park. The presence of this fence is looked at as the main factor that has prevented occupations within the park (Fig. 5).



Figure 5: Park's fence. Source: Photo by Author (2012).

Looking at the urban dynamics in Santo Domingo, the building of a fence for the Parque Nacional Mirador Norte is justified by its creator as an efficient way to keep informal settlements out of the park.

The fence was built with the objective of helping to respect this area, if we left it without fence, a good day somebody put a banana tree and then a little house and later a building is built there. It is the experience that I have had (Hernandez, pers. int., June 20, 2012).

This theory is affirmed by the park director, Soriano, who points out that there was pressure to occupy the park by people who were evicted. Therefore, an additional budget was created to enclose the park and delimit its area in 1992 (Soriano, pers. int., June 19, 2012). Currently there are some specific places in which the fence has been broken; however, most of the fence has been maintained in good condition.

The year when the construction of the park fence started coincided with the inauguration of the Columbus lighthouse in Santo Domingo to celebrate the 500th anniversary of the Columbus voyage, which also included the construction of a fence, but in that case the so-called “wall of shame” was used to hide popular settlements that surrounded the lighthouse. Since one of the goals of both urban interventions was the beautification of Santo Domingo, their fences could be understood as clear expressions of modern planning approaches that through the elimination, separation, or concealment of undesirable urban areas attempted to create order, clean, and beautify Santo Domingo (Greene S, 2003).

Furthermore, even though urban planners pointed out unanimously that the principal reason for the low attendance levels at the Parque Nacional Mirador Norte is the lack of education of people who live in popular settlements that surrounded the park, the imposition of an entrance fee, the lack of access facilities to the park, and the construction of a fence are also important factors that need to be investigated at a community level. The next chapter contains the community perceptions about these factors, and also includes other, new factors that emerged from the interviews with community leaders.

Chapter 4: Los Platanitos and Parque Nacional Mirador Norte

Introduction to Los Platanitos

In front of Gate Four, the most visited entrance of the Parque Nacional Mirador Norte lies Los Platanitos, one of the oldest informal settlements in Santo Domingo Norte. Located in a valley, Los Platanitos is traversed by a *cañada* that runs from the Los Guaricanos neighborhood in the upper zone to La Piscina area in the lower zone. The La Piscina area is a small wetland that is fed by four streams, and it is located next to the Avenue Mirador Norte, just in front of the Parque Nacional Mirador Norte. Due to the natural stream, all of the water of La Piscina flows into the park, below the highway, and then drains into the Yaguaza River (Sletto ed. 2008: 63).

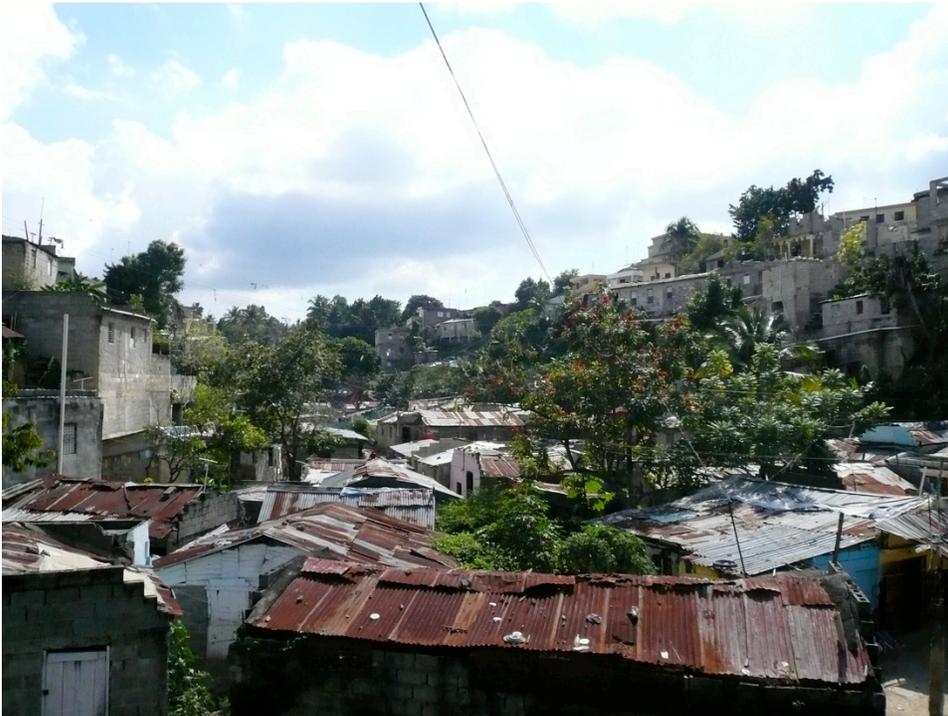


Figure 6: Los Platanitos. Source: Photo by Author (2012).

The first inhabitants of Los Platanitos came in the mid-1980s, before the park was built, as part of migration process from rural areas to cities looking for new opportunities. However, it was not until the mid-1990s that its population increased significantly (Sletto ed. 2008: 2). The birth and consolidation of Los Platanitos occurred when Santo Domingo experienced a rapid informal urban growth process in the 1990s, so that by 2001, 38% of the Dominican urban population was living in informal settlements (UN, 2008). As has been told, many measures were taken to stop the urban growth in Santo Domingo at that time, such as the creation of the greenbelt in 1993. It is important to mention that the increasing population in Los Platanitos coincided with the creation of the Parque Nacional Mirador Norte, which was inaugurated in 1994.

Currently, approximately 500 families live in Los Platanitos, and as the other 30 informal settlements in Santo Domingo Norte, its urbanization process has depended on their community efforts to improve its quality of life (Sletto ed. 2010: 4). Residents of Los Platanitos have had to fight for basic public services such as energy, water, public health, and trash collection. Furthermore, it is well known that most of the time, rural migrants settle in places that are not desirable and with high risk of natural disaster, such as near streams and in floodplains. Los Platanitos was built on a landfill and is also located in an area prone to flooding, which makes its population not only socially but also environmentally vulnerable.

According to Sletto (ed. 2008), the precarious living condition of the residents of Los Platanitos is reflected in their health problems: most families have at least one member affected by respiratory diseases and digestive problems, especially those families located next to the *cañada* (2008: 55). Unemployment is another problem in Los Platanitos: 48% of working-age adults are unemployed, while 39% have informal work. This situation could explain the low-income rates in the community, which go from a

median income between 2,400-4,000 pesos (U\$60.00-100.00) in the lower area to a median income between 8,000-13,800 pesos (U\$200.00-345.00) in the upper area of the cañada (Sletto ed., 2008: 59).



Figure 7: Houses and *cañada* of Los Platanitos. Source: Photos by Author (2012).

Perhaps the most serious problems in Los Platanitos stem from the lack of public trash collection. Solid waste can be found everywhere in Los Platanitos, the *cañada* being the principal deposit for it (Fig. 7). Trash accumulations worsen flooding problems and public health, which is clearly recognized by the residents of Los Platanitos. After a study of the waste production in Los Platanitos's households and the trash accumulations along the *cañada*, Sletto (ed. 2010) found that one of the largest accumulations of trash was in the lowest area of Los Platanitos in La Piscina (2010: 73). Furthermore, due to the fluvial connection between Los Platanitos and the park, the trash accumulations in the Piscina directly affect the environmental situation of the Parque Nacional Mirador Norte (Fig. 8).



Figure 8: La Piscina area and trash accumulations in Los Platanitos. Source: Photo by Author (2012)

Given the unplanned nature of the development of Los Platanitos, and the lack of public services, there are few adequate public spaces and green areas in the community. This situation was reflected in a visioning exercise where the residents of Los Platanitos mentioned the lack of green spaces in the community as one of the issues of “great social importance,” especially for local children and youth (Sletto ed., 2008: 89). However, it is important to mention that despite the lack of public and open areas, many families have developed subsistence agriculture systems that give the community a green appearance, especially when it is looked at from above. Walking around Los Platanitos, it is easy to find fruit trees, and edible and medicinal plants that have been planted or have naturally grown in the houses’ small backyards, and even in the alleys (Fig. 9).



Figure 9: Garden in an alley of Los Platanitos. Source: Photo by Author (2012).

On the other hand, it is important to see this lack of green areas and public spaces in the context of the proximity of Los Platanitos to the biggest urban park in Santo Domingo, the Parque Nacional Mirador Norte. This situation begs the question, why do residents in Los Platanitos not consider the park as a green area that could be used by their children and youth? At a quick glance, only the highway Mirador Norte separates Los Platanitos from the Parque Nacional Mirador Norte, so maybe the lack of a proper crosswalk is the key factor that limits access to the park. Or are there other factors, not necessarily physical, that limit residents' use of the park and shape their perception that it is inaccessible?

In an attempt to answer these questions, I interviewed nine representatives of two community organizations from Los Platanitos: Fundación Los Platanitos - FUMPLA (Los Platanitos Foundation), and Mujeres Unidas (United Women). I decided to work with

these community organizations for two reasons: first, representativeness is important to obtain more accurate information, and, second, it is well known that community leaders are often more familiar with the socio-political context that affects their community.

Both community organizations have emerged during the last two years, as part of the long-term, UT-led project to address the solid waste problem in Los Platanitos. Furthermore, FUMPLA has become an umbrella organization that also takes care of other social aspects in the community such as public health, community based micro-enterprise development and building relationships with other similarly disadvantaged community organizations, while Mujeres Unidas, a women's leadership organization, is managing a vermiculture project in an attempt to reduce local organic waste and to empower community members through participative approaches.

In addition to the interviews, a focus group was developed in the Parque Nacional Mirador Norte. Eleven residents from Los Platanitos participated in this activity, which focused on the feelings of the participants with respect to the park facilities and how they could be improved. Based on interviews, focus group, and my observations, the following paragraphs analyze the uses of the park by the residents of Los Platanitos, their perceptions about the meaning of the park in their daily lives, and some community recommendations to improve the access to the park.

COMMUNITY PERCEPTIONS OF THE PARQUE NACIONAL MIRADOR NORTE

Uses of the Parque Nacional Mirador Norte

Taking into account that the Parque Nacional Mirador Norte is the largest and closest green area to Los Platanitos, it could be said that the community residents are underutilizing the park. Even though Gate Four is the most visited, the majority of the interviewees said that they are not frequent users of the park. However, despite the low

use of the park by residents from Los Platanitos, the importance of having a park close to the community is recognized by almost all interviewees. Furthermore, the president of FUMPLA emphasizes, “Wherever there are living people, they always need a park, because we are nature, and we need fresh air” (Almonte, pers. int., June 2012).



Figure 10: Gate Four of Parque Mirador Norte. Source: Photo by Author (2012).

Because one of the services that the park offers is the use of its installations to celebrate special events, most of the interviewees visit the park only for occasional events such as birthdays, weddings, church congregations, school activities, and meetings hosted by local organizations. Furthermore, low-income families only visit the park occasionally, while, according to interviewees, middle-class families from nearby neighborhoods visit the park more often. As one interviewee stated, “those who go to the park more are middle-class people that live at the top (higher elevations), they go to

celebrate, host activities, and recreate; poor people hardly go to the park, they stay outside, they sit outside” (Suero, pers. int., June 2012).

Looking for an explanation for the low attendance of residents of Los Platanitos to the park, Abreu, a resident of the upper area of Los Platanitos called “Los Trinitarios,” concludes that given the socio-economic conditions of residents of Los Platanitos, they go to the park only occasionally, in part because their busy schedules and daily economic activities do not allow them to visit the park frequently (Abreu, pers. int., June 2012). As the president of FUMPLA said, “I do not visit the park because my work does not allow me to visit it” (Almonte, pers. int., June 2012). Furthermore, this situation directly affects the children from Los Platanitos and explains why, during informal conversations with children, many of them said that they have never entered to the park. Using drawing exercises to understand the relationship between the children of Los Platanitos and their environment, Diaz (2011) sheds light on the reasons for the infrequent visits by children in Parque Nacional Mirador Norte.

With the participation of approximately 33 children from Los Platanitos, who draw a total of 183 drawings, Diaz found that most children include dirty water and garbage in their drawings, reflecting their perception of their environment as contaminated (2011: 50). On the other hand, their drawings of envisioned spaces included clean streams, flowers and trees. These results could in part be understood as a reflection of their lack of relationship with the park. Growing up in a contaminated environment with no other options (such as a park) for recreation, children of Los Platanitos look at garbage and pollution as normal. As one parent explained to Diaz: “you have to understand that for many of these children, this is the only environment they have ever known, the garbage they drew is more of a detail in their drawing, they probably are not even aware of what it is exactly” (2011: 53).

Services of the Parque Nacional Mirador Norte

The park services most mentioned by interviewees in Los Platanitos are related to recreational activities such as the rental of park facilities for special events, the rental of recreational amenities (bicycles, canoes, and peddle-boats), and sports courts, playground, cafeterias, and the restaurant at Gate Three. Although to a lesser extent, the environmental services that the park offers to its visitors are also recognized by the interviewees, expressions such as “fresh air,” “healthy environment,” “natural paradise,” “green lung,” “meditation site,” and “quiet nature” are commonly used to refer to the park’s environment. In this way, interviewees point out that the park is also used as a quiet place to meditate and study, and most important to be in contact with nature. Two of the community interviewees make this point even more clear when explaining the main goal of the park: “to preserve the nature is the most important function of the park,” (Percival, pers. int., 2012), and “the principal reason for the park to be here, is the biodiversity, fauna and flora” (Abreu, pers. int., 2012).



Figure 11: Recreational facilities at Gate Four. Source: Photo by Author (2012).

To understand this apparent paradox—that residents emphasize the ecological functions of the park while at the same time favor the recreational facilities—we need to return to the city narrative between conservation and recreation goals of the park. The local narrative in Los Platanitos reflects the tension that exists in the institutional discourse about the main goal of the park, which became apparent in the contradictory declarations of the Director of the park, who, on the one hand, called for more social events and recreational activities in the park, and on the other hand, also emphasized the formal mission of the park, which calls for the preservation of the environment and protection of the flora, fauna, and hydrological resources of the park (Soriano, pers. int., June 2012).

Before the park was built

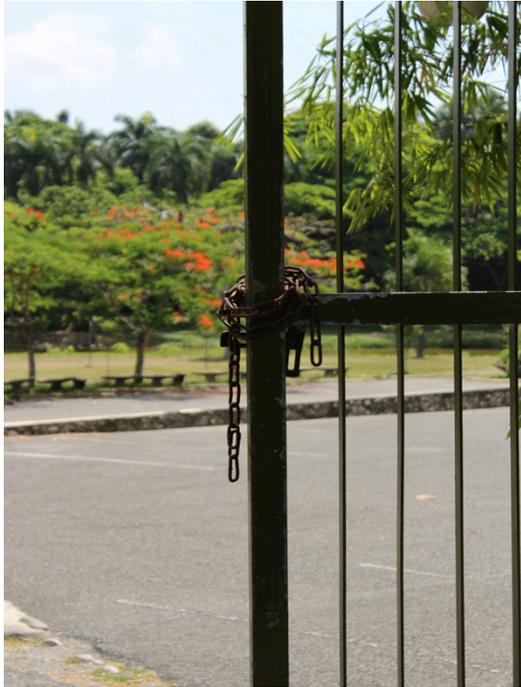
The land that is now occupied by the Parque Nacional Mirador Norte was previously private land, which was dedicated principally to raising livestock. Many of the interviewees remember the time before Balaguer bought the land and built the park. Almost all interviewees remember Jose David, the owner of the land, but most importantly, they tell stories with certain nostalgia about that time. Free access to the land is the most mentioned aspect. Even though the land was private, there was not a fence, and because of the huge extension of the land and the lack of security, the residents of Los Platanitos could easily go into the property. Furthermore, as one interviewee mentioned, “before, that land belonged to Jose David, but it was like free land, but you could not do any damage ... so you could not take a cow or fell a tree, but you could take the fruits and eat them” (Correa, pers. int., May 31, 2012). However, some unpermitted activities also took place at that time: as one interviewee remembers, many people used to take a tree called “guasi,” which served as a medicinal plant that later was sold in the

market. This activity constituted a source of income for the residents next to the property (Almonte, pers. int., June 2012).

Also, because the environmental conditions were better at that time, women from Los Platanitos used to wash their clothes in the Yaguaza River, which was inside the property, and children used to carry the water to their houses because there were no water services in the community at that time. Children and youth used to go to play in the property and to swim in the Yaguaza and Manguito rivers. The abundance of fruit trees, and the good environmental conditions of the river, allowed the residents of Los Platanitos to go to the property to take fruits, and fish.

One did not have to pay, it was a huge private land, and the entrance was very big, there was not a fence ... today the entrance is prohibited, there were three rivers in which one swam, the first one is called Yaguaza, the other is Manguito River, Yaguaza River is where women used to wash clothes, women went to wash and to take water to bring to here, because there was not water, so you had to go to the river to bring water, women and children used to go to the Yaguaza river, the other Manguito River was deeper and only the good swimmers used to swim there, and the last one was the Isabela River, but that one was very deep (Correa, pers. int., May 31, 2012).

The change in the ease of access from those early times, before the Park was established, and the present day, was often mentioned by the residents of Los Platanitos. Furthermore, according to Correa the park area was used for recreation even before it was built, but now, the built structures and natural environment are different and access is more difficult. For example, the trails that residents of the area used to walk are different now, but most importantly, the vigilance of park staff and restrictions on uses has reduced the number of visits by the residents who, ironically, live closest to it (Fig. 12).



I am 34 years old, I was 18-19 at that time, I didn't ever leave it that park, it was as they say, the same park, but without swings, without little canoes, and without bicycle ... people do not go to the park because is forbidden now, you have to pay a ticket, and you cannot walk on the paths that people used to walk on, and there are things that are divided now (Correa, pers. int., May 31, 2012).

Figure 12: Entrance at Gate Four. Source: Photo by Starks (2012).

It is clear that the construction of Parque Nacional Mirador Norte directly influenced the lives of the residents of Los Platanitos. The new configuration of the space based on modern ideas affected the daily life and common practices of people that lived next to the park, in effect reducing their access and sense of ownership of this green space.

Why was the park created?

As in many Latin-American cities, Santo Domingo increased its conservation lands during the 1990s. The Parque Nacional Mirador Norte was built based on environmental and ecological approaches, but it was also part of an intensive building process in order to organize the city. The prevailing official discourse when the park was built was one that called for order, cleanness, and urban modernization. After asking residents of Los Platanitos about the reasons for building the park, it could be said that

they have adopted aspects of this official narrative and included them into their own discourse.

On the one hand, some interviewees agree that ecological and environmental features were taken into account to create the park. “I understand that the park was built because it is like a lung for the city, and then through nature we can breathe pure air and reduce carbon dioxide” (Percival, pers. int., 2012). This appreciation is complemented by the recognition of Balaguer as a politician, whose main concerns were the construction of huge urban projects and the creation of parks in order to protect the environment, and to beautify the city (Ibid). In the same vein, another interviewee mentioned the high biodiversity of the area as the principal reason to transform the private land into a park. Furthermore, Abreu agrees with Hernandez, the builder of the park, that if the park were not built, the land would have been occupied by informal settlements (Abreu, pers. int., June 2012)

On the other hand, some interviewees from Los Platanitos see the construction of the park as a sign of urban modernization. Comparing the construction of the Parque Nacional Mirador Norte with the Metro, another community interviewee points out, “there was nothing there, now that is being civilized, and at least the park and the metro were built to civilize Villa Mella” (Correa, pers. int., May 31, 2012). The building of both projects, the park and the Metro, were developed in an attempt to organize and modernize the urban space. According to Casey (2011), the construction of the Metro in Santo Domingo was accompanied by government discourse of urban modernization and progress, in which its construction was presented as a way to overcome underdevelopment. After an analysis of the narratives about the Metro, Casey concludes that many residents of Los Platanitos have adopted the governmental discourse about

how the Metro has brought progress to the community, even though they cannot explain how the Metro has contributed to improving their community (Casey, 2011).

A similar analysis could be applied to the narratives of the residents of Los Platanitos about the building of the park. As one community interviewee argued, referring to the time before the park was built, “everything was very different because those were backwards times, things were backwards and things are progressing now, things are progressing” (Almonte, pers. int., June 2012). This statement reflects how the idea of progressing thanks to physical urban transformations has permeated local perceptions about the improvement of their living conditions based on new infrastructure, although their access to it is very limited.

However, it is well known that both projects included evictions and relocations of some informal neighborhoods, and that the construction of the Parque Nacional Mirador Norte also led to the reduction of land that could have been used for affordable housing. From a more critical perspective, one of the interviewees, Filomena, asks, “Why would someone leave all that land unused? There are a lot of people that need that land to live” (Filomena, pers. int., June 2012). Furthermore, Filomena contrasts the possibility of using the land of the park to build affordable housing, with the existence of the park as an entity that only benefits the government through the entrance fee. She concludes that in order to generate benefits for the community, the park’s management should be more participative and provide employment for the residents of nearby communities such as Los Platanitos (Filomena, pers. int., June 2012). This perspective coincides with the principal criticism that planners of the park had to face when the park was built almost 20 years ago, when those opposed to the building of the park argued that the money should be used to solve the lack of basic services in popular settlements. However, the prevailing planning policy

was focused on organizing, cleaning, and reconfiguring an urban reality that seemed chaotic at that time.

Order vs. Disorder (park rules vs. everyday practices)

Many authors have seen the implementation of modern urban projects as a way to clean up cities and to control and discipline urban populations (Fernandez and Carre, 2011; Outtes, 2003). The Parque Nacional Mirador Norte was built not only to control urban sprawl and to preserve the environment, but also to avoid the proliferation of the so-called “precarious settlements” in Santo Domingo Norte. Slum clearance was performed in Santo Domingo during the Trujillo and Balaguer governments as a common component of urban renewal processes. For a long time, informal settlements have been seen as “Dantesque” landscapes (Hernandez, pers. int., June 20, 2012). This strong negative view of informal settlements has even permeated the discourse of some of its inhabitants. In an unexpected argument, a resident of Los Guaricanos said:

There should not be humble houses in front to the park because they deteriorate the park; they give the park a bad image. Something worthwhile should be built at that site, and they should buy the land from the poor people of that area. In front to the park, should be something that combines with the park, a place in which the visitors could have a good time (Beltre, pers. int., June 2012).

Furthermore, according to some community interviewees, because the park is a neat, clean, and quiet place, it is a much better place than their neighborhood to host special events. This differentiation between order and disorder coincides with the modern urban approach that influenced the construction of the park, which attempted to fix the “disordered” urban reality of informal settlements through the construction of huge urban projects (Outtes, 2002).



Figure 13: Panorama contrasting the park and the lowest area of Los Platanitos. Source: Photo by Starks (2012).

The lack of public services and the unplanned development of informal settlements have led many urban planners to describe their environment as one that is chaotic and full of vicious elements (Balaguer, 1969). Because informal settlements lack formal public spaces, people use streets, alleys, and even the *cañada* for social interaction, creating vibrant and dynamic spaces in places, which, according to modern planning, should even not exist. Comparing Los Platanitos with the Parque Nacional Mirador Norte, one urban planner refers to Los Platanitos as a disorderly place without “public space,” while he describes the park as a “beautiful, precious and comfortable huge green area” (Navarro, pers. Int., June 19, 2012). Based on what she has heard from official declarations and professional opinions, one community leader points out:

A lot of people have said that the park is too close to Los Platanitos, and because there are a lot of little houses in bad conditions, they have found the neighborhood ugly to be next to the park ... the houses are ugly and the park is very nice and beautiful, and many people with money go to the park and when they take photos the popular neighborhoods could appeared on the photos giving a bad impression (Moises, pers. int., June 2012)

This statement and others like it could be seen as reflection of a subjectivity that is shaped, in part, by the narratives of informality originating in government and planning institutions. For example, referring to the houses of informal settlements as “suicide

housing⁶” or “pigsties,” Hernandez, the builder of the park, reflects on the environmental impact caused by informal settlements and questions if they have the right to pollute water sources based on their needs. From an ecological perspective and leaving aside the complex socio-politic reality of Santo Domingo with its huge social inequities, Hernandez advocates for energetic urban interventions to do what is good for the city (Hernandez, pers. int., June 20, 2012). He reinforces his vision with the premise that poor people do not have education or knowledge.

Doing good things is not only an issue for churches, no, to do good things sometimes you have to have the energy of the decision, because if you see those people (referring to people from informal settlements), they have their interests, and those are people who do not have education, do not have perception (Hernandez, pers. int., June 20, 2012).

Furthermore, Hernandez calls for respecting the park and “all that is behind the park fence,” and stresses that since poor people do not understand the “benefits of order and respect,” they should be educated (Hernandez, pers. int., June 20, 2012). These statements clearly illustrate the ideology that lay behind the creation of the Parque Nacional Mirador Norte, and in particular how it was seen as a physical intervention that could change the behavior of poor people and alleviate pressures on private land. In fact, a series of “rules of behavior” were established at the park to educate poor people and to control or change their behavior. The rules, which vary between different areas of the park, are placed on big posters throughout the park, and especially at the entrance (Fig. 14).

⁶ Hernandez refers to the houses of the “Hoyo de Chulin,” which was an informal settlement that he intervened to relocate its inhabitants. He uses “suicide houses” to describe houses located in high-risk zones threatening the lives of its inhabitants (Hernandez, pers. int., June 20, 2012).

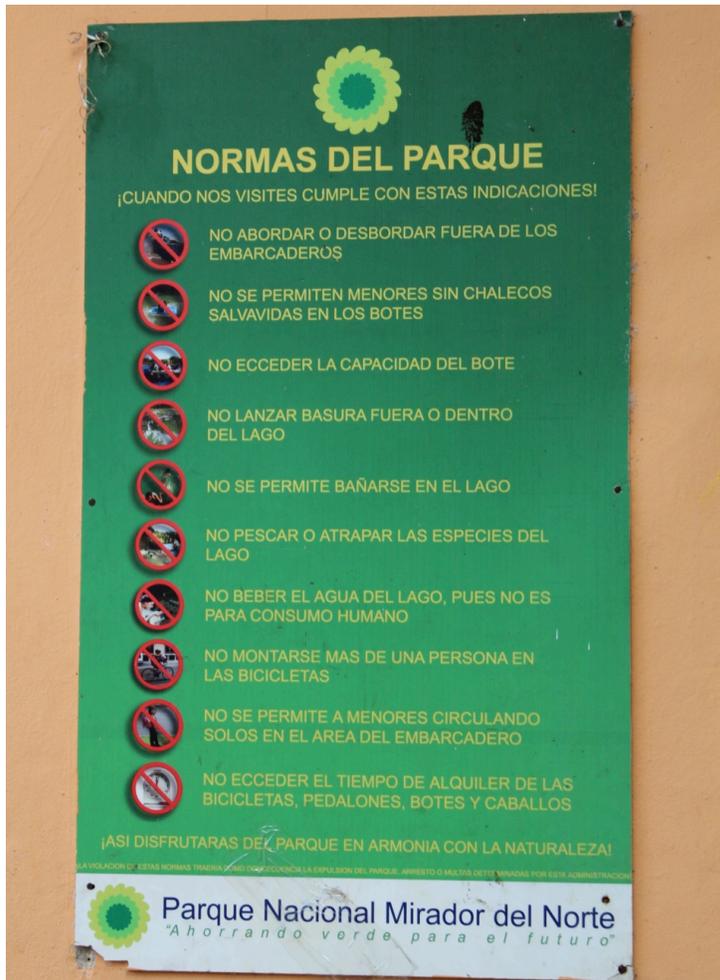


Figure 14: Park rules. Source: Photo by Author (2012).

After spending time in Los Platanitos, these rules give the impression that their intention is to create an environment opposite from the noisy and vibrant one of Los Platanitos. However, almost all interviewees agreed with the idea of having rules in the park, especially because of the services that the park is offering now: “The rules are good, all of them are good; there were not rules before but neither were there bicycles or canoes” (Correa, pers. int., May 31, 2012).

In addition, at least three women made an analogy between having rules at home and the park rules. They emphasize the importance of setting rules at home to avoid disorder and hence they agree with the right of the administration of the park to establish its own rules (Filomena, Percival, and Ulerio, pers. int. June 2012). An extreme opinion suggests that societies are disordered by nature and therefore rules are necessary to control them.

If these rules are not met, and the community is left to do what they want to do, it would be a mess and you know that not everyone has the same control of things. I see the rules as normal, just like at home, if you do not set the rules, the home is going down, it falls apart, it makes a mess, and the societies are like that (Percival, pers. int., June 2012).

Despite the favorable discourse that most interviewees reproduced regarding the need for rules in the park, some of their actions during the focus group in the park showed a different, contrasting pattern of everyday practice. Once the focus group finished, we returned to Los Platanitos. During our walk back to the community, I saw Filomena cutting plants and flowers within the park. When I asked Filomena why she was doing this, she told me that these plants were called “cabra” and dragon” and that they had medicinal uses. She planned to use the plants to cure her sore throat. A few days later, as I was interviewing Filomena about the park, I mentioned the rule that forbids cuttings plants in the park. After reading the rule, which states, “Do not cut or pull the plants of the park,” Filomena said: “That is good, the plant cannot wither, neither can it be cut, it must be cared for, of course” (Filomena, pers. int., June 2012).

During the focus group conducted in the park, we wanted to take a photograph of the rules, but the woman who worked in the cafeteria asked us for authorization before taking the photo. All participants expressed their dissatisfaction with this incident, claiming that the park is a “public park” and that those who bring their camera have the right to take pictures wherever they want. Furthermore, other rules such as listening to

music in the park are “broken” when there are social events in the park; as one interviewee said, “they turn on music, especially when there is birthday celebration” (Suero, pers. int., June 2012).

How can these practices be understood? Small acts that contradict the set of park rules could be seen as important ways to redefine the “permitted uses” of the park, generating insurgent processes that redefine the uses of this public space. Furthermore, practices that reflect the cultural values of informal settlements represent a process of re-appropriation of a space that was once used by local people in different ways.

Entrance fee and other costs

Starting at 5 pesos (\$US0.12) in 1994, the entrance has increased over time, reaching 30 pesos (\$US0.75) now. Even though Dominican planners and developers are divided in their opinion about the repercussions of the park entrance fee for levels of visits by low-income families, all interviewees in Los Platanitos stated that the entrance fee definitely reduces the frequency of their visits to the park. As the vice-president of FUMPLA said:

Because of the entrance fee, people do not go to the park, because it is so expensive, people who live around here are very poor; people who go to the park are middle-income class, people from the upper areas. Only few people go to the park from Los Platanitos, only few people, because the entrance fee is too expensive for them (Suero, pers. int., June 2012).

Community leaders not only see the entrance fee as an impediment to visiting the park, but they also see paid services, such as canoe and bicycle rentals, as important factors influencing families’ decision whether or not to go to the park. As Correa argues, “almost everything costs money in the park” (Correa, pers. int. May 31, 2012).

The average family in Los Platanitos is comprised of 4.8 members (Sletto ed., 2008). Having a family weekend in the park represents a substantial financial

commitment for low-income families, especially taking into account the number of family members, the entrance fee, the paid services inside the park, and the cafeteria. Each park gate has small cafeterias, which sell drinks, snacks and light meals; however, prices for these products are significantly higher than regular cafeterias. During the focus group in the park, all participants agreed with the following statement of one of the representatives from Mujeres Unidas, “The cafeteria is too expensive, and another thing is that the canoes and bicycles are expensive also, those are 50 pesos (U\$1.25), and they asked for ID –identification-, I found that so bad, because it is too expensive” (MU, focus group May 31, 2012).

However, people from Los Platanitos do want to use the park. This affirmation is reinforced by the fact that many women go periodically to the park; however, because of the entrance fee, they walk along the fence from Gate Four to Gate Five (Fig. 15). A leader of FUMPLA explains:

People from Los Platanitos go to the park, they always go, most of the moms walk to the park, but they do not go inside because of the entrance fee, but at least they walk along the park, we walk the entire edge of the park to Gate Five (Beltre, pers. int., June 2012).

Furthermore, Beltre confesses that sometimes a young park guard allows them to go inside the park without paying the entrance fee (Beltre, pers. int., June, 2012).



Figure 15: Walking from Gate Four to Gate Five of the park. Source: Photo by Author (2012).

Fresh air, shade, and a chance to relax are repeatedly mentioned by the interviewees as benefits that they receive from the park. In other words, they recognize the potential of the park to improve their quality of life. Their declarations are reinforced by the fact that when they have an opportunity to go to the park for free, they attend in massive numbers. As Filomena, a retired woman, said “I have gone to the park, many times, because the park guard does not charge me, none of the park guards have charged me the fee” (Filomena, pers. int., June 2012). Or as another resident suggests, “we would like to be able to use the park more frequently, to go inside the park, and use it every day.” During the period just after the inauguration of park, he says, he visited the park almost every day because admission and park services were free (Correa, pers. int., May 31, 2012).

Asking for permission to use the park installations for free is possible, and the President of FUMPLA indicates that on many occasions, he has asked for an exemption

of the entrance fee to organize special activities (Almonte, pers. int., June 2012). However, the process to obtain exemptions is not easy. It includes writing a formal solicitation, sending e-mails, and requesting a personal interview with the park Director. Taking into account the limitations of informal settlements in terms of infrastructure and access to technology, writing a solicitation letter could be a complicated process that depends on resources that are very scarce in these kinds of communities. In addition, the approval of exemptions is not guaranteed even after completing the formal process, as one of the interviewees explains: “If you ask the park administrator, he gives you permission, but only sometimes” (Correa, pers. int. May 31, 2012). This situation contrasts with the position of the Director of the Park, who states that entrance fee waivers are common in order to incentivize the use of the park. However, the president of FUMPLA energetically argues that residents of Los Platanitos have always shown interest in using the park installations: “when one achieves a free event in the park, they go very happy, and everyone goes. If the fee were cheaper, more people would go, because 20 pesos is more affordable than 30 pesos” (Almonte, pers. int., June 2012). The community leader’s declarations lead me to re-think the institutional view that the park is under-used because of the lack of education of people from popular settlements.

On the contrary, because of the high value that people ascribe to the park, all interviewees argued that admission should be cheaper or, even better, free. Some suggested that the entrance fee must include all park services (canoes and bicycles) (Mujeres Unidas, focus group, May 31, 2012), or that the fee should be lowered or waived for residents in informal settlements that border the park. As one interviewee argues, “in this zone we are poor people, they should put a price that anyone can pay” (Moises, pers. int., May 31, 2012). Suero suggested an entrance fee of 10 pesos in order to facilitate the access of poor people to the park (Suero, pers. int., June 2012).

However, some interviewees mentioned that because of the huge extension of the park, the entrance fee represents an important economic resource for the administration of the park. This willingness to pay for a service, which in other better-served neighborhoods (such is the case of Parque Mirador Sur) is free, is a very important indication of the high value that poor families from Los Platanitos place on the park, and therefore on both its environmental and recreational functions.

Access factors: the highway and the park security

The Avenue Mirador Norte extends along the Parque Nacional Mirador Norte, and it separates the park from Los Platanitos at Gate Four. It also connects the Avenue Hermanas Mirabal on the east side of the park with the Avenue Jacobo Majluta in the west. Because it is a high-speed highway and it does not have pedestrian facilities, the residents of Los Platanitos look at the Avenue Mirador Norte as a threat to their safety.



Figure 16: Av. Parque Mirador Norte between Gate Four and the entrance to Los Platanitos. Source: Photo by Starks (2012).

Given the high speed at which cars circulate along the Avenue and the curves that limit the view of oncoming traffic, people who cross the Avenue in Gate Four put their

life in danger (Fig. 16). As a woman leader said, “you have to cross running because of the curves... because when a car comes at such high speeds there are accidents” (Moises, pers. int., June 2012).

All participants in the focus group pointed out that crossing the avenue to come to the park is a threat for them and especially for children. As a suggestion to improve the access to the park many participants and interviewees propose the construction of a pedestrian bridge, or the installation of a traffic light.

There should be a pedestrian bridge to cross the street to the park, because there have been many accidents. All of the park gates should have something to facilitate crossing so as to not have to run across like crazy. Those cars hit people and then they flee (Manzueta, pers. int., May 31, 2012).

The lack of pedestrian facilities to access the park is not only a problem at Gate Four: none of the park gates have pedestrian access that connects the other side of the Avenue Mirador Norte with the park. On the other hand, parking lots are present at all park gates, favoring vehicular over pedestrian access.

In an attempt to increase the use of the park and its surroundings, the Planning Director of ASDN mentioned the project “Vía de la Salud” (Healthy Highway), as a good measure to improve the pedestrian use of this highway. The project proposes to close the Avenue Mirador Norte to vehicular traffic from 5:00am to 9:00am, and from 4:00pm to 7:00pm to allow for pedestrian usage of the Avenue (AND, pers. int., June 2012).

However, while government authorities have talked about this project since last year, it has not started yet. In June 2, 2011, a Dominican media website stated that the Mayor Francisco Fernandez has offered to convert the Avenue Mirador Norte into a “Vía de la Salud” and to implement preventive police patrols to make the Avenue safer (El Puerto, 2011).

Furthermore, interviewees not only recognize crossing the highway as a risk to them, but they also see the construction of the highway as an important factor that has negatively influenced the security of the area. It is well known that highways offer better connectivity and accessibility, but they also have social repercussions. Correa, who is in charge of community security for FUMPLA, highlights the fact that before the highway was built everyone who wanted to go the park had to pass through the community. However, since the Avenida Mirador Norte was built, people from faraway places can easily access Gate Four via the highway. Furthermore, Correa says, “you can come from somewhere else, you can do something bad over there and then come here and leave people (referring to murders) here” (Correa, pers. int. May 31, 2012). Because of this threat of violence from visitors to the park, Correa suggests increasing security personnel at each park gate, and, more extremely, even adding military security.

Ultimately, implementing pedestrian facilities and providing security at Gate Four were the most mentioned demands by the interviewees when they were asked about the ease of access to the park. In this way, planners and community interviewees coincide in their call for improved pedestrian facilities. However, when talking about security the perceptions about it differ significantly: planners perceive the park as insecure because it is surrounded by informal settlements, while residents mentioned the highway and the lack of security guards as the principal reasons to feel insecure in the park.

Recently, Reynaldo Soriano, the administrator of the park, publically declared that the security in the park has improved 90% due to the presence of municipal guards in each gate (El Nuevo Diario, 2012). However, most interviewees agree that the lack of security is a big problem for the park and one of the factors that limits their use of the park, especially for women. More specifically, one of FUMPLA’s leaders said that the security guards are difficult to recognize in the park because they do not use a uniform or

identification (Abreu, pers. int., June 2012). And because of the huge extension of the park and the lack of pedestrian and public spaces along the avenue that surround it, it is easy to find desolate areas hidden by exuberant vegetation.

While all interviewees called for improvements in the park's security, women are the most worried about this. Because the park has desolate areas, women do not feel safe enough to visit the park alone. Furthermore, some isolated areas such as the cien matas (hundred plants) are defined by women as spaces only for men: "only men dare to go there" (Moises, pers. int., May 31, 2012). Women's perception of safety could be better understood by considering the social construction of "public and private spheres" in the community. While women from Los Platanitos have a more dominant role in private spaces such as their homes, when they leave their homes to enter "public spaces," their roles change and many times they lose their power to influence community decisions (Sletto ed., 2010). This situation, which is commonly accepted by local residents, makes women more vulnerable in public spaces, including the park. As the vice-president of FUMPLA told me, "I would advise you not to go alone" (Suero, pers. int., June 2012).

Furthermore, as was said in the last section, Correa blames the Avenue Mirador Norte as the principal cause of insecurity around the Parque Nacional Mirador Norte. The vice-president of FUMPLA points out that much delinquency came from a market that is located above Los Platanitos, in other words from people that are not from the area (Suero, pers. int., June 2012). On the other hand, the planners I interviewed see the presence of informal settlements next to the park as a principal cause of insecurity in the park. Furthermore, one planner suggested, "those are zones that are surrounded by marginal neighborhoods with a lot of delinquents, the delinquency is a thing that has heavily affected that park." He continues by comparing Parque Mirador Sur with Parque Mirador Norte: "in the Parque Mirador Sur, which is an open park and it is not

surrounded by marginal settlements, there are robberies, (so) imagine there (in Mirador Norte, which is surrounded by informal settlements)” (DGODT, pers. int., June 18, 2012). Blaming informal settlements as the principal cause of delinquency could be seen as a result of a discriminatory ideology that fits perfectly with authoritarian planning, which was favored at the time when Balaguer built the park.

Park landscape

As in many Latin American cities, the creation of the Parque Nacional Mirador Norte included the transformation of the original landscape in order to create a more pleasing aesthetic appearance (Hardoy, 1992). For example, the construction of the artificial lake Yaguaza could be seen as an attempt to replicate European landscapes.

Most interviewees agree that the park’s vegetation is different from that of Los Platanitos. Subsistence agriculture plays an important role in this differentiation. While most plants grown in Los Platanitos are edible, the park mostly includes ornamental plants (Fig. 17). As a leader from FUMPLA points out, “the plants are so different, because Los Platanitos has plants that the park does not have as a result of people looking for their subsistence; for example plantains are planted as a way to seek out daily subsistence” (Abreu, pers. int., June 2012).



Figure 17: Contrasting vegetation between the park and of Los Platanitos. Source: Photos by Author (2012).

The landscape of the park definitely has changed, however. According to the park administrator and the ecologist Martinez (a member of the Patronato), although most trees planted in the park are native species, community residents do not recognize many of them as local. The vice-president of FUMPLA said, “the park plants are different, they were brought to the park from another site, they are different, they are not like the plants of Los Platanitos” (Suero, pers., int., June 2012).

Furthermore, during the focus group in the park, participants suggested the establishment of “park instructors,” who would explain the characteristics of the different trees and plants of the park as part of an educational program. However, after many informal conversations with residents of Los Platanitos about the local botany, many of

them demonstrated an extensive knowledge of the characteristics of the local vegetation and especially about its uses.



Figure 18: Community resident holds medicinal plants that were taken from an alley of Los Platanitos. Source: Photo by Starks (2012).

Is this call for education the same as the one so heavily touted in the ideology of the parks planners, or does the knowledge of the residents of Los Platanitos challenge the assumptions underlying planners' call for "education"? It is important to recognize that Los Platanitos was settled relatively recently and that most residents over 20 years of age migrated from the countryside during their lifetimes. With this migration, the residents of Los Platanitos brought with them extensive knowledge of ethnobotany. As described previously, Filomena briefly mentioned having a sore throat and within minutes returned from the park with "cabra" and "dragon" with the intention of making a tea with the plants. A few days later, another resident of Los Platanitos, Fanny, collected some plants to cure a family member's skin ailment (Fig. 18). It quickly became obvious that this

knowledge of ethnobotany was both commonplace and important in the community, especially with high indices of disease and disproportionate access to healthcare.

Given the extent to which community-members possess this knowledge, what does it mean that the participants of the focus group suggest education based on local flora? This could be seen as a way to lay claim to the park space. In other words, they suggest that their ways of living and interacting with the natural world should become incorporated into the park, in contrast with the current order of the park.

However, from another perspective, residents' calls for education could be seen as reflective of a subjectivity that has incorporated the dominant discourses about the lack of education of poor people. Since city planners constantly repeat that the principal reason that people from Los Platanitos do not use the park is their lack of education, this narrative may have shaped the subjectivity of residents of Los Platanitos. Therefore, they assume they "know less than the experts" because they are always being told by city planners and other professionals that they are uneducated.

COMMUNITY RECOMMENDATIONS FOR THE PARQUE NACIONAL MIRADOR NORTE

During the focus group, participants made a number of suggestions to improve the services of the Parque Nacional Mirador Norte. The community recommendations can be grouped in four categories: economic inclusion, access facilities, community engagement, and technical education.

In order to integrate residents in park activities, participants suggested increasing of job opportunities in the park. Taking into account the high percentage of unemployment in Los Platanitos (48%), the inclusion of community members in remunerated park activities would be an important factor to improve the perception of community residents about the benefits of having such a huge park next to them. Most

importantly, the maintenance of Parque Nacional Mirador Norte would benefit from local participation, since it is well known that including people in decision-making processes related to the management and maintenance of parks has generated good results (Amati & Taylor, 2010). Therefore, the park administration should work to develop more inclusive projects that incorporate community-based organizations in the surrounding areas, and hire local residents as guards and for clean-ups, reforestation and gardening projects.

Participants also mentioned improving access facilities as key to increase the use of the park. Building a pedestrian bridge to connect Los Platanitos with the park was suggestion most widely supported by participants, but they also recommended building a stoplight and a crosswalk between the entrance to Los Platanitos and Gate Four. The option of building a crosswalk is cheaper and could improve the pedestrian access to the park by making crossing of the highway safer for residents. Because such infrastructure has to be developed by local government, participants suggested the possibility of asking for this work within the participatory budgeting process. However, taking into account that Los Platanitos have more urgent problems such as the trash collection, participants were not very optimistic about this idea.

Community engagement is one of the most commonly invoked strategies for increasing the use of the park. Participants recommended very specific actions to encourage the attendance of residents and, most importantly, the participation of youth and children in park activities. Based on the focus group discussion, some of the activities that the administration of the park should organize are: baseball championships, volleyball and basketball for youth, painting courses for children, summer courses for youth and children, and cultural and artistic events for residents. Such activities were

seen by participants as not only a good way to improve the park services, but also as a good way to promote the services of the park.

Finally, participants discussed and made suggestions regarding education. They suggested that the park administration should implement courses on trash management, recycling, and public health. Moreover, participants emphasized the importance of developing capacity building courses that provide them with new technical skills. These courses should be focused on technical training, such as crafts for women and youth. In addition, most of the participants showed interest in learning about the flora and fauna of the park, so they suggested developing an environmental educational area that includes park instructors. Finally, because of the huge extension of the park, residents recommended the implementation of a train and expert-guided tours through the park where the characteristics of its flora and fauna would be explained.

Conclusion

The greenbelt of Santo Domingo and the Parque Nacional Mirador Norte were created during the 1990s as part of an intensive urban renewal process in Santo Domingo that responded to the ideology of the incumbent Dominican government. Local formal discourses that defined slums as “disorderly and vicious places” were very similar to those that characterized the beginning of urban environmental planning in big cities such as Chicago at the end of the 19th century. Furthermore, sanitary and preservationist planning approaches were accompanied by modern principles that evoked progress and order to overcome underdevelopment. As in many Latin American cities, a series of measures to “clean” and “order” the city accompanied the implementation of both projects, in the guise of controlling urban growth and improving the urban natural environment. However, the evolution of each project has been different. While the Parque Mirador Norte is seen as a successful project in the eyes of urban planners, the current situation of the greenbelt leaves much to be desired.

The huge extension of the greenbelt, its authoritarian delimitation, and the weakness of the institutions that manage it could be understood as the principal reasons for its failure. Based on authoritarian planning of a dictatorial government that tried to fix structural social problems with exclusionary policies, the greenbelt of Santo Domingo could not support pressures of urban growth of a city marked by socio-economy inequities. The protected areas of the greenbelt have been reduced by more than 50% from 1993 to 2002, which has led some planners to name it the “brown-belt” in allusion to the occupation of much of its area. The implementation of the greenbelt was a top-down planning decision, and current declarations about its “recuperation” are still marked by non-participatory planning approaches. Even though the local legal framework

recommends community participation in the management of parks and green areas (Article 36 of the Dominican Environmental Law 64-00), slum clearance and the strengthening of local institutions for its management are still mentioned in formal narratives to preserve or “rescue” the greenbelt areas that are still in good environmental conditions. Dissociation between environmental and social factors is still present in official discourses, although the current international trend of greenbelt management and urban environmental planning promote participatory planning practices.

On the other hand, some Dominican urban planners highlight the partial privatization of the Parque Mirador Norte as a key factor to its effective maintenance; however, they recognize that citizens are not using the park in full. While planners see the lack of education of people who live in informal settlements that surround the park as the principal reason for the underutilization of the park, residents of the informal settlement of Los Platanitos point towards the privatization of park services as the principal impediment keeping them from using the park.

Governmental and official discourses about progress, order, and education are also found in community narratives. It is clear that repeated negative opinions about informal settlements that have been reproduced in local media, public declarations, and technocratic narratives have also impacted community subjectivity. The idea of progress and order as good values compared with “disorder” shape some of the community perceptions when describing their space. However, even though they call for education, which could be seen as a reproduction of official discourses that define them as “uneducated” people, the kind of education that they are asking for is different. While planners propose that residents of Los Platanitos need to be educated about the environmental and recreational values of the park in order to increase their use of the park, residents of Los Platanitos ask for technical training in order to acquire new skills.

Community residents have internalized the “education” discourse that marks them as “uneducated” in their narratives, but more importantly they have appropriated this idea by placing it in their own context, one that could be understood as a response to their socio-economic status, in which the opportunities to improve their life conditions are scarce.

Furthermore, even though residents of Los Platanitos recognize that they do not use the park frequently, they have different explanations for their infrequent visits to the park than those of urban planners. Contrasting the institutional discourse about the lack of education of people from informal settlements, leading them to undervalue the environmental and recreational services of the park, residents of Los Platanitos maintain that their lack of use of the park is due to other factors: the expensive entrance fee, the lack of security (especially for women and children), and the lack of access to the facilities in the park. Furthermore, people from Los Platanitos want to use the park, and they highly value its recreational and environmental services. This is well represented by the willingness of community residents to pay a cheaper entrance fee, although parks are free in other well-served neighborhoods.

The recommendations that community members made to improve park services reflect the community interest in increasing its use of the park. Furthermore, the recommendations are very feasible and practical. Taking into account the community recommendations through participatory planning could enormously improve the relationship of the residents of Los Platanitos with the Parque Nacional Mirador Norte, and serves as an example of inclusionary planning processes for other informal settlements.

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