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**The Integration of Emergency Economies in Developing Countries:
The Case of Los Platanitos, Santo Domingo Norte, Dominican Republic**

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**The Integration of Emergency Economies in Developing Countries:
The Case of Los Platanitos, Santo Domingo Norte, Dominican Republic**

by

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Dedication

I dedicate this thesis to the community of Los Platanitos. Without their support, enthusiasm, and kindness, this work would not have been possible.

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Abstract

The Integration of Emergency Economies in Developing Countries: The Case of Los Platanitos, Santo Domingo Norte, Dominican Republic

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The University of Texas at Austin, 2010

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Slum development in the Global South continues at a rapid pace, leading to a search for solutions to the severe environmental, social, and economical challenges facing these settlements. Informal economic activities are central to these communities' survival and structure. Ownership policies have been initiated that contribute to security for residents, and there is evidence that this can lead to increased social and economic productivity. However, studies have also shown that broad ranging titling reforms may destroy existing networks, practices, and livelihoods of residents. This raises a fundamental question on how land titling and formalization of business ownership can be accomplished, while still maintaining local social networks and livelihoods. This thesis calls attention to the need to develop policy approaches that are context specific while also taking into account the complex economic networks that develop in informal settlements.

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Introduction

Slum development in the Global South continues at a rapid pace, leading to a search for solutions to the severe environmental, social, and economical challenges facing these settlements. In 2003, the estimated population of people living in slums was approximately one billion (UN Habitat 2003). Rural to urban migration in developing countries is expected to rise, putting increasingly severe strains on city infrastructure and economic opportunities. The world's population is expected to increase to 8.1 billion by 2030; of this, 5 billion will be found living in slums, primarily in Africa and Asia. In Latin America and the Caribbean, approximately 32 percent of the population, or 128 million people, were living in slums in 2003 (UN Habitat 2003).

Most of these “informal” settlements function outside the legal protection and support of municipalities, or, as De Soto (2000) states, in the *extra legal* sector. It has been shown that in certain countries land titling and ownership policies have been initiated that contribute to tenure security for residents (Reerink and Gelder 2010). Other studies have also found that these policies can lead to increased social and economic productivity (Fields 2005). However, studies have also shown that broad ranging titling reforms may destroy existing networks, practices, and livelihoods of residents in these communities (Nijman 2009, Sjaastad and Cousins 2008, Bromley 2008). This raises the central theoretical problems examined in this thesis: 1) how can land titling and formalization of business ownership be accomplished, while still maintaining local social networks and livelihoods?

Informal economic activities are not only essential for the survival of community members living in these settlements, but they are central to the community's development of legitimacy and structure. Those activities that take place within informal networks

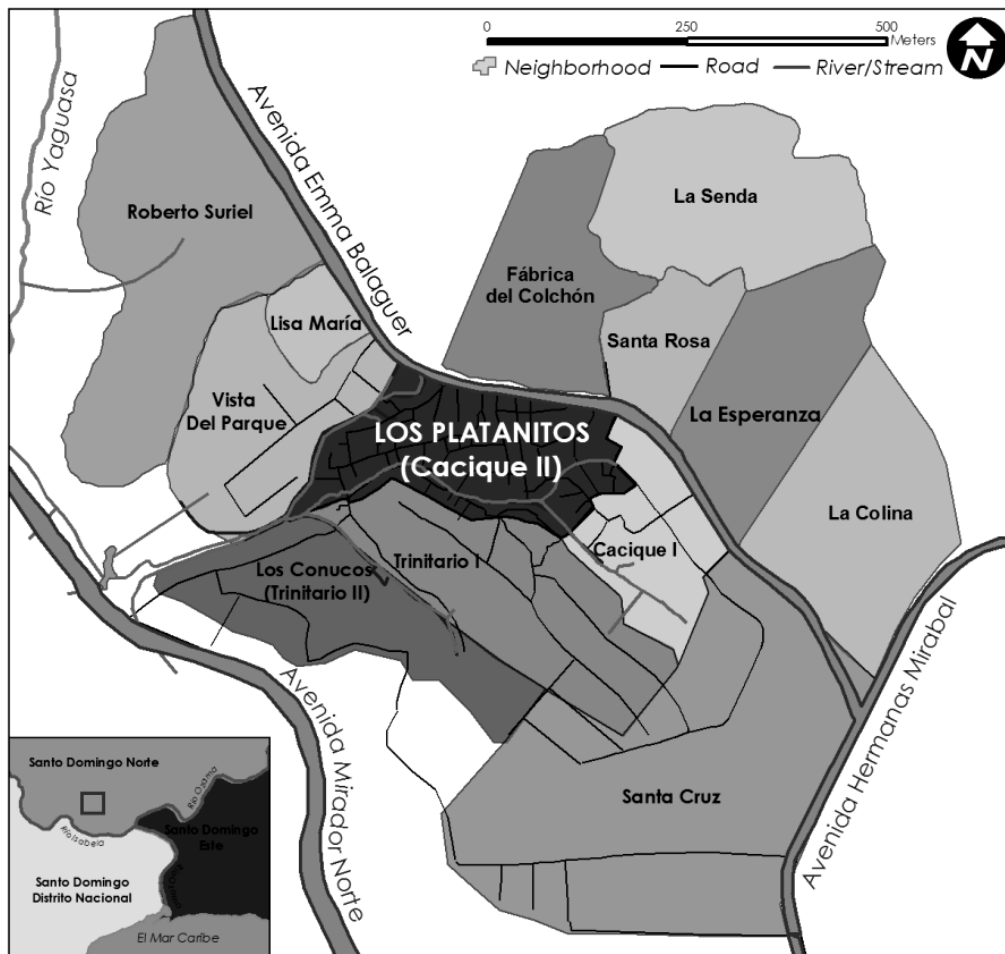
constitute what Abdoumalig Simone (2008) calls the *emergency economy*. This term connotes a “state of alarm and defragmentation in the organization of the present,” (Simone 2008, 30) where normal approaches to daily survival are insufficient. There is a lack of formal rules that give rise to networks that are developed through what Pelling (2002) calls the community’s *adaptive potential*, i.e. the community’s ability to adapt to the geographic, political and economic circumstances and develop relatively high levels of self sufficiency. One example of this “adaptive potential” is the establishment of businesses and points of commerce that cover a wide range of sectors. These establishments serve as nodal points for a community economic and social structure, and become symptomatic of a unique economic adaptation firmly rooted in place and community.

The focus of this study is the informal community of Los Platanitos, located in the city of Santo Domingo Norte, Dominican Republic. Los Platanitos, which has approximately 2000 residents concentrated in a 9-hectare area, is located near a major arterial and metro line that leads to the Distrito Nacional (national district; i.e. ‘downtown’) of Santo Domingo (Fig. i). Santo Domingo Norte has approximately 30 informal settlements that are precariously situated in floodplains along *cañadas*, creeks that traverse steep valleys. Beyond referring to “creek,” in the Dominican Republic the term *cañada* is also used to describe poor, informal settlements that are characterized by high levels of unemployment and a lack of basic infrastructure.

Los Platanitos began developing in the mid 1980s on the site of a former landfill, which was widely used by residents throughout Santo Domingo. At the time, the city of Santo Domingo was receiving a heavy influx of migrants from rural areas. Since the city was unable to provide housing and infrastructure for all these new residents, people chose to settle in Los Platanitos and other informal communities. In fact, Los Platanitos, which

is also known as Cacique II, is located amidst many other informal settlements, some of which have become “consolidated,” i.e. infrastructure has been developed and they have become integrated into the formal economy. In Los Platanitos, however, the infrastructure is still piecemeal and water, sewage, and electricity service is intermittent and unreliable. In addition, the community continually experiences flooding and suffers from accumulations of solid waste.

Figure i: Los Platanitos Regional Context



Source: Sletto ed. 2008

Despite the problems they face by electricity and water shortages and poor accessibility, business establishments have learned to adjust to these conditions in order to continue to serve and support the community. Los Platanitos has its own internal “emergency” economy (Simone 2008, 30) that provides formal and informal employment and a modicum of independence for community members. This suggests that “informal settlements” are integrated in complex ways in the formal and informal urban fabric, and that “internal” economies are partly independent and partly contingent on broader economies. It also suggests that we need to reconsider the dualisms between “informal/formal” and “internal/external” in our analysis of informal economies. As these emergency economies increasingly become integrated in regional, formal economic systems, planners and policy makers need to consider the significance of these emergency economies for day-to-day survival and the sustainability of the local economy. This project aims to record and illuminate these informal economic systems and suggest planning and policy initiatives to cultivate these emergency economies, while at the same time seeking to integrate informal settlements in the broader regional economic and legal system.

Since many of these establishments in the community act outside of the protection of the state, this report will assess to what extent Los Platanitos is self sufficient in terms of everyday goods and service provisions. Questions that will be addressed are:

- What are the components of the “emergency economy” in Los Platanitos?
 - What is the distribution and character of business establishments Los Platanitos?

- How do these business establishments fall into a larger formal industry sector schemes, particularly that of the United States, and national scheme, and the United Nations, a global scheme?
- What are the economic networks and support systems associated with the “emergency economy” in Los Platanitos?
- What are appropriate policy and planning initiatives to bolster/sustain the emergency economy and associated social networks in Los Platanitos, and how can municipal governments develop policy approaches to such challenges?

The findings show that there is a well-established, self-sustaining network of businesses and commerce activities in Los Platanitos. Local businesses provide residents with all goods and services that are required for daily sustenance; even leisurely activities are widely available in the community. This local business network therefore constitutes an important asset for the community and should be incorporated into future planning and development activities in Los Platanitos.

The present study builds on an assessment of risk and vulnerability in Los Platanitos conducted by student participants in a University of Texas graduate class in spring semester 2008 (Sletto ed. 2008). In the previous study, students mapped streets, waterways and building footprints in the community and conducted a preliminary mapping of the economic and social structure. This report further develops the mapping and categorization of business establishments, while also recording how people use these establishments and other services. The primary methods of data gathering were interviews with establishment owners and community members, combined with field mapping and systematic documentation of data about each business establishment. The information recorded included products sold, establishment size, ownership or rental

status, duration of operations, and other information that allowed for the categorization of businesses in sectors and sub-sectors. This data was incorporated into a Geographic Information Systems (GIS) to map and determine areas of influence for each establishment types. Because of time limitations, no household surveys were conducted. Participant observations contributed much information about how community members use these establishments, although household surveys could have illuminated the consumption patterns of individuals and families in greater detail.

The following chapter provides an overview of key literature on informal settlements, focusing specifically on the role of the informal economy for community development. Chapter two reviews the history and economic development of the Dominican Republic, Santo Domingo, and Los Platanitos, while chapter three summaries the methods used for data collection and analysis. In chapter four, I present the findings from my field work, including a description of the composition of the informal business sector in Los Platanitos and an analysis of its role in establishing and maintaining community support networks. I conclude my thesis with a discussion of proposed municipal policy strategies intended to integrate these informal establishments while still maintaining the social networks that characterize the emergency economy of Los Platanitos (Simone 2008).

Chapter 1: Literature Review

INTRODUCTION TO THE ISSUE

Urbanization is now the predominant experience in underdeveloped nations of the southern hemisphere (Davis 2006, Dawson 2004, De Soto 2000). Because of the limited capacity of developing countries to provide adequate infrastructure and housing, this rapid rate of urbanization is resulting in the creation or expansion of slums in the developing world (Awusu, Agyei-Mensah and Lund 2008). In 2001, 924 million people, or 31.6 percent of the world's urban poor, lived in slums (UN Habitat 2003). By 2030, an estimated 5 billion of the world's 8.1 billion people will live in cities and about 2 billion of them will live in slums, primarily in Africa and Asia (Davis 2006, Eaves 2007, UN Habitat 2003).

A UN Habitat study in 2003 found that in 2001, 924 million people, or 31.6 percent of the world's urban poor, lived in slums. Of this figure, 43 percent lived in developing regions compared to six percent in more developed regions (UN Habitat 2003). Sub-Saharan Africa had the largest proportion of the urban population living in slums, with 71.9 percent. Oceania had the lowest with 24.1 percent, while South-central, Eastern, and Western Asia had 24.1, 58, and 33.1 percent respectively. Northern Africa and Southeast Asia were at 28.2 and 28 percent respectively. Latin America and the Caribbean, the focus region of this study, had 31.9 percent of the urban population living in slums. In terms of absolute numbers, Latin America and the Caribbean had 128 million slum dwellers, or about fourteen percent of the world's total slum dwellers (UN Habitat 2003).

The spatial structure of these Latin American slum developments are influenced by what is termed as *multi-centers*. Many cities are amorphous and multi-nodal in their development because they have been built almost from the beginning around motorized transport, rather than walking. Different modes of motorized transport, i.e. personal automobile and public transportation, create differentials in mobility for individuals within different classes. More affluent neighborhoods will often surround concrete canyons of business districts where few poor people venture. Poor people cannot rely on efficient modes of transportation, like cars or public transit, creating less mobility in these neighborhoods. This creates the different types of economic activity within the *multi-centered* urban fabric. Larger urban areas of poor quality low-income housing can lie in older inner areas, in squatter zones on the fringe, or in wedges and strips of fragile land. A prototypical slum that lies within the dense urban center of a city is Dharavi in Mumbai, India, where a million people live on prime property in the middle of this world financial capital. Slums that lie on the fringes of urban centers are seen in Brazil, where favelas lie in the hills surrounding the city. This is also the case in other informal settlements in Latin America.

A UN Millennium Project report in 2005 on the lives of slum dwellers found that in Latin America and the Caribbean, there is a need to confront the underlying causes of urban crime and violence in order to make slums safer for habitation. The fear of violence and crime has replaced the fears of the 1960s and 1970s of eviction by the government or private land owners. Latin America has the world's highest homicide burden, which is more than double the world's average of 3.5 per 1,000 people (United Nations 2005). These high crime rates are compounded by the exclusion of slum dwellers from formal economic and social systems. There is a lack of political voice, secure and good quality housing, safety and the rule of law, good education, affordable health services, decent

transportation, adequate incomes, and access to economic activity and credit that make the slum dwellers' lives even more difficult than wealthier individuals (United Nations 2005). The multitude of differences between slum dwellers and more prominent urbanites affects the way they access and control these amenities. This is seen in cases where slum dwellers must illegally acquire electricity and water, while wealthier citizens can rely on the city for such services. Other problems faced in urban slums are intentional and unintentional injuries, communicable diseases, and sexual and reproductive health issues. Given these harsh physical and social conditions in urban slums, sustained and chronic stress is prevalent. Mental health studies focusing on such communities show that depression affects many urban adults, with poor urban residents suffering the most (Blue 1999, Montgomery et.al. 2003).

INFORMAL ECONOMIC ACTIVITY IN INFORMAL SETTLEMENTS

While globalization and the liberalization of many economies have catalyzed growth in many countries, there is a need to focus on how these developments have impacted informal sector economies. The informal sector generally means economic activities that operate outside the national and local legislative or regulatory context (Brown 2006). Measurements of the informal economy are a difficult task as there is no clear definition of this term. Guillermo Vuletin (2008) delineates a variety of terms that are utilized to describe these economies: the “illegal economy” consists of the income produced by those activities pursued in violation of legal statutes defining the scope of legitimate forms of commerce, and the “unreported economy” consists of those legal and illegal economic activities that evade fiscal rules as codified in tax laws (Vuletin 2008):

The informal economy comprises those economic activities that circumvent the costs and are excluded from the benefits and rights incorporated in the laws and administrative rules covering property relationships, commercial licensing, labor contracts, torts, financial credit and social systems. A summary measure of the informal economy is the income generated by economic agents who operate informally. Similarly, Portes et al. (1989) defines the informal economy as ‘a process of income-generation characterized by one central feature: it is unregulated by the institutions of society, in a legal and social environment in which similar activities are regulated. (Vuletin 2008)

Of 42 countries where data on informal employment was collected, 17 had more than half their employment in the informal sector (Brown 2006). Latin America experienced an increase from 52 percent in 1990 to 58 percent in 1997 which was spurred by the contraction of formal economies (Brown 2006). This growth appears to be linked to the process of globalization, the exclusion of large groups from its benefit, and the increasing urbanization of poverty (UN Habitat 2004). The evidence of growth in informal economic activity highlights the draw, and need, of individuals seeking to benefit from commerce activity, while at the same time having to circumvent the cost and laws that have been developed for the protection of economic activities.

Research conducted on the informal sector highlights networks and social structures in slum communities around the globe (Baharoglu and Leitmann 1998, Garau et. al. 2005, Mitra 2004, Pelling 2002, Simone 2008, Soto 2000). Baharoglu and Leitmann (1998) state that “in the absence of relevant formal rules, coping strategies – which enable the spontaneous settlements to operate – are formulated by suppliers and consumers” (Baharoglu and Leitmann 1998, 115). In other words, it is recognized that “there are actors and modes of behavior inside and outside of the formal rule structure who shape infrastructure and service outcomes” (Baharoglu and Leitman 1998, 188).

Informal settlements that are not governed by formal rules can be better understood in the light of this theoretical framework.

In looking deeper at the absence of formal rules and coping mechanism of informal settlements, Mark Pelling (2002) proposes the concept of *adaptive potential* through his examination of local social assets in Santo Domingo, Dominican Republic. Arup Mitra (2004), who studied the role of networks in accessing jobs in the urban labor market, has further expanded on this concept. Mitra (2004) identified three types of networks that operate through kinship bonds, caste or ethnicity bonds, and formal channels like NGOs and employment exchanges. In his study of 800 slum households in New Delhi, India, he notes that the urban labor market is highly segmented because of the differences in the nature of economic activities performed in different parts of the city. The lack of formal rules gives rise to networks and systems that are built upon *adaptive potential*. Within this, the segmentation in the urban fabric allows for the assembly and formation of communities which are supported by such networks. This creates communities that are self sufficient and rooted in place.

The concept of *emergency democracy*, developed by Abdoumalig Simone (2008), adds to the understanding of such activities. The term *emergency* connotes a state of alarm and the “rupture in the organization of the present where normal approaches are insufficient, where what has transpired in the past threatens the sustenance of well-being at the same time that it has provided an inadequate supply of resources in order to deal with this threat” (Simone 2008, 30). This suggests that despite the failure of the formal approaches of the present system, communities develop systems of self-sustenance and self-sufficiency. Ultimately, this literature suggests that there is a semblance of a formal economy at work in informal settlements. As these activities further assimilate into the urban fabric of developing cities, a strong linkage between the formal and informal sector

develops. This linkage is developed with regards to everyday goods and service provisions. In many instances, there is a great diversity of commerce within communities despite the lack of state and municipal government initiatives. This illuminates an entrepreneurial spirit where innovation and desire for legitimacy exist despite the overall experience of poverty.

LEGALIZATION AND TENURE

As informal communities become more interwoven into the urban structure of cities in the developing world, the question of legality become more prominent. As increasing numbers of people migrate to cities looking to start a business of their own, they face serious bureaucratic hurdles when trying to legalize their business. The bureaucratic process for legalizing a business in developing countries is extremely difficult for those who lack legitimacy and proper funds (De Soto 2000). For people who live in informal settlements, or land where individual property rights are not protected, they face major hurdles when attempting to legalize their businesses.

In an attempt to understand the process of legally creating a firm, De Soto's team worked at creating a garment workshop on the outskirts of Lima, Peru. The team spent six hours a day working on this, and 289 days later they finally received the required certificate to operate. The cost of legal registration was \$1,231 for a firm with just one employee, thirty-one times the monthly minimum wage. Additional non-monetary cost, like travel time, add to this burdensome process. In Egypt, if an individual seeks the proper legal ownership of land or a business, they risk having their dwelling demolished, paying a steep fine, and serving up to ten years in prison. In Haiti, a citizen can settle legally on government land by leasing it for five years; however the process for obtaining

this lease involves 65 bureaucratic steps. The average time period is two years. Purchasing the land after the 5 year lease period required another 111 bureaucratic steps and twelve more years (De Soto 2000).

Because of the many obstacles in obtaining or maintaining a title to their home, or when attempting to legalize their business, most people decide to opt out of the legal system. De Soto refers to this as the “extralegal” system. This alternative of working and living outside of official law creates a system of communities using informally binding arrangements to protect and mobilize their assets (De Soto 2000). These arrangements are developed from a combination of rules selectively borrowed from the official legal system as ad hoc improvisations, customs brought from their places of origin, or systems that are devised locally. These arrangements are held together by a social contract that is upheld by a community as a whole and is enforced by the authorities that are selected by the community. This type of entrepreneurial undertaking is filling a gap in the legal economy. In addition, this “undercapitalized sector” (De Soto 2000, 28) is proof of the non-idleness demonstrated by these individuals and their progressive economic activity that is spurred out of the need to engage in an emergency economy. This again highlights the *adaptive potential* of those living in informal settlements and the networks that are developed therein.

De Soto’s (2000) extensive study highlighted five *mysteries of capital*. The first of these is the mystery of “missing information,” which refers to the myopia of charitable organizations which focuses on the miseries and helplessness of the world’s poor, while overlooking the capacity of these communities for accumulating assets. This missing information is prominent in the undercapitalized sector. After further review, this information sheds light on migrants who have not retreated “into idleness” but who instead have developed communities that “buzz with hard work and ingenuity” (De Soto

2000, 28). De Soto states that “new urban poor have created entire industries and neighborhoods that have to operate on clandestine connections to electricity and water” and that these “new entrepreneurs are filling the gaps in the legal economy as well” (De Soto 2000, 28). The Mexican Statistics Institute in 1994 came up with a total of 2.65 million informal micro businesses (De Soto 2000).

De Soto’s work suggests that the assets of the informal sector represent a great potential for economic development. This leads to his third “mystery,” which is the mystery of “political awareness,” i.e. the inability of governments to tap into the potential wealth represented by the assets of the informal sector. Soto argues that a huge industrial-commercial revolution which was spawned in these poorer countries has been largely ignored. The fourth mystery is the “missing lesson” of U.S. history. What is currently taking place in the Global South and in former communist states has taken place before in Europe and North America. The fifth and final factor is the mystery of “legal failure.” Soto states that since the 19th century, nations have been copying the laws of the West to give their citizens the institutional framework to produce wealth. However, this model is not working for such countries due to particular development and cultural trends. Legal processes that have been adopted do not properly address the needs and aspirations of those working and living in the informal sector. As stated by De Soto, modifications in company and property law which adapt to the needs of those that are accustomed to extralegal rules will create more potential for legal compliance.

DEBATE ON FORMALIZING SLUM DEVELOPMENTS

De Soto’s approach, which calls for the formalization of the informal, or “extra-legal”, sector, has been applied in developing cities through mass titling programs. Such

policies are put in place to protect residents of these communities from involuntary removal from their land by the state or third parties. The method is also meant to generate the economic and commerce activities that had historically been excluded from the formal sector and the protection therein. Gustaff Reerink and Jean-Louis van Gelder (2010) studied the consequences of such policies for informal settlements, or kampongs, in Bandung Indonesia. Three categories of land tenure were used in this analysis: formal land tenure, semi-formal tenure, and informal tenure. Formal tenure signifies full legal ownership of property based on the rights acknowledged by the 1960 Basic Agrarian Law (BAL), which remains the general framework for Indonesian land law. Semi-formal tenure applies to local tradition *adat* law, which acknowledges inherent ownership rights; however full ownership is not recognized. Ownership is semi-formal in that it is acknowledged as a legitimate claim for formalization which can be formalized through titling programs provided by the state. The third category, informal land tenure, is the result of dwellers squatting land on which the state holds direct right. Dwellers in this category have no legal basis for tenure (Reering and Gelder 2010).

When respondents were asked if they foresaw possibility of their involuntary removal from their land in the next five years, 94.7 percent respondents who had formal tenure stated that there would be no possibility of removal, compared to 93.1 percent who had semi-formal tenure and 76.4 percent of those with informal tenure. While there is a large difference between the informal and semi-formal/formal respondents, it must be noted that more than three fourths of those with informal tenure do not experience a threat of removal. Similar results were found when respondents were asked whether the government would agree that they reside on the land in a *de facto* legal manner, and not based on actual legal *de jure* ownership. Those stating “yes”, that they felt the government would recognize *de facto* residency, were 88 percent for formal, 91.6 percent

for semi-formal and 70.1 percent for informal. The overall findings of this report supported the assumption that land titling policies contribute to the perceived tenure security for residents in informal settlements. Also, the findings support the idea that perceived tenure security is “enhanced not only by titling, but also by increasing de facto tenure security” (Reering and Gelder 2010, 84).

Erica Field (2005) further examined the effect of changes in tenure on residential investment in urban informal settlements. Results of her study indicated that strengthening property rights in urban slums had a significant effect on residential investment. She states that “strengthening tenure security through property formalization in urban squatter settlements has a large positive effect on investment... [and] is associated with a 68 percent increase in the rate of housing renovation within four years of receiving a title” (Field 2005, 280). Her findings suggest that strengthening of property rights in urban slums leads to this significant increase in residential investment, and that property reforms can be “productivity-enhancing” in urban settings (Field 2005).

The formalization of urban slums settlements by way of titling is becoming a more common strategy to address the issue of legal land tenure and informal economic activity (De Soto 2000, World Bank 2003). However, this approach has encountered criticism as well (Bromely 2008, Durand-Lasserve and Selod 2007, Sjaastad and Cousins 2008, Von Benda-Beckman 2003). Bromely (2008) argues that slum dwellers who get titles and are without work cannot possibly leverage credit or gain sufficient income for financial upkeep of housing and land. He also makes the argument that formalization erodes and displaces existing social networks and arrangements that do offer security.

Sjaastad and Cousins (2008) state that this universal proposal of formalization contains numerous flaws and that a more context-specific and flexible approach is needed. Policies that pay greater attention to local settings and specific objectives, with

tools that take account of local politics and culture, should be put in place. They highlight that the “objective must be to make state-sanctioned laws and policies a meaningful and stabilizing influence in the daily life of the poor rather than a source of opportunism and confusion” (Sjaastad and Cousins 2008, 8). There is a need for a wider perspective that recognizes the complexities of poverty and its causes, the realities of existing practices and local livelihoods, and the myriad of conflicts that often surround land (Sjaastad and Cousins 2008). When taking into account *adaptive potential* and network systems that are in place in informal settlement communities, “nation-wide formalization programs can be seen as risky social experiments that gamble with the livelihoods of the poor... [and] we should encourage pilot projects and smaller experiments that can aid in our understanding without producing irreversible disasters” (Sjaastad and Cousins 2008, 8).

Jan Nijman (2009) highlights these existing practices and local livelihoods in his study of space in Mumbai’s slums. He notes that there is an overwhelming significance of place for its dwellers: “it determines who they are, what they do, where they go, and whom they know” (Nijman 2009, 4). The multiple realms of life are spatially integrated and Nijman’s study reveals the overlapping spatial patterns. Slums therefore “not only provide shelter to a large urban labor force but also a milieu that is conducive to intense social organization and economic production” (Nijman 2009, 4).

Ultimately in looking at the breadth of literature on informal settlements and economies, policy makers are beginning to see the importance in the assimilation of these communities into their urban fabric. New approaches that address these issues are coming into play that do not simply demolish settlements or grant land titles to residents (Uzun et. al. 2010).

In this thesis, I will integrate the theoretical perspectives developed by Pelling (2002), Mitra (2004), Nijman (2009), Simone (2008), and Sjaastad and Cousins (2008) to

consider how the community of Los Platanitos has developed and established a strong network of businesses and economic activity. The community's sense of place has developed by way of *adaptive potential*. My research will show that the lack of formal rules has given rise to a self sufficient and highly active community, where every day needs are met through the residents' strong entrepreneurial economic spirit. Findings will show that the simple approach of granting land titles will not be sufficient in addressing this dynamic community. Policy makers can use this framework and analysis to develop policies that are sustainable and uniquely tailored for informal settlements of this type.

Chapter 2: The Place

The following chapter provides a brief introduction to the island of Hispaniola, the country of the Dominican Republic, the city of Santo Domingo, and finally, the community of Los Platanitos. I start with a history of the region, which leads to a discussion of the regional political economy and the internal movement to cities. I focus in particular on the development of informal settlements such as Los Platanitos. In the section on slums/informal settlements (also commonly known as cañadas in the Dominican Republic), I describe how many people live in these settlements, where they are located, and the variety of problems that they face. The section on the community of Los Platanitos will provide insight into survival strategies and community sustenance.

Figure 2.1: Island of Hispaniola



Source: BBC 2010

BRIEF HISTORY

Dominican Republic shares the island of Hispaniola with Haiti. The island was first explored and claimed by Christopher Columbus on his first voyage in 1492. It quickly became the springboard for Spanish conquest of the Caribbean and the American mainland. Before the arrival of Columbus, the Taíno people populated the island, which was called Quisqueya (mother of all lands) and Ayiti (land of high mountains) (Saunders 2005).

Spain recognized French dominion over the western third of the island in 1697, which became the independent nation of Haiti in 1804. Santo Domingo, as the remainder of the island was called, sought to gain its own independence in 1821; however, it was conquered and ruled by the Haitians for 22 years. It attained independence in 1844 as the Dominican Republic. The Dominicans voluntarily returned to the Spanish Empire in 1861. This was short lived, as two years later they launched a war that restored independence in 1865. Unsettled and mostly non-representative rule followed until Rafael Leonidas Trujillo initiated a dictatorship that lasted from 1930 until his assassination in 1961. Juan Bosch was elected president in 1962, but was deposed in a military coup the following year. The United States led an intervention during a civil war in 1965, which was sparked by an uprising to restore Bosch. Joaquin Balaguer defeated Bosch in an election to become president in 1966 and maintained power for most of the next 30 years, until international reactions to flawed elections forced him to conclude his term in 1996. Following this period, regular competitive elections have been held in which candidates from opposing parties have won the presidency. Former president Leonel Fernandez (1996 – 2000) won election to a second term in 2004 following a constitutional amendment that allowed presidents to serve more than one term. He is the current president of the Dominican Republic.

GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC OVERVIEW

Geography

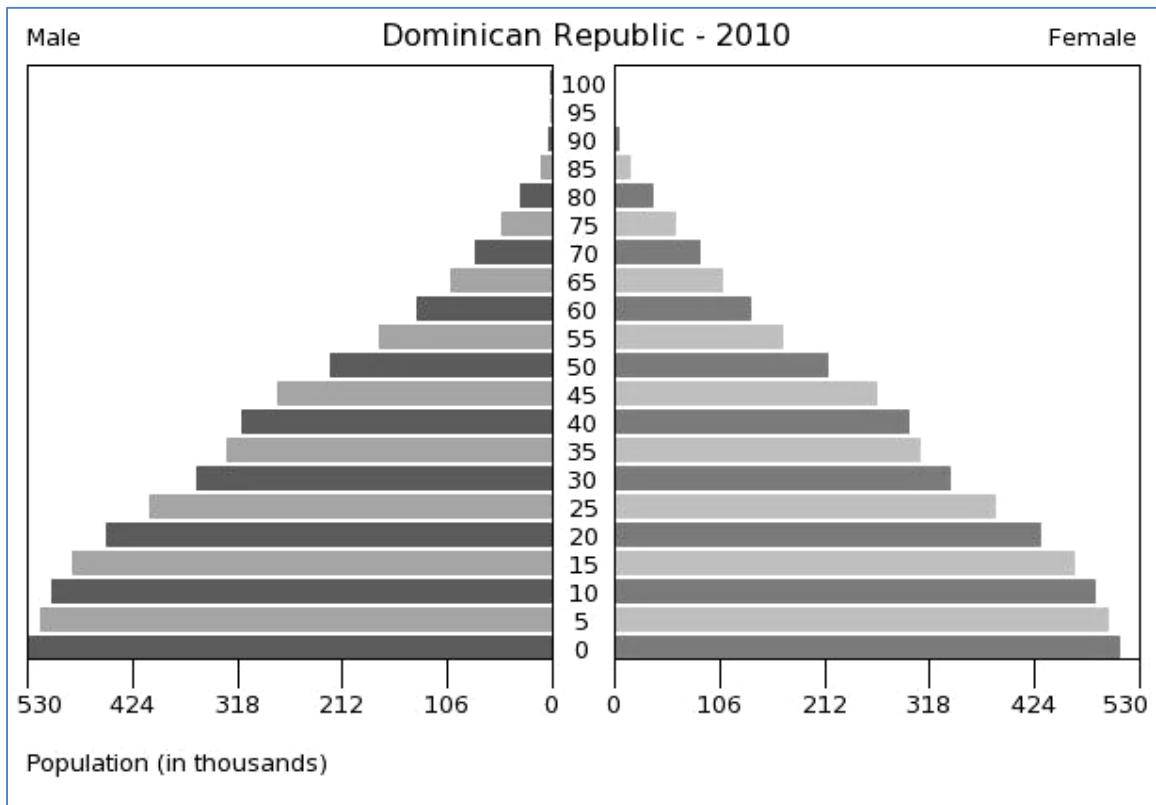
The total area of the island is 48,670 square kilometers, of which only 350 square kilometers are water. The Dominican Republic is located on the eastern two-thirds of the island that lies between the Caribbean Sea and the North Atlantic Ocean. The climate in the area is tropical maritime with little seasonal temperature variation; however, there are seasonal variations in rainfall. The terrain of the island is that of rugged highlands and mountains with fertile valleys interspersed. The highest point in the Dominican Republic is that of Pico Duarte, at 3,175 meters, and the lowest point is Lago Enriquillo at -46 meters. Natural resources are nickel, bauxite, gold, and silver. The total irrigated land in the country in 2003 was 2,750 square kilometers, with 10.26 percent of land being permanent crops, 22.49 percent arable land, and 67.25 percent termed as “other” (CIA 2010). The country lies in the middle of the hurricane belt and is subject to severe storms from June to October, and there are also occasional floods and periodic droughts. Along with deforestation, the country suffers from water shortages and soil erosion, which in turn is causing damages to coral reefs (CIA 2010).

Demographics

The estimated 2010 population is about 9.79 million people. The population pyramid for the country (Fig. 2.2) shows a heavy youth bulge, with more than 31 percent of the population below fifteen years of age (U.S. Census Bureau 2010). The working population, or individuals aged 15 – 64, constitutes approximately 63 percent of the total (U.S. Census Bureau 2010). Total median age is 24.9 years with a birth rate of 22.4 births per 1,000 persons and a growth rate of 1.5 percent (U.S. Census Bureau 2010). The

population ratio for the country is 1.04, with 50.7 percent being male and 49.3 percent being female. The total urban population in 2008 is estimated at about 70 percent with a 2.6 percent annual rate of change based on 2005 to 2010 estimates. The net migration rate for the country is estimated at -2.22 migrants for every 1,000 population. The ethnic breakdown of the country has 73 percent being mixed, 16 percent being white, and 11 percent being black (CIA 2010). As the rate of urbanization is a large factor in the development of an informal sector and informal communities, I will discuss it in more detail below.

Figure 2.2: Dominican Republic Population Pyramid 2010 Estimate



Source: US Census Bureau 2010

Economy

The Dominican Republic has been viewed primarily as an exporter of sugar, coffee, and tobacco. However, in recent years the service sector has overtaken agriculture as the economy's largest employer. This is due largely to the growth in tourism and free trade zones. Two-thirds of exports for the country are to the US, creating a high dependence on that country. A tenth of the country's GDP are remittances from the US, which is equivalent to almost half of exports and three-quarters of tourism receipts (CIA 2010).

The Dominican Republic suffers from great income inequality. A country's Gini coefficient, which is a range between 0 and 1 (or when multiplied by 100, between 0 and 100), is a measure of statistical dispersion that is used to evaluate the inequality of income or wealth. A low Gini Coefficient indicates a more equal distribution of income/wealth, with 0 corresponding to complete equality. Higher coefficients indicate more unequal distribution, with 1 corresponding to complete inequality. In other words, the most unequal society will be one in which a single person receives 100 percent of the total income and the remaining people receive none. The most equal society will be one which every person receives the same percentage of the total income. Denmark is an example of a country with low income inequality, as the Gini coefficient is 24.7 on the UN scale, and Namibia is a country with high income inequality, as the coefficient is 74.3. On the same UN scale, the Dominican Republic has a coefficient of 51.6 (UN Development Program 2010). However, it is important to note that it is not GDP that influences the Gini coefficient, but the *disparity* between income levels in the country. A country may have an extremely low GDP while also having a low Gini coefficient, which means that the people in that country do not have a strong disparity in income. In the Dominican Republic, the poorest half of the population receives less than one-fifth of the

GDP, while the richest 10 percent enjoys nearly 40 percent of GDP (UN Development Program 2010).

The high income disparity coupled with high under- and unemployment rates remain serious long-term challenges for the country. The Central America-Dominican Republic Free Trade agreement (CAFTA-DR) increased investment and exports after coming into action in March of 2007 (CIA 2010). This also reduced the losses to the Asian garment industry which has a strong presence in the country. Because of the global recession, the economy started slowing down in the middle of 2008 after several years of strong GDP growth. In particular, the recession has had a significant impact on tourism and remittances to the country.

The estimated Gross Domestic Product (GPD) based on Purchasing Power Parity (PPP) for the Dominican Republic was \$78.89 billion in 2009 (CIA 2010). While this is lower than the 2008 estimate of \$79.12 billion, it is higher than the 2007 estimate of \$75.14 billion. The 2009 GDP real growth rate was -0.3 percent; a stark contrast from the 5.3 percent and 8.5 percent growth rate for 2008 and 2007, respectively. GDP per capita has remained at about \$8,000 based on PPP. Within this, the GDP composition by sector was 10.5 percent in agriculture, 21.3 percent in industry, and 68.2 percent in services, with a labor force for each respective industry at 14.6 percent, 22.3 percent, and 63.1 percent in 2005 (CIA 2010). The size of the labor force is estimated at 4.417 million for 2009. As stated above, one of the perpetual issues that this country has to deal with is that of unemployment, with a rate of 15.1 percent in 2009, a 1 percent increase from the 2008 estimate. This helps at putting the population below the poverty line at more than 40 percent (CIA 2010).

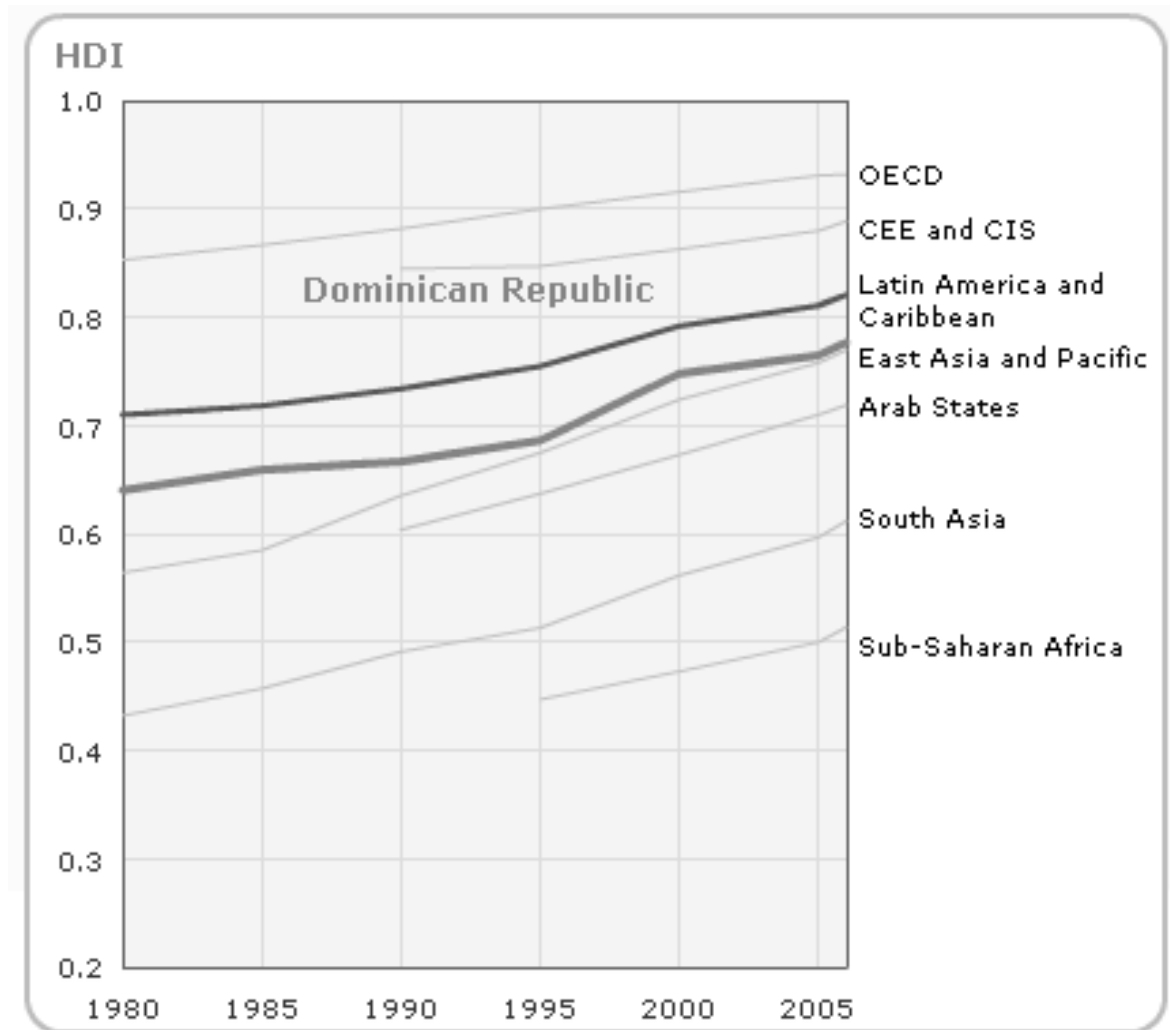
GOVERNANCE AND DEVELOPMENT INDICATORS

Various indexes have been developed to characterize the development and social structure of countries. After describing these different indexes, I will discuss their relevance to the present study.

Human Development Index

Since 1990 the Human Development Report, part of the United Nations Development Program, has published the Human Development Index (HDI). This index looks beyond GDP to a broader definition of well-being. It provides a composite measure of three dimensions of human development: 1) living a long and healthy life (measured by life expectancy), 2) being educated (measured by adult literacy and gross enrollment in education), and 3) having a decent standard of living (measured by purchasing power parity, PPP, income). While other important indicators are not present in this index, it gives a broadened prism for viewing human progress and the complex relationship between income and well-being (UN Development Program 2010). Of the HDI components, only income and gross enrollment are somewhat responsive to short term policy changes, and for that reason, it is important to examine changes in the HDI over time. It is these trends that illuminate the important aspects of development for each respective country. The index is based on a 0 to 1 range, with 1 being the highest level of HDI and 0 being the lowest. With regards to the Dominican Republic, between 1980 and 2007 the country's HDI rose by 0.72 percent annually from 0.640 to 0.777 today (Fig. 2.3). The 0.777 HDI gives the country a rank of 90th out of 182 countries which have data available.

Figure 2.3: Human Development Index 1980-2005



Source: Human Development Report 2009

Human Poverty Index

While the HDI measures the average progress of a country in human development, the Human Poverty Index (HPI-1) focuses on the proportion of people below certain threshold levels in each of the dimensions of the human development index (i.e. living a long and healthy life, having access to education, and a decent standard of

living). This index uses the proportion of people who are not expected to survive to age 40 as a measurement of severe deprivation in health. Education, in turn, is measured by the adult illiteracy rate; while the “decent standard of living” is measured by the un-weighted average of people not using an improved water source combined with the proportion of children under age 5 who are underweight in their age. The Dominican Republic, with a value of 9.1%, ranks 44th among the 135 countries for which the index has been calculated. The below table provides the variables and shows them in relation to other countries (Table 2.1) (UN Development Program 2010).

Table 2.1: Human Poverty Index

Table 2: Selected indicators of human poverty for Dominican Republic				
Human Poverty Index (HPI-1)	Probability of not surviving to age 40 (%)	Adult illiteracy rate (%ages 15 and above)	People not using an improved water source (%)	Children underweight for age (% aged under 5)
1. Czech Republic (1.5)	1. Hong Kong, China (SAR) (1.4)	1. Georgia (0.0)	1. Barbados (0)	1. Croatia (1)
42. Uzbekistan (8.5)	81. Kyrgyzstan (9.2)	73. Lebanon (10.4)	43. Kazakhstan (4)	33. Uzbekistan (5)
43. Brazil (8.6)	82. Honduras (9.3)	74. Peru (10.4)	44. Guatemala (4)	34. Venezuela (Bolivarian Republic of) (5)
44. Dominican Republic (9.1)	83. Dominican Republic (9.4)	75. Dominican Republic (10.9)	45. Dominican Republic (5)	35. Dominican Republic (5)
45. Mauritius (9.5)	84. Jamaica (9.9)	76. Bahrain (11.2)	46. Ecuador (5)	36. Qatar (6)
46. Suriname (10.1)	85. Suriname (10.0)	77. Turkey (11.3)	47. Chile (5)	37. Brazil (6)
135. Afghanistan (59.8)	153. Lesotho (47.4)	151. Mali (73.8)	150. Afghanistan (78)	138. Bangladesh (48)

Source: UN Development Program 2010

Worldwide Governance Indicators

“Governance” consists of the traditions and institutions where authority in a country is exercised, but also includes the process by which governments are selected, monitored and replaced (The World Bank Group 2009). The capacity of the government to effectively formulate and implement sound policies is an important factor, governments need to respect the institutions that govern economic and social interactions

between the state and the citizenry. “Governance indicators” have been developed that can be used to analyze the efficiency and capacity of national and local level governments. These aggregate indicators are based on survey responses of a large number of business leaders, experts, and citizens and experts, and on data drawn from a variety of survey institutes, think tanks, NGOs, and international organizations. The indicators are disseminated in the form of a ranking system, which compares 211 countries world-wide. I developed the table below (Table 2.2) to provide a snapshot of the governance indicators for the Dominican Republic with high and low benchmarks (The World Bank Group 2009).

Table 2.2: Governance Indicators for the Dominican Republic 2008

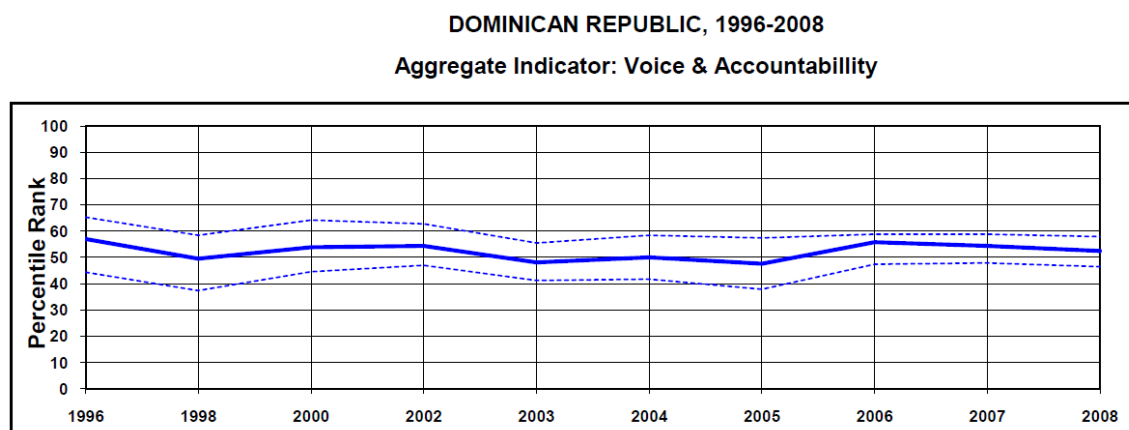
	Benchmarks
Voice & Accountability: 52%	Norway 100%/Eritrea 1%
Political Stability & Absence of Violence: 49%	Luxembourg 100%/Pakistan 1%
Government Effectiveness: 42%	Singapore 100%/Congo 1%
Regulatory Quality: 46%	Hong Kong 100%/Myanmar 1%
Rule of Law: 33%	Norway 100%/Iraq 1%
Control of Corruption: 32%	Finland 100%/Myanmar 1%

Source: The World Bank Group 2009

Voice and Accountability

The *Voice and Accountability* indicator ranking for the Dominican Republic puts it in the 52nd percentile in 2008. This measures the extent to which country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. The country's ranking puts it in the range with Macao and Timor-Leste, but above other Latin American countries like Mexico (50th), El Salvador (50th), Peru (49th), Bolivia (48th), Nicaragua (45th), and Ecuador, (41st). The Press Freedom Rank in 2009 as reported by Reporters Without Borders ranked the Dominican Republic 98th out of 175 countries (Reporters Without Borders 2009). The voice and accountability indicator shows a decrease in percentile rank between the 1996 and 1998 period with fluctuations around the 50th percentile for the rest of the decade, with a steady decrease after 2006 (Fig. 2.4).

Figure 2.4: Voice and Accountability 1996-2008

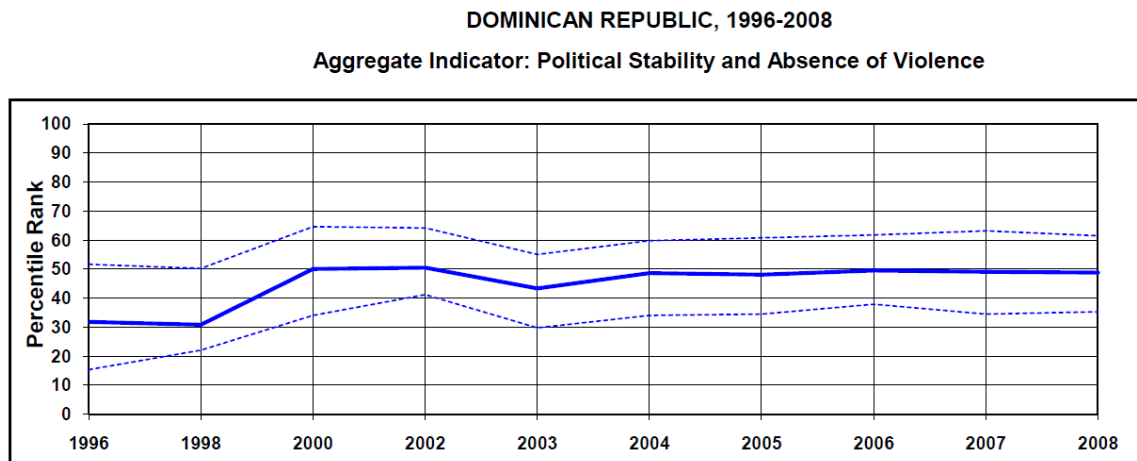


Source: World Bank Group 2009

Political Stability and Absence of Violence/Terrorism

The indicator of *Political Stability and Absence of Violence/Terrorism* measures the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism. The Dominican Republic's ranking in this indicator is in the medium range, in the 49th percentile. This puts it in the range of Panama and El Salvador. The historical trend shows low percentile rankings from the year 1996 to 2000 (Fig. 2.5). The 30th percentile ranking in 1996 corresponds to the Balaguer presidency. In 1994 elections were considered flawed and international pressure led Balaguer to schedule another election in 1996 (CIA 2010). After this period, functional democracy has remained constant and the country's percentile ranking has stayed in approximately the 50th percentile.

Figure 2.5: Political Violence and Absence of Violence 1996-2008

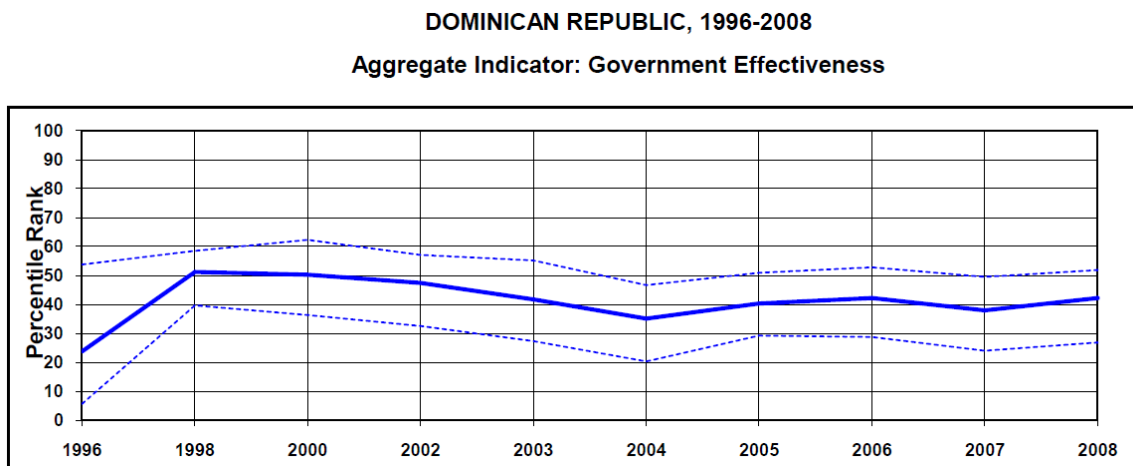


Source: World Bank Group 2009

Government Effectiveness

The Dominican Republic's ranking for *Government Effectiveness* for 2008 is in the 42nd percentile. This puts the country in the same range as Tonga and Mozambique. This measures the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Historically the country has experienced rather large fluctuations, with a low point in 1996, again attributed to Balaguer's presidency (Fig. 2.6). After a peak in 1998, the country's percentile ranking has not risen above 50th.

Figure 2.6: Government Effectiveness 1996-2008



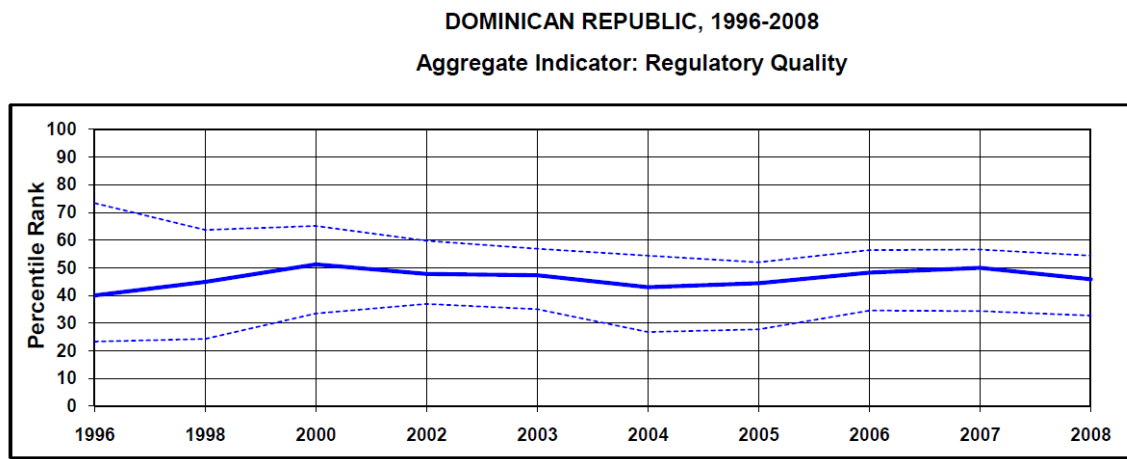
Source: World Bank Group 2009

Regulatory Quality

The *Regulatory Quality* indicator measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The Dominican Republic was at the 46th percentile in 2008, in the

range of Indonesia and China. Over the decade the country has reached the 50th percentile rank twice, once in 2000 and then in 2007, at the time of the passing of the DR-CAFTA (Fig. 2.7).

Figure 2.7: Regulatory Quality 1996-2008



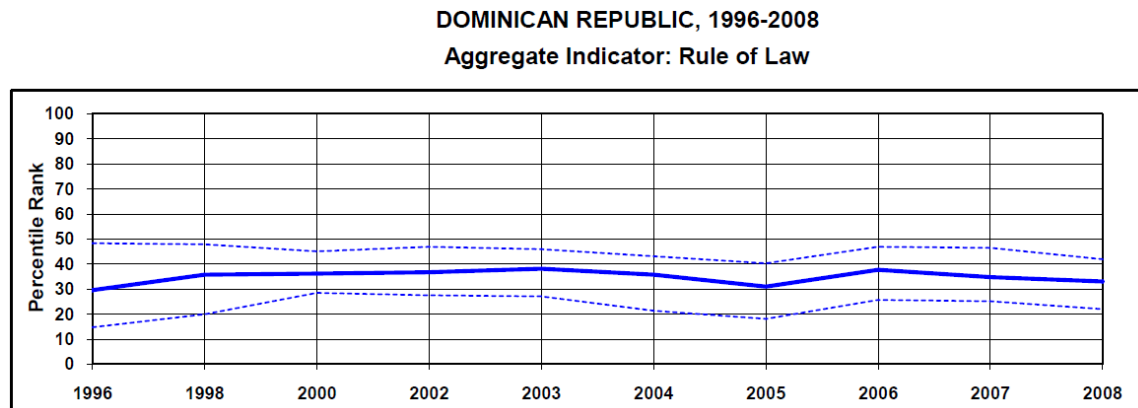
Source: World Bank Group 2009

Rule of Law

The Dominican Republic's standing for the *Rule of Law* indicator for 2008 was at the 33rd percentile, in the range of Argentina and Ethiopia. This measures the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence. In 1996 the country was ranked in the 30th percentile and has remained between the 30th and 50th percentile over the decade (Fig. 2.8). This indicator illuminates the weakness of the rule of law in the country. As stated above, crime remains a major factor in the Dominican Republic. This indicator shows that there is a lack of

effectiveness in the legal system and that the likelihood of crime and violence in the country remains relatively high.

Figure 2.8: Rule of Law 1996-2008

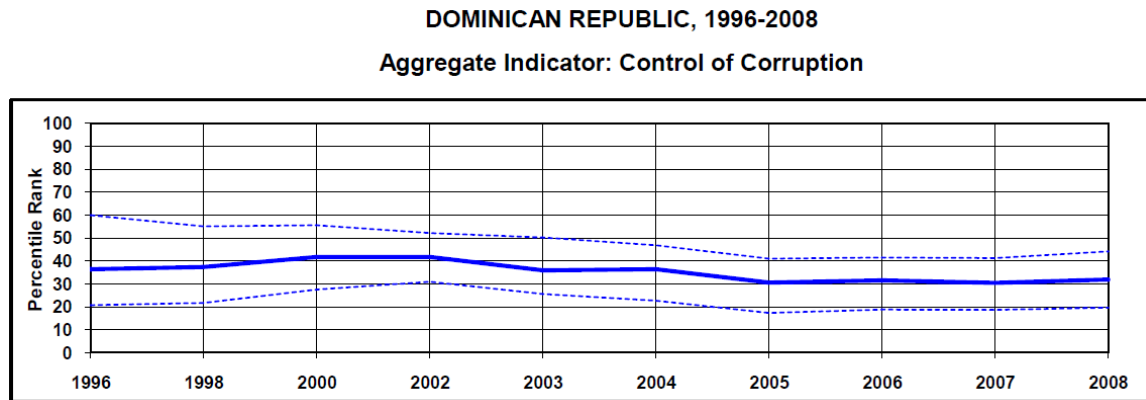


Source: World Bank Group 2009

Control of Corruption

The final indicator, *Control of Corruption*, measures the extent to which public power is exercised for private gain, including petty and grand forms of corruption, as well as the “capture” of the state by elites and private interests. The country’s 32nd percentile ranking in 2008 puts it in the range of Indonesia and Mongolia. Historical trends show that the Dominican Republic only went above the 40th percentile in 2000 and 2002. There is a downward trend in percentile rank after the Balaguer era, with the exception of two peaks in 2000 and 2002 (Fig. 2.9). The current ranking is an 11% decrease from the 1996 percentile ranking, which showed the country in the 36th percentile. The pervasiveness of corruption and the lack of rule of law are therefore two of the most pressing issue facing governance of the country.

Figure 2.9: Control of Corruption 1996-2008



Source: World Bank Group 2009

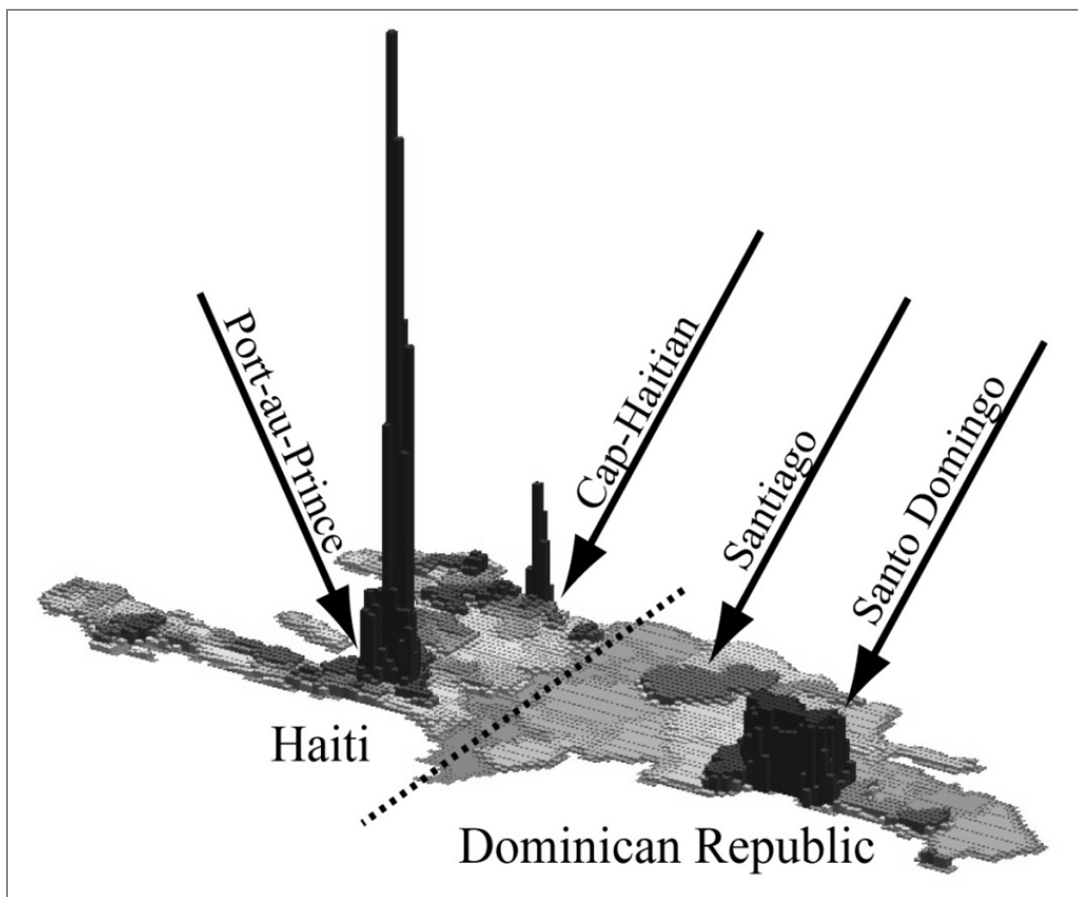
These indexes show that, relative to the 211 countries evaluated, the Dominican Republic is still struggling with inefficient governance, slow social development, and problems with poverty. While the country continues on its path of economic and social development, high rates of urbanization, and the inability for cities to address this influx, lead to the growth of the informal sector and informal settlements.

URBANIZATION AND SANTO DOMINGO

The urban population of the Dominican Republic is approximately 70 percent, with an annual rate of urbanization at 2.6 percent based on 2005 to 2010 estimates (CIA 2010). With a total population of 9.79 million people, that puts the urban population at about 6.8 million, with about 3.8 million living in the Santo Domingo metropolitan area (Fig. 2.10). For most of its history, the country was overwhelmingly rural. In 1920, over 80 percent of the population lived in the countryside, and in 1950 more than 75 percent

still lived in rural areas. Urban expansion began in 1950 and gained momentum in the 60s and 70s. Urban population grew at 6.1 percent annually during the 1950s and 5.7 percent annually during the 60s and 70s. Through the 1980s the urban population grew at 4.7 percent annually (Haggerty 1989).

Figure 2.10: Population Grid Hispaniola 2000



Source: Strange 2010, SEDAC 2010

In the early part of the 20th century the Dominican Republic was dominated by smaller cities and provincial capitals. Nearly 80 percent of all city dwellers lived in cities with fewer than 20,000 inhabitants. At this time, Santo Domingo had barely more than 30,000 residents, accounting for only 20 percent of all urban residents. However, the population of Santo Domingo doubled every decade between 1920 and 1970, and by 1981, the city accounted for nearly half of all city dwellers. Cities with fewer than 20,000 inhabitants accounted for less than 20 percent of the urban population by 1981 (Haggerty 1989). Based on current estimates; approximately 56 percent of the country's urban population lives in the Santo Domingo metropolitan area. The second largest city in the country is Santiago de los Caballeros with a population of 1.94 million, followed by La Romana with a population of 250,000.

The massive physical expansion of the city began in the 1950s when the growth in industry, coupled with Trujillo's expropriations of rural land, fueled rural-urban migration. This population growth and rural-urban migration strained the capacity of the municipal government to provide adequate housing and amenities. During the time between 1930 and 1996, central government captured most of the municipal government's responsibilities, with the exception of rubbish collection which had been privatized (Pelling 2002). However, planning at this time was directed by the whim of the president, and there was no urban development plan (Cela 1996). Squatter settlement grew rapidly, especially during 1980s, when there was an estimated housing deficit of some 400,000 units. These settlements in Santo Domingo were concentrated along the Ozama River and on the cities periphery. The word, *campuno*, was coined to describe the rural-urban campesino migrant (Haggerty 1989). The principle destination was Santo Domingo, also known as the *national district*. Estimates in 1985 put national district inhabitants at almost 50 percent migrants.

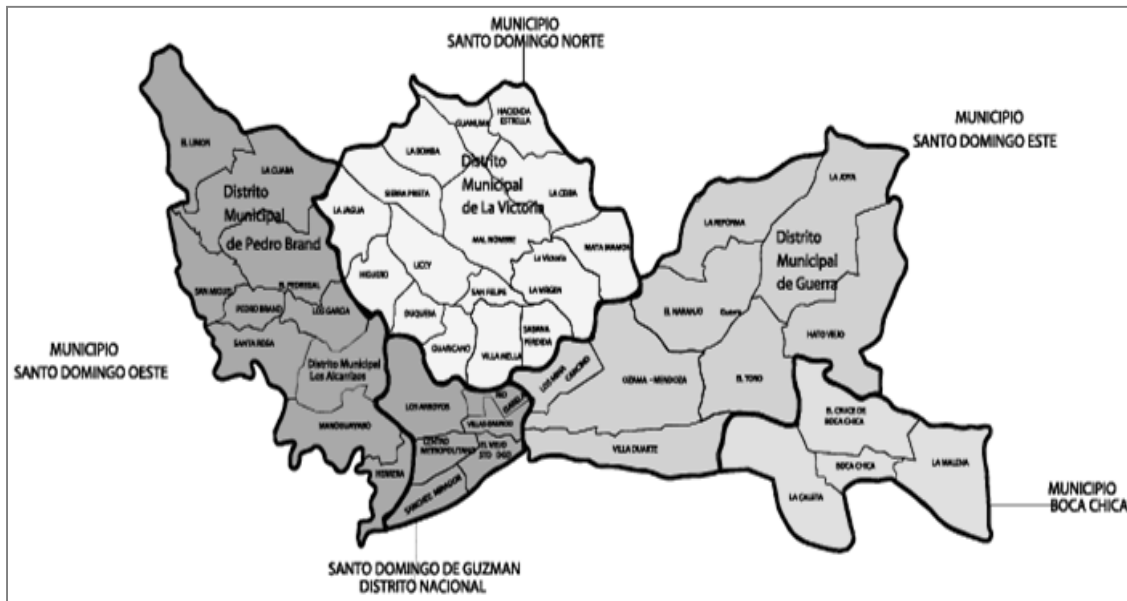
Studies conducted by José Itzigsohn on the informal economy of the Dominican Republic and Costa Rica give insight into what types of jobs might be sought out by such rural-urban migrants. This will begin to illuminate the growth of informal settlements (Itzigsohn 2000). Between 1950 and 1960, formal urban employment experienced a sharp reduction as a proportion of total employment in urban areas. This was then followed by rapid growth between 1960 and 1980. These trends suggest that under the Trujillo dictatorship industrialization developed at a very slow pace (Itzigsohn 2000). Therefore, people who migrated to cities found little work in the formal economy and sought income through the informal sector. However, Trujillo also prohibited internal migrations, and only after the end of this regime in 1961 did internal migration to the cities and industrialization accelerate. During the era of Import Substitution Industrialization, which is a trade and economic policy based on the premise that a country should attempt to reduce its foreign dependence through the local production of industrialized products (Baer 1972); labor absorption into the formal economy in the Dominican Republic was not as robust due to Trujillo's prohibition migration. The lack of a developmentalist-protective regulatory regime gave rise to this trend as well (Itzigsohn 2000). These policies caused the development of a large informal sector. The rise of an industrial base spurred urban migration; however the lack of jobs in this sector spurred the development of informal communities in urban regions (Yunén 1992, Itzigsohn 2000). In Santo Domingo, 64 percent of the city's population lived on 20 percent of the urban land area in 1981. By the 1980s, about 70 percent of the population of Santo Domingo lived in the informal sector of "working-class barrios and poor shantytowns" (Greene 2003, 174). By 1990, the informal/self-build sector accounted for 71 percent of all housing in the urban area (Fernandez 1996).

INFORMAL SETTLEMENTS IN SANTO DOMINGO

The Dominican Republic's capital city, Santo Domingo, was disaggregated into five separate municipalities in 2001 as part of a national strategy to decentralize regional development and policy making (Baez 2007). These five are Santo Domingo Este, Santo Domingo Oeste, Boca Chica, the Distrito Nacional (National District), and Santo Domingo Norte (Fig. 2.11). A continuous influx of migrants into the city from the rural areas has created a challenge for urban planning and the administration of public works in these new municipalities. Many of these municipalities lack the economic and technical capacity to handle the influx of migrants, which, in turn, has led to the proliferation of cañada settlements (Greene 2003, Pelling 2002, Fernandez 1996). In the words of Pelling, "exclusion from the formal housing market, together with the forced clearance of established inner-city barrios for prestige development projects since the 1980s, has promoted the rapid growth of informal settlements on the fringes of the city, and in hazardous places adjacent to the rivers Isabela and Ozama" (Pelling 2002, 65). In Santo Domingo Norte alone, where Los Platanitos is located, there are more than 30 such settlements (Baez 2007).

These informal developments typically occur on state-owned land in the cañadas, or steep river valleys, but also in low-lying floodplains that are often at risk of flooding and are greatly exposed to hurricanes. The term cañada is used to refer to these types of settlements, but also, as in the case of Los Platanitos, also refers to the channel of water that runs through the community (Sletto ed. 2008). These settlements begin as informal, temporary settlements, which become consolidated communities through the continued presence of residents and constant arrival of newcomers.

Figure 2.11: Santo Domingo Regional Municipalities



Source: Baez 2007

These informal settlements consists of various types of homes, some permanent, and some more precarious. Permanent homes are built from a combination of cement blocks, aluminum, and wood (Sletto ed. 2008). Infrastructure development, such as streets, solid waste disposal, and water services, has been secured in piecemeal fashion though community initiatives and the work of local organizations. However, certain infrastructure cannot be obtained by community initiatives alone and has to be acquired by illegal means; electricity being a prime example.

Problems faced by the informal settlements in Santo Domingo are characteristic of informal settlements throughout Latin America. Drugs are a perpetual problem that not only affect the development and trajectory of youth culture, but also catalyze violence and gang affiliations in communities. As men and women are not able to engage in formal employment, work in the informal sector helps the family maintain a minimum

level of household income (Globe Net 2010). The term used for this type of work is a *chiripa*, and the term for a worker in this sector is *chiripero*. The Dominican sociologist, Isis Duarte, further defines this type of work (translated):

Chiriperos are not unemployed individuals. A person who is unemployed is one who is without work for a period of time, and in many countries, someone who receives subsidies during that time... In Santo Domingo an unemployed person can get formal employment or can get work that is called a *chiripa*. A *chiripero* does not have stable work and in no case does he or she have the protection of work laws or social security. (Duarte 2010)

Most families living in such *cañadas* do not have a sense of economic security due to the lack of income from informal work. Families tend to remain in the lower levels of poverty and must seek aid from the government to be able to purchase goods. The government has been able to respond with what is called a Carta de Solidaridad, a debit-card holders can use to purchase household goods. However, it has been documented that poorer communities have created social networks that reduce the effects of unemployment and difficulties with services (García 1996).

Malnourishment and disease are common problems in these particular types of settlements, as black and brown water are breeding grounds for mosquitoes and bacteria. Water accessibility is a problem in Santo Domingo; only 46 percent of households receive water in their home through a formal water system (CONAU 2007). Studies have shown that the majority of surface water in Santo Domingo is biologically contaminated (CONAU 2007).

While the situation in these urban informal settlements is drastic, initiatives are in place that address such problems. The Plan Cigua, or Plan de Desarrollo Urbano para la Ciénaga y Los Guandules, which was initiated in 2004 but is now in hiatus, worked to

cultivate the rights of persons living in the communities of Ciénaga and Los Guandules. A series of projects were put in motion to evaluate the environmental, social, and cultural conditions of these settlements. The goal was to generate a progressive process of intervention that addresses these different physical and social aspects while working with the government, community, and civil sector. Through participation of these three sectors, the intent was to serve as an example for addressing the conditions in informal urban settlements in Santo Domingo (Navarro 2004).

The Distrito Nacional (the downtown area of the city) has recently initiated a project that will address problems in some of these settlements. The “Acción Barrial” will address the challenges facing the informal settlements located in the floodplain of the rivers Ozama and Isabela through participatory planning among non-profit organizations, the city, and community members (Secretaria Técnica 2009).

LOS PLATANITOS

The problems facing informal settlements are sometimes exacerbated by the surrounding urban environment. Trash accumulation, highly trafficked roadways that run along the borders of these communities, and heavy rainfall which funnel trash and contaminants into the valley regions where these settlements are located, contributes to the vulnerability that community members deal with on a daily basis. This is also the case in the community of Los Platanitos (Sletto ed. 2008).

In 2007 The University of Texas at Austin engaged in a collaborative effort with the City of Santo Domingo Norte and the University Autónoma de Santo Domingo (UASD) to develop a program of cooperative research, technical assistance, and public sector engagement with government officials, scholars and students. This project focused

on the informal settlement of Los Platanitos in the spring semester of 2007. A group of ten students, along with Dr. Bjørn Sletto, worked in the community during the winter and spring break periods. In the fall of 2008 a report on methods for risk and vulnerability assessments in informal settlements was published based on this collaborative research (Sletto ed. 2008).

Los Platanitos is approximately 1 square kilometer and has a total, estimated population of 2,400 (Sletto ed. 2008). The average household size is 4.75, and the average age is 23.9. Average monthly household income is estimated at 7,030 pesos, or \$204US. The average number of years a family has lived in this community is approximately 13, and the average age of homes is 9.5 years. The unemployment rate of those 18 years or older who would like to work is 39.6 percent (Sletto ed. 2008). This is 162 percent larger than the national average of 15.1 percent of people unemployed (CIA 2010). The unemployment rate in Los Platanitos must be taken with caution however, since individuals who work informal daily jobs, or *chiripas*, may state that they are unemployed or seeking work.

Los Platanitos is bordered on the north by Avenida Emma Balaguer and by Avenida Parque Mirador on the south (Fig. i). The length of the community is approximately 450 meters along Avenida Emma Balaguer, but the width is only about 200 meters. The community began growing in the 1980s, during a period of high rural-urban migration. The original settlers of the community came in search of land near employment opportunities in the urban center. They engaged in the common pattern of building informal structures and neighborhoods in spaces that were not monitored by government agencies. This particular area previously served as a landfill for the city and the ground consist of layers of trash; the buried garbage produces pockets of methane that on occasions lead to methane explosions (Sletto ed. 2008). The name *Los Platanitos*

refers to the gardens that once existed in the area. Being that the settlers built their homes on what was public land deemed unsuitable for settlement, no water or electricity infrastructure were provided when the community was founded.

The community remained at about twenty families until the early 1990s. By the mid 1990s the area was steadily growing, which catalyzed the development of housing units, along the *cañada*, or waterway, in the lower portions of the valley. Based on interviews conducted during the UT study, long-time community members remember when the lower portion of the valley was a lake. In order to build their homes or businesses in the lower portions of the valley, residents put down sandbags, dirt, trash, and rock to create foundations. Despite severe hazards brought by flooding in the lower area, residents typically prefer to own a home near the *cañada* rather than renting a home at a higher elevation in the community (Sletto ed. 2008). The community today consists of numerous permanent homes built from a combination of cement blocks, aluminum, and wood (Sletto ed. 2008).

Through time, the city has attempted to provide water and electrical systems. However, due to the geographical precariousness and weak foundations, an adequate water and sewage system has not been fully developed. Potable water is often contaminated when cracks and breaks in tubing systems allow for the entrance of brown and black water. While the road network in the community is primarily dirt and gravel, the city in the last year has paved two primary arterials that allow for adequate mobility for commerce and access during times of heavy flooding.

Students conducted a visioning exercise where community participants identified and ranked their principal concerns. While flooding and related problems were the principal concerns for individuals living along the waterway in the lower lying region, people in the upper region were more concerned about social issues like crime and

employment. Overarching problems facing the community, in both the upper and lower regions, were lack of education, high unemployment, health services, and inadequate housing.

At the same time, students observed that residents of Los Platanitos have developed survival strategies and networks to sustain themselves and their families. Residents have also developed community organization and churches that address the myriad of social and physical problems that are faced in the community. This type of adaptive potential creates a self sustaining system that addresses economic needs as well as infrastructure needs like roads and electricity. This means that Los Platanitos has its own, internal “emergency” economy that provides formal and informal employment and a modicum of independence for community members. At the same time, community members are also employed in the formal and informal sectors outside the community, and there are informal businesses in the community that also serve the broader region. This highlights the integration between the informal and formal sectors of the city, and suggests that communities such as Los Platanitos need to be considered as integral to the urban fabric as cities develop. In the following chapter, I outline the methods I used to map and document businesses in Los Platanitos, while conducting interviews with residents and community leaders.

Chapter 3: Methods

The data gathered and my own experiences during the US student project in Los Platanitos in fall of 2008 helped me focus my research on business establishments and their contributions to the community. The data sets and maps also provided a strong base that I could build on and use when developing my methods. My participation in the initial class in 2008 facilitated my re-entry into the community in the summer of 2009. Contacts that had been established by UT professors, other students from the class, NGOs, and municipal workers, made it easier to form personal. These relationships were very important in that the majority of my methods required interviews with business owners in the community.

The methods for this project involved two main techniques. I conducted interviews with residents and business owners to: 1) document the formal and informal sectors of the local economy, and 2) to understand the ways in which the informal economy constitutes a network founded on *the adaptive potential* of community members. Geographic Information Systems (GIS) tools were also used to diagram and display the economic structure of the community. The main software used here were the ArcGIS applications ArcMap and ArcScene. The following will give an insight into the interview process, the mapping and documentation in the field, the use of photography, data entry, and the use of GIS.

PRELIMINARY DATASET

One way of gaining additional knowledge of the economic and commerce sector of the community was to field check, correct, and update information that had been

previously gathered in the field. The previous class had created a map of building envelopes throughout Los Platanitos. Land use data for each building had been entered in a spreadsheet, which allowed the students to create maps that “classify” buildings by land use; specifically public space, commercial, or residential. Because I spent four weeks in Santo Domingo, I was able to gather more data about each business establishment and also correct the location of these businesses when necessary. Since I was able to use the preliminary spatial and business data gathered by UT students in spring, 2008 as my starting point, I developed methods that contributed to these data through interviews with residents and business owners.

BUSINESS DATA COLLECTION

In my research, I focused on mapping and documenting activities in businesses and other locations where more casual business-related discussions or transactions take place. Before leaving Austin, I printed maps of the community on 11 by 17 sheets of paper. These maps showed building envelopes labeled with their respective land use and their unique ID (Appendix A). These codes corresponded to the data set developed by the UT students in 2008. Each row represented a building envelope, while each column indicated a specific set of data I would collect in the field for each establishment. These fields included land use, size of the establishment, duration of time as an establishment, and the name of establishment. I added an additional set of entries (rows) with unique IDs at the end of the data sheet in case I needed to add additional buildings or business establishments. These entries would then later be added to the map document. A voice recorder was also used to record interviews.

In order to update the information about each business establishment, I conducted semi-formal interviews with establishment owners, workers or managers. Each interview differed depending on what additional information was required. When I located business establishment not previously documented, then interviews would be longer in order to gather all the necessary information. When I approached businesses that were already included in the data set, I used interviews to verify already existing information or to fill in gaps in the data. As I conducted my field research and learned more about the informal and formal economies in Los Platanitos, I developed additional questions to further illuminate the role of the business sector in the community.

While in Los Platanitos, I always walked with local guides, both for safety reasons and also to capitalize on their local knowledge to locate all existing businesses. The guides provided insight and knowledge of particular establishments that had not been previously recorded. My guides were also able to provide information on establishments that had closed since 2008, when the data set had originally been developed. While I walked through the community with my guides, I conducted informal interviews with residents who were not owners of business establishments to gather information on local employment opportunities. I engaged in ad-hoc interviews whenever possible. These particular interviews gave me a better sense of the informal economy, social networks, and assisted me in understanding the terms used in Los Platanitos to describe various forms of work and commerce (Appendix B).

MAPPING WORKSHOPS

I held mental mapping exercises and mapping workshops with community members to document: 1) locations of commercial nodes, 2) the possible activity

individuals might be engaged in at these nodes, 3) “job opportunity locations” (i.e. places where *chiripas* can be obtained, or locations where persons might go to find formal work in the community), and 4) where job opportunities were located outside Los Platanitos. I provided the workshop participants with 1x2 meter maps showing: 1) a large scale map of Los Platanitos, 2) a medium scale map of the surrounding region, and 3) a small scale map showing the whole metropolitan area, 4) trace paper, and 5) colored markers. I then explained the maps, the goals of the exercise, and how to draw on the trace paper over the maps. I recorded the entire conversation with each participant with the voice recorder. Participants then marked on the trace paper the location of their home, where they went to work, and what method of transportation they used.

The goal of the mapping workshop was to map their movement in a *typical* day (a “typical day” was defined as a day when they were seeking work). However, a serious challenge was that the maps were difficult for individuals to comprehend. By using landmarks, i.e. subway stations, individuals were better able to gauge distance and locations in the city. The exercise did help me better understand the movement of residents outside Los Platanitos as they seek employment. However, this part of the research did not produce sufficient empirical data that could be accurately represented in this report.

GEOREFERENCING AND PHOTOGRAPHY OF STORE FRONTS

I also took photographs of each of the points of informal commerce and every business establishment. I referenced these photos on paper maps in order to label them later. My goal was to document the storefront of each establishment and the commerce activity taking place there. Although I wanted to take candid photographs, this proved

difficult since people would typically want to pose for the photos. The photographs also proved helpful in categorizing business establishments in different sectors, as described in the *Findings* chapter. By photographing in the interior of these establishments and reviewing these photos later, I was better able to identify what types of goods were sold in each establishment. The assistance of the guides was vital, as I attempted to capture scenes that would provide a sense of the place and the social activities taking place in the community. Overall, their assistance helped in alleviating the concerns of store owners and residents.

MAPPING AND DOCUMENTATION IN THE FIELD

As stated above, maps were printed out at various sizes and scales. One primary goal was to edit the preliminary map of building envelopes and land use developed in 2008. I used a variety of methods to validate or correct the shape of each building and the respective land use.

After checking the building name and location, I made sure that the building envelope and location on the streets was correct. I did this by counting the number of buildings along each street and properly noting the number of shops or residential units within each building envelope. To facilitate the editing process, I carried an aerial image of the entire community with the preliminary building envelopes as outlined, hollow polygons. Each of these polygons was identified with a code that correlated to the Excel data set. Should a building need to be altered in shape or land use, I would note this in the corresponding field in the data set and the aerial image/polygon map (Figures 3.1, 3.2). When editing a part of the map was required at a more detailed level, hand drawing on a blank piece of paper would help to better define the change (Fig. 3.3).

Figure 3.1: Photo of Data Set Used in the Field

ID	CODE	NAME	OWNER	TIME EXIST	TYPE	SERV AREA	AREA CHAS	FINCH	FROD SOLD	RETL DISC	LAND USE	Notes 1	Notes 2
782	563	Colorado	Prigants										
783	644	California	Quero	oro	bestaria							copy in	copy in
784	564	California	Quero	oro	bestaria							proteccion ambiental	copy in
785	798	California	Quero	oro	bestaria							Miembros	copy in
786		California	Quero	oro	bestaria							Declaracion de Dure	
787	255	California	Quero	oro	bestaria								
788		California	Quero	oro	bestaria								
789													
790													
791													
792													
793													
794													
795													
796													

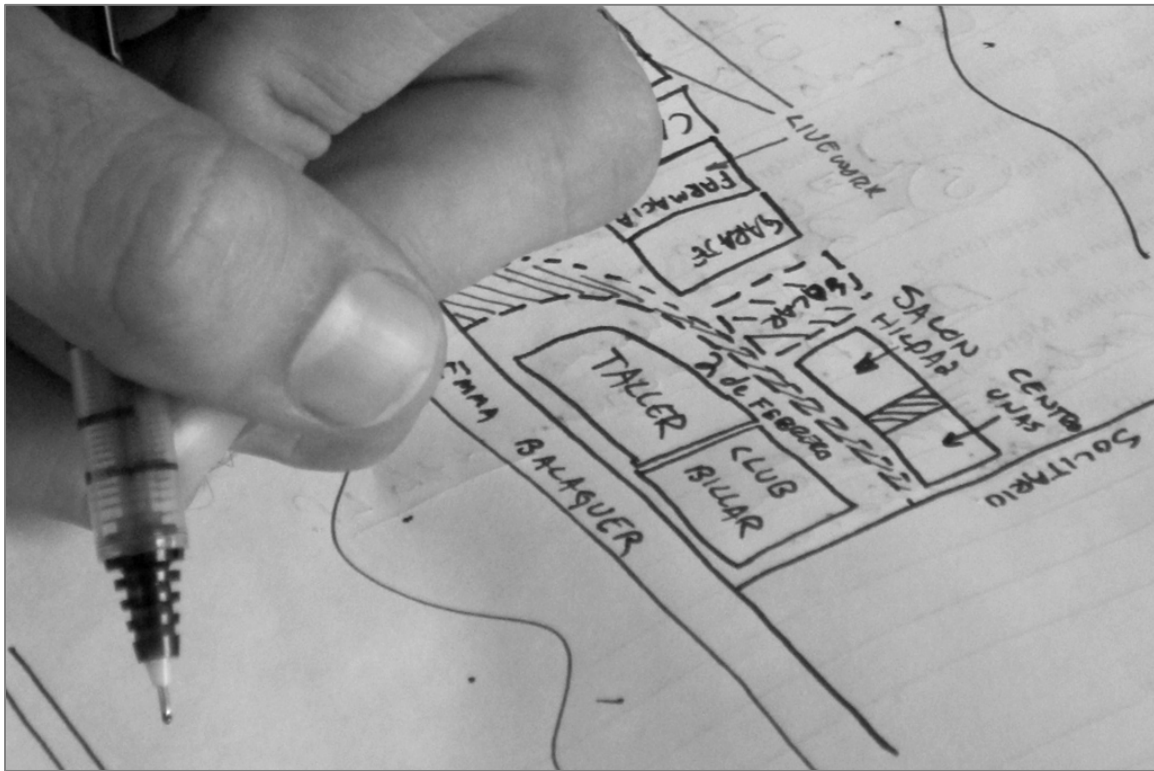
Source: Strange 2010

Figure 3.2: Photo of Aerial Image Used in the Field



Source: Strange 2010

Figure 3.3: Hand Drawn Building Envelopes



Source: Strange 2010

TRANSCRIPTION, DATA ENTRY, AND GIS WORK

After data had been gathered in the field, I had five types of information to process. These were 1) interviews, 2) aerial imagery edits and additions, 3) data additions and edits for the excel dataset, 4) photography and respective codes, and 5) mental mapping data entry. Given the wealth of data I accumulated, it was important to accomplish as much data entry as possible while in Santo Domingo, and not to wait until my return to Austin. This required me to spend several hours on data entry every day, following my field work for the day. This was not only efficient use of time in Santo Domingo, but it made it possible to record facts and data that I otherwise might have

overlooked. My data entry in the evenings was facilitated by the generous assistance of Gabriel Baez, who provided me with a room to stay during my research in Santo Domingo.

My main task immediately after field work was editing the Excel file, followed by editing the GIS' MXD file to match the respective changes in the Excel file. If changes were required to the outline of a building envelope (a polygon in the GIS file) I would make the changes in the MXD (Map) file the same day. After all data for each entry was added from hard copies, a completion signifier was posted to both the map and spreadsheet hard copies.

The next step was to download and properly code each photograph taken that day. All photos from the day would be saved in the folder with the day's date. Each picture would be opened and then the photo's name would be changed to reflect its respective building or entry code and name of the establishment, e.g. *ID 30 Billar Esballar*. Codes were determined and recorded based on their sequence in the day's entries and also by their sequential number from the digital camera being recorded on the dataset or aerial image. The coded photos proved essential when determining the size and type of products sold at each establishment. Their codes also proved helpful for georeferencing, or "placing", them in GIS.

After the photo, dataset, and aerial data had been added and altered in electronic format, the next step was to code the interviews properly. They would be coded by the name of the person who was being interviewed with the subject matter as well, i.e. *Interview with Juan Correa and Salvador about Chiripa*. When I returned to Austin, I translated the interviews and transcribed them in a Word document.

After I returned to Austin, I joined the data table to the building envelope shapefile, including new building envelopes. Building envelopes that had more than one

shop or resident in it were drawn, or updated, in the MXD. The symbology used in the map was updated with the new dataset and the layer was exported to create a new shapefile that included the dataset permanently in its VAT.

CROSS-REFERENCING CODING SYSTEMS

After all data had been compiled and updated, analysis of the sectors and subsectors began. Each establishment was determined to lie within its own unique sector or business type, i.e. *colmado* or *salon*. Being that these businesses do not function within this single sector alone, particular subsectors were attributed to establishments. I decided to categorize business establishments into these sectors and subsectors to illuminate the uniqueness of businesses in this community, and to show how they fall into a larger scheme of sectors that have been determined by more formal systems; most prominently, the North American Industry Classification System (NAICS) and the United Nation's International Standard Industrial Classification (ISIC).

The NAICS system is the standard system used by US agencies to classify business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. It was adopted in 1997 under the guidance of the Office of Management and Budget (OMB) and replaced the Standard Industrial Classification (SIC) system. The NAICS system was developed jointly by the U.S. Economic Classification Policy Committee (ECPC), Statistics Canada, and Instituto Nacional de Estadística y Geográfica of Mexico. This partnership allowed for a high level of comparability in business statistics among North American countries (U.S. Census Bureau 2010).

The ISIC system was developed by the United Nation Statistics Division. This division works toward the advancement of a global statistical system (United Nations 2010). Information is compiled and disseminated of global level statistical information while working toward the development of standards and norms for statistical activities. They also support countries' efforts to strengthen their national statistical systems. They facilitate coordination of international statistics activities and support the functioning of the UN Statistical Commission as the main entity of the global statistical system (United Nations 2010).

The Dominican Republic uses a classification system called the Nomenclatura de Actividades Económicas (NAE), or Economic Activities Nomenclature. This system is used by the National Account System of the Dominican Republic (SNADR). This system is somewhat different than the ISIC system, basically in their numeration. This system, however, was created based on the ISIC system of the UN. It was somewhat adapted to the characteristics of the Dominican economy (United Nations 2010). The name of the institution that is primarily responsible for the elaboration and maintenance of the classification system is the Central Bank of the Dominican Republic, National Accounts and Economic Statistics Department. However, access to this particular system was not available, and being that the previous classification system for the national accounts was the second revision of the ISICs, it was this UN system that served as the basis for comparison at an international level.

ALLOCATING SECTOR TYPES TO ESTABLISHMENTS

After all data had been gathered and entered for analysis, establishments had to be categorized and grouped by services and types. At times it was as easy as getting the

names of each establishment in the right category, i.e. *Salon* or *Colmado*. But certain establishments were more difficult, as they were more informal in nature than, say, *colmados* or *salons*. These tended to be smaller vendors or food kiosks. Once all establishments had been properly grouped, each group was cross-referenced with the appropriate sector and subsector. This required a thorough understanding of each sector and subsector to avoid any incorrect allocation of the sectors to community business establishments. Each appropriate sector from the NAICS and ISIC system was noted in table format. Prototypical establishments for these sector groupings were used as indicators of sector makeup. Photographs were then used to give an actual image of these establishments.

The purpose of using both classification systems was to compare the community's businesses with a national system (NAICS), and an international, or global, system (ICIS). A national system is tailored to the business environment of that nation; while a global system takes into account the variation between national systems and their respective business environments. The ISIC system allows for an allocation scheme that is not based on one single nation, while the NAICS system compares businesses with those that are found in the United States.

Ultimately, my field data was used to analyze the diversity of business establishments in the community and the links between the informal economy and community sustainability. By gaining a better understanding of how establishments serve this community, I was able to document how well tailored they are to meeting the daily and long-term needs of residents. I also analyzed the spatial differentiation of sectors using GIS, to evaluate the service area of each business. This provided a better understanding of the spatial differentiation and diversity of these businesses. In total, I recorded approximately 100 establishments. In the following chapter, I describe the

sectors and subsectors of formal and informal establishments in Los Platanitos, including the types of products they sell or services they provide. I also briefly discuss what social roles these establishments serve in the community, which demonstrates their key positions in the *emergency economy* in Los Platanitos (Simone 2008), and illuminates the resident's *adaptive potential* in the face of economic exclusion (Pelling 2002).

Chapter 4: Findings

OVERVIEW OF SECTORS AND SUBSECTORS

The primary goal of this chapter is to define and categorize the 95 business establishments in Los Platanitos using the NAICS and ICIS systems. As there is no formal/legal rule system for business establishments, they often fall into a wide range of sectors and subsectors. I then present and discuss their contributions to the community. Contributions range from selling breakfast goods to passer-bys, to businesses serving as centers of social and economic networking places where residents can discuss politics or talk about current employment opportunities.

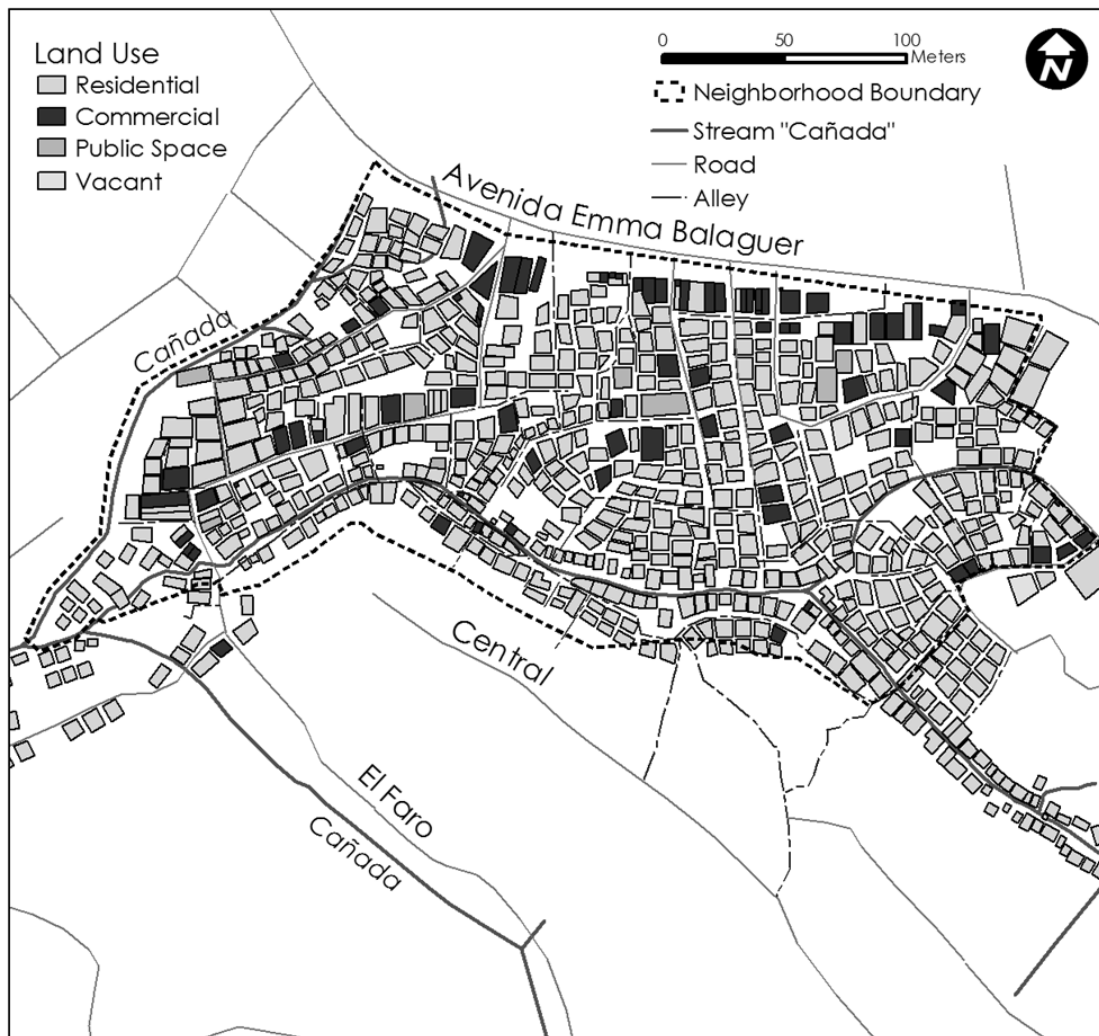
There are 7 sections in this chapter (Table 4.1). Each section is based on a sector. After providing a broad definition of each sector and subsectors in these sections, I then explore each subsector in depth and outline what is typically sold, and/or what service is provided, in these business establishments. I then describe prototypical establishments for each subsector and provide data on numbers of establishments, their locations, and other relevant information. I also discuss how each subsector relates to, and differs, from relevant U.S. NAICS and U.N. ISIC categories. The structure of sectors and subsectors used here has been discussed and defined previously in Chapter 4. At the beginning of each section a table will be provided that gives a detailed hierarchical breakdown of the respective sector. I then use GIS to look at the spatial distribution of businesses and to discuss their commercial service areas. The map below (Fig. 4.1) shows the geospatial makeup of all business establishments in the community alongside public spaces and residential units.

Table 4.1: Sections Broken Down by NAICS and ISIC Sectors

Section Breakdown by Sectors
SECTOR I: RETAIL TRADE (NAICS: 44-45), (ISIC: G/45-47)
SECTOR II: FOOD SERVICES (NAICS: 72), (ISIC: I/56)
SECTOR III: ENTERTAINMENT AND RECREATION (NAICS: 71), (ISIC: R/92, 93)
SECTOR IV: SERVICES (NAICS: 81), (ISIC: G/45, S/95, 96)
SECTOR V: MANUFACTURING (NAICS: 31-33), (ISIC: C/14)
SECTOR VI: WASTE MANAGEMENT (NAICS: 562), (ISIC: E/38)
SECTOR VII: OTHER MINOR SECTORS (NAICS: 61, 56), (ISIC: P/85, N/82)

Source: NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Figure 4.1: Map of Los Platanitos Land Use 2009



Source: Strange 2010

The table below (Table 4.2) provides a breakdown of businesses that are found in the community. While these businesses are not formally confined to these larger sectors, the table provides a snapshot of which establishments can be found in each section. At the end of the chapter, I discuss the significance of the number and variety of

establishments in each sector, particularly considering the demands and needs of different services by residents of Los Platanitos.

Table 4.2: Business Establishments in Los Platanitos by Type and Sector

ESTABLISHMENT TYPE	95	SECTOR
COLMADO	36	RETAIL TRADE
MEAT SHOP	4	
FERRETERIA	4	
BUY/SELL	1	
FANTASIA	2	
FURNITURE	1	
BREAD MAKER	1	
PHARMACY	1	
WHOLESALE	1	
FOOD KIOSK	5	FOOD SERVICES
CAFETERIA	6	
BILLAR	4	ENTERTAINMENT AND RECREATION
DANCE HALL	1	
SPORTS BAR	1	
BANCA	6	
SALON	10	SERVICES
TALLER	4	
COPY STORE	1	
PARKING SPACES	1	
PHOTO STUDIO	1	
PRIVATE SCHOOL	1	
CLOTHING MANUFACTURING	1	MANUFACTURING
RECYCLING	2	WASTE MANAGEMENT

Source: Strange 2010

Sector I: Retail Trade (NAICS: 44-45), (ISIC: G/45-47)

Table 4.3: Retail Sector Breakdown in Los Platanitos

SECTOR I: RETAIL TRADE (NAICS: 44-45), (ISIC: G/45-47)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Colmado</i>	Convenience Stores: 445120, Limited Eating Service Places: 72221, Other Recreational Activities: 713990, Drinking Places: 722410	Retail Trade in Non-Specialized Stores with Food, Beverages: 4711, Retail Sale of Food, Beverages, and Tobacco: 472(1-3), Retail Sale of Cosmetic and Toilet Articles: 4772, Other retail Sale of New Goods: 4773, Restaurants and Mobile Food Service Activities: 5610, Beverage Serving Activities: 5630
b. <i>Specialty Food Stores</i>	Specialty Food Stores: 4452, Meat Markets: 445210, Fruit and Vegetable Markets: 445230, Baked Goods Stores: 445291, Retail Bakeries: 311811, Limited Eating Service Places: 72221	Retail Sale of Goods in Specialized Stores: 4721, Restaurants and Mobile Food Service Activities: 5610
c. <i>Ferreteria and Fantasia</i>	Department Stores: 452111, Cosmetics, Beauty Supplies, and Perfume Stores: 446120, Used Merchandise Stores: 453310, Electronics and Appliance Stores: 443	Other retail Sale of New Goods: 4773, Retail Sale of Second-Hand Goods: 4774, Retail Sale of Good in Specialized Stores: 4721, Retail Sale of Perfumery and Cosmetic Articles: 4772
d. <i>Almacén</i>	Wholesale Trade-Nondurable Goods: 424	Wholesale of Food, Beverages, and Tobacco: 4630
e. <i>Other</i>	Used Merchandise Stores: 453310, Furniture Stores: 442110, Pharmacies and Drug Stores: 446110	Retail Sale of Second-Hand Goods: 4774, Retail Sale of Pharmaceutical and Medical Goods: 4772, Retail Sale of Electrical Appliances, Furniture, and Other Household Articles: 4759

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Retail trade is the primary sector in Los Platanitos with 51 of the 95, or approximately 54 percent, of business establishments falling into this sector. It is comprised of establishments engaged in retailing merchandise and foodstuff, generally without transformation, which means that goods are not altered from the state that they are in when they arrive at the establishment. The retailing process is the final step in the distribution of merchandise where retailers sell merchandise in small quantities to the general public. The focus in this sector is on store retailers who are involved in fixed point-of-sale locations which are designed to attract walk-in customers. The selling of merchandise to the public is for personal or household consumption and can also serve other small businesses. The codes for this sector are Retail Trade (NAICS 44-45, ISIC G/45-47).

In Los Platanitos, the subsectors within this sector are the following: a) Colmados, b) Specialty Food Stores, c) Ferreterias and Fantasias, d) Almacenes, and e) Other. Since 67 percent of business establishment in Los Platanitos engage in retail trade, these businesses are found throughout the community.

Subsector a: Colmado

Table 4.3.a: Colmados as they relate to NAICS and ISIC

SECTOR I: RETAIL TRADE (NAICS: 44-45), (ISIC: G/45-47)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Colmado</i>	Convenience Stores: 445120, Limited Eating Service Places: 72221, Other Recreational Activities: 713990, Drinking Places: 722410	Retail Trade in Non-Specialized Stores with Food, Beverages: 4711, Retail Sale of Food, Beverages, and Tobacco: 472(1-3), Retail Sale of Cosmetic and Toilet Articles: 4772, Other retail Sale of New Goods: 4773, Restaurants and Mobile Food Service Activities: 5610, Beverage Serving Activities: 5630

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Colmados make up approximately 71 percent of retail business establishments in the Los Platanitos community. These 36 stores are primarily engaged in retailing a general line of food products and provide the community with various household foodstuffs and products. Typical products sold in *colmados* include juice, bread, soda, beer and liquor, snacks, seasoning and spices, oils, and other cooking essentials. Certain *colmados* will also sell specialty products, making them places where residents go for that particular good, such as *maiz y leche*, a drink made of corn and milk, and *mabi*, a traditional Dominican juice made from lime, sugar, water, and vanilla. Other goods sold are canned foods, sanitary tissues, brooms, and coal. *Colmados* vary in size depending on the location within Los Platanitos and the building structure. Some are dedicated buildings, attached to larger structures, or are part of a resident's house. Establishments

range from 3 to 100+ square meters (approximately 30 to 1,000+ square feet). Larger *colmados* sell a wider variety of products, such as more snacks, beverages, and household products, while smaller ones primarily sell cooking essentials like seasonings, spices, oil, and bread.

These establishments also serve as a gathering area for community members. Most *colmados* have a patio with tables and seats for people to eat and drink goods that were purchased there. Patrons will spend many hours playing Dominos at these locations, trade stories, and talk politics. Even *colmados* without patios are places of social interaction, not just for games, but also for conversation and for just passing the time. In the evenings *colmados* serve as gathering places where beer will be consumed on premise.

Figure 4.2: Prototypical Colmado – Pica’s



Source: Strange 2010

A prototypical *colmado* in the community is called *Pica's* (Fig. 4.2). It is a standalone building along the channel that runs through the community and is approximately 35 square meters (377 square feet) in size. It is owned by a long term community member. Goods sold in this establishment are numerous. One may find everything from rum to coal. The picture below shows the inside of this establishment and the numerous goods that are sold (Fig. 4.3).

Figure 4.3: Inside Pica's Colmado



Source: Strange 2010

The colmado provides a patio area outside for customers to play dominos or to otherwise pass time. The fixed point-of-sale location is designed to attract walk-in customers along two main passage ways, the walkway on top of the channel and the Callejon (alleyway) Cacique. It is located at the foot of two stairways as well, called Alta Gracia and Pica, which go up the side of the valley to another community. Therefore this area experiences much foot traffic and the *colmado* is conducive to creating a social gathering spot while also serving the community members in the area.

As stated above, smaller *colmados* do not offer such a large variety of products. *Colmado Fautina*, located on Calle El Faro (Fig. 4.4), is only 3 square meters (32 square

feet) and sells common household goods like spices, liquors, and breads. These small colmados are often located within people's homes or along busy roads or alleyways and serve families who don't want to travel to the larger *colmados*. It is less common to have outside social activity as there is less public space out front. At times, however, patrons will set up seating and a domino table.

Figure 4.4: Colmado Fautina



Source: Strange 2010

As can be seen in the table presented at the beginning of this section, *colmados* fall into a variety of subsectors based in the NAICS system. The primary retailing of a limited line of goods that generally includes milk, bread, soda, and snacks, puts *colmados* in the Convenience Store subsector (NAICS 445120). However, they also serve as Limited-Service Eating Places (NAICS 72221) in that they provide food services where patrons generally order or select items and pay before eating on site where chairs and tables are provided. Therefore, *Colmados* can also be classified in the Accommodation and Food Services (NAICS 72) sector under Limited-Service Eating Places. Businesses in this sector are engaged in providing patrons foods and beverages for consumption on or near the premises. Also, the playing of dominos and the consumption of beer and alcoholic beverages places *colmados* in the Other Recreational Activities (NAICS 713990) sector and the Drinking Places (NAICS 722410) sector.

The same sort of breakdown takes place in the global ISIC coding system. These establishments are in the primary sector of Retail Trade in Non-Specialized Stores with Food (ISIC 4711), Sale of Food and Beverages, and Tobacco (ISIC 472(1-3)), Sale of Cosmetic and Toilet Articles (ISIC 4772), and other Sale of New Goods (ICIS 4773). The social activities that take place at *Colmados* also put them in the Restaurant and Mobile Food Service Activity (ISIC 5610) and under Beverage Serving Activities (ISIC 5630).

It is this overlap of retail, food services, recreation, and drinking that contributes to the unique nature of these establishments. Formal rule systems are not in place that limit the types of goods sold and activities that take place at *colmados*. Patrons can frequent these establishments for household goods but also for food services and entertainment.

Subsector b: Specialty Food Stores

Table 4.3.b: Specialty Food Stores as they relate to NAICS and ISIC

SECTOR I: RETAIL TRADE (NAICS: 44-45), (ISIC: G/45-47)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
b. <i>Specialty Food Stores</i>	Specialty Food Stores: 4452, Meat Markets: 445210, Fruit and Vegetable Markets: 445230, Baked Goods Stores: 445291, Retail Bakeries: 311811, Limited Eating Service Places: 72221	Retail Sale of Goods in Specialized Stores: 4721, Restaurants and Mobile Food Service Activities: 5610

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Another retail establishment type in Los Platanitos is Specialty Food Stores. This group comprises establishments that are primarily engaged in retailing specialized lines of foods like meats, fruits, and baked goods. These differ from the *Colmados* in that they sell one specialized item. These establishments make up approximately 10 percent of the retail sector. Examples are *Pollerias*, *Carnicerias*, *Fruterias*, and *Panaderias* which sell chicken, meats, fruits, and bread and other baked goods, respectively. These goods are sold to the community for household consumption, but these establishments can also serve as *wholesalers*. Owners of *Colmados* may sell goods that they have been purchased at these specialty stores.

Figure 4.5: Prototypical Carniceria – Cela



Source: Strange 2010

Pollerias and *carnicerias* are specialty establishments that sell pre-butchered raw chicken and meat, respectively. There are only 4 recorded meats shops in the community, all located in the upper portion, close to Avenida Emma Balaguer. The approximate size of these establishments range from 6 square meters (65 square feet) to 70 square meters (750 square feet). *Caniceria Cela* is a prototypical seller of meat products in the community (Fig. 4.5). Patrons purchase meats by weight, which are prepared, measured, and then wrapped. Establishments of this type fall within the Specialty Food Store (NAICS 4452) category of Meat Markets (NAICS 445210). The ISIC system code for these establishments is Retail Sale of Goods in Specialized Stores (ISIC 4721).

Figure 4.6: Small Frutería



Source: Strange 2010

The sale of fruit and vegetables in the community occurs in various ways. Often times one may see an individual returning from the market with a barrel of goods, or automobiles may drive through the streets selling these goods from the back of the truck. However, there are also business establishments that sell these goods to the community, which are called *fruterías* and *verdureros*. Another name used by the community is *ventorillo de fruta y verduras*. Like a typical retailer of goods, they sell these goods based on product type and quantity. One of the primary fruits sold are *plátanos*, or plantains in English. Mature/Ripe (*maduros*) and green/unripe (*verde*) plantains are sold

and used as a staple in the community. Vendors also typically sell other fruits like melons, oranges, and mangos, and vegetables like onions and cabbage. Due to the prevalence and need of such products, people may sell these goods from their door step, creating very small establishments the size of 1 square meter (Fig. 4.6). Larger establishments about 5 square meters (54 square feet) also exist and these sell a wider variety of fruits and vegetables (Fig. 4.7). *Ventorillos de fruta y vegetables* fall under the sector of Fruit and Vegetable Markets (NAICS 445230). The ISIC code for these establishments is the same as the above, Retail Sale of Goods in Specialized Stores (ISIC 4721).

Figure 4.7: Prototypical Ventorrillo de Fruta y Vegetables



Source: Strange 2010

Panaderias are retail establishments that are primarily engaged in retailing bread and other bakery products not for immediate consumption and which are made on the premises from flour or prepared dough. While these stores sell mostly to colmados and other small food retail shops in the community, individuals can purchase products as well. In this way, panaderias serve as wholesalers to the community. A prototypical panadería in Los Platanitos is Pan Baez. The owner of this store sells baked goods that are prepared in his establishment from flour or dough that he has purchased from other establishments outside of the community. Pan Baez is the only establishment of this type within Los Platanitos (see Fig. 4.8). His shop is 40 square meters (430 square feet) and contains a bread press, a multi-level oven, and display space.

Figure 4.8: Prototypical Panadería – Pan Baez



Source: Strange 2010

These establishments fall under the subsector of Baked Goods Stores (NAICS 445291) in that they retail baked good not for immediate consumption; however, they differ from this sector in that they make baked food on the premises. This puts *panaderias* in the Retail Bakeries (NAICS 311811) subsector. Retail Bakeries fall under the Manufacturing (NAICS 31) sector due to the engagement in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. Under the ISIC coding system, these establishments fall under Retail Sale of Goods in Specialized Stores (ISIC 4721). It must be noted that if these businesses are mobile

kiosks, they will also fall under Restaurant and Mobile Food Service Activities (ISIC 5610).

Subsector c: Ferretería and Fantasía

Table 4.3.c: Ferreterías and Fantasías as they relate to NAICS and ISIC

SECTOR I: RETAIL TRADE (NAICS: 44-45), (ISIC: G/45-47)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
<i>c. Ferretería and Fantasía</i>	Department Stores: 452111, Cosmetics, Beauty Supplies, and Perfume Stores: 446120, Used Merchandise Stores: 453310, Electronics and Appliance Stores: 443	Other retail Sale of New Goods: 4773, Retail Sale of Second-Hand Goods: 4774, Retail Sale of Good in Specialized Stores: 4721, Retail Sale of Perfumery and Cosmetic Articles: 4772

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Ferreterias and *fantasias* make up approximately 12 percent of the retail sector in the community. Both establishment types are engaged in retailing a wide range of products such as apparel, personal care goods, electronic and household appliances, and additional items that have household utility. Secondhand goods are often sold here. One aspect that makes these stores unique to their own category is that they sell ‘knick-knacks’ that don’t really have a place within other establishments. Also, the goods sold here are considered durable, or with a lifespan longer than 3 years. *Ferreterias* tend to sell more secondhand goods than *fantasias* and they focus on apparel, household appliances, electronics, and other items used in the household. *Fantasias* are tailored to women and female youths in that they sell hair and beauty products, perfumes, and other products oriented towards women. Sizes of both of these types of shops vary depending on location and accessibility of patrons. Some establishments might be maintained out of an individual’s porch and larger establishments can take up an entire building. The size of

such establishments in this community ranges from the 1 to 40 square meters (10 to 430 square feet).

A prototypical *ferreteria* would be *Ferreteria Polín*, located along the main road El Faro. This *ferreteria* has many items for sale and utility of products varies (Fig. 4.9). A prototypical fantasia is *D'Joanna* along the main arterial Avenida Emma Balaguer (Fig. 4.10). Other establishments exist in the community and vary in size.

Figure 4.9: Prototypical Ferretería – Polín



Source: Strange 2010

Figure 4.10: Prototypical *Fantasia* – D' Joanna



Source: Strange 2010

These establishments would most closely parallel Department Stores (NAICS 452111), which sell various merchandise lines, such as apparel, jewelry, linens, electronics, and home accessories. On occasion these stores also sell secondhand goods, therefore putting them in the Used Merchandise Stores (NAICS 453310) subsector. *Fantasias* sell cosmetics, beauty supplies, and perfumes, which places them in same named subsector, Cosmetics, Beauty Supplies, and Perfume Stores (NAICS 446120), under the sector of Health and Personal Care Stores (NAICS 4461).

The ISIC coding system puts both of these establishments under Other Retail Sale of New Goods (ISIC 4773), as well as under the Retail Sale of Second-Hand Goods (ISIC 4774). The overlay of these two depends on what is being sold at each respective

location. They are also coded under Specialized Stores (ISIC 4721). *Fantasias* are coded under the Retail Sale of Perfumery and Cosmetic Articles (ISIC 4772).

Subsector d: Almacén

Table 4.3.d: Almacenes as they relate to NAICS and ISIC

SECTOR I: RETAIL TRADE (NAICS: 44-45), (ISIC: G/45-47)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
d. <i>Almacen</i>	Wholesale Trade-Nondurable Goods: 424	Wholesale of Food, Beverages, and Tobacco: 4630

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

In Los Platanitos, an *almacén* is an establishment engaged in the sale of nondurable goods to other businesses. Nondurable items are those generally with a normal life expectancy of less than three years, such as food stuffs and beverages. Goods that are sold in these establishments are those that are sold in *colmados* and other nondurable goods establishments. Common goods in an *almacén* would be bottled beverages, canned goods, spices, and other foods that are packaged in larger quantities and sold to establishments who in turn sell the good on an individual basis to patrons. There is only one *almacén* in the community—*Asoc. De Comerciantes Detallistas Santa Cruz de Villa Mella*, or *CDAD Villa Mella*—but it is a typical representative of such stores found throughout Santo Domingo (Fig. 4.11).

Figure 4.11: Prototypical Almacén – Asoc. De Comerciantes Detallistas Santa Cruz de Villa Mella



Source: Strange 2010

This establishment is approximately 70 square meters (750 square feet) and only serves as a distribution point for products. Goods sold are similar to those sold in colmados, but on site consumption of goods does not take place and patrons do not pass extended periods of time at this establishment (Fig. 4.12).

Figure 4.12: Inside Asoc. De Comerciantes Detallistas Santa Cruz de Villa Mella



Source: Strange 2010

While this establishment is engaged in the sale of retail goods, the primary function is that of Wholesale Trade-Nondurable Goods (NAICS 424). This establishment under the ISIC system would be that of Wholesale of Food, Beverages, and Tobacco (ISIC 4630). Products sold in this establishment are considered non-durable and include paper products, chemical products, alcoholic beverages and other beverages, tobacco products, and foodstuffs.

Subsector e: Other

Table 4.3.e: Other Establishments as they relate to NAICS and ISIC

SECTOR I: RETAIL TRADE (NAICS: 44-45), (ISIC: G/45-47)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
e. <i>Other</i>	Used Merchandise Stores: 453310, Furniture Stores: 442110, Pharmacies and Drug Stores: 446110	Retail Sale of Second-Hand Goods: 4774, Retail Sale of Pharmaceutical and Medical Goods: 4772, Retail Sale of Electrical Appliances, Furniture, and Other Household Articles: 4759

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

There are other establishments in the Los Platanitos community that do not fall under the above five subsectors. The following *other* establishments sell more specialized items, such as furniture, and are therefore less often frequented by community members. Pharmacies, for example, are important for community members, but most community members don't need to buy medicine on a daily basis. This shows a distinction in the hierarchy of goods needed in the community. The large majority of these more specialized businesses are located on the boundary of Los Platanitos along Ave. Emma Balaguer. Because of the heavy traffic along Emma Balaguer, this location allows them to serve patrons from the larger region outside Los Platanitos.

The single compra y venta establishment in Los Platanitos is engaged in the selling of second hand goods; however, the owner of this business also owns the muebleria. The muebleria is the primary business at this location. This establishment is therefore engaged in sale of both new and second-hand furniture and household appliances, serving residents in Los Platanitos but also from the surrounding area. The photo below shows the storefront of *Compra Venta – Mueblería: La Mas Fácil* (Fig. 4.13).

Figure 4.13: Compra Venta – Mueblería La Mas Fácil



Source: Strange 2010

This establishment fits clearly into the two subsectors of Used Merchandise Stores (NAICS 453310) and Furniture Stores (NAICS 442110). The former is defined as an establishment primarily engaged in retailing used merchandise and second hand goods, and the latter refers to the retailing of new furniture. Furniture sold here includes mattresses and box springs, outdoor tables and chairs, and indoor tables and chairs. Certain household appliances are sold by way of the *compra y venta* segment of this business.

The establishment also fits into the ISIC sector of Retail Sale of Second Hand Goods (ISIC 4774) and Retail Sale of Electrical Appliances, Furniture, and Other Household Articles (ISIC 4759) As previously stated, this establishment is not patronized by a majority of Los Platanitos community members, but by people from the surrounding area as well.

The next retail establishment in the *other* subcategory is that of *farmacias*, which are primarily engaged in the retailing of prescription or nonprescription drugs and medicines. While other government serviced establishments exist that provide health and prescription drug assistance to community members, Los Platanitos community has only one privately owned *farmacia*. The government pharmacy is located outside of community. Based on my interviews, it is this pharmacy that is frequented most by residents. The private establishment is located along Ave. Emma Balaguer and is approximately 60 square meters (645 square feet). *Farmacia Santa* is the prototypical *farmacia* establishment (Fig. 4.14). This establishment naturally falls under the Pharmacies and Drug Stores (NAICS 446110) subsector and the ISIC sector of Pharmaceutical and Medical Goods (ISIC 4772).

Figure 4.14: Farmacia Santa



Source: Strange 2010

Sector II: Food Services (NAICS: 72) (ISIC: I/56)

Table 4.4: Food Services Breakdown in Los Platanitos

SECTOR II: FOOD SERVICES (NAICS: 72), (ISIC: I/56)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Food Kiosks</i>	Mobile Food Services: 722330, Limited Eating Service Places: 72221	Retail sale via stalls: 4781, Restaurants and Mobile Food Service Activities: 5610
b. <i>Cafeterias</i>	Cafeterias: 722212, Limited Eating Service Places: 72221	Restaurants and Mobile Food Service Activities: 5610, Beverage Serving Activities: 5630

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

There are thirteen (approximately 14 percent) recorded establishments of the total 95 in Los Platanitos that fall within the Food Services sector, also known as Accommodation and Food Services (NAICS 72, ISIC I/56). Of these 13, 6 are *food kiosks* and 7 are *cafeterias*. The Food Services sector comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The following will be a description of the two most prominent subsectors of food services: 1) *food kiosks*, and 2) *cafeterias*.

Subsector a: Food Kiosks

Table 4.4.a: Food Kiosks as they relate to NAICS and ISIC

SECTOR II: FOOD SERVICES (NAICS: 72), (ISIC: I/56)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Food Kiosks</i>	Mobile Food Services: 722330, Limited Eating Service Places: 72221	Retail sale via stalls: 4781, Restaurants and Mobile Food Service Activities: 5610

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Food kiosks, or stands, are common in Los Platanitos, but they come and go during the day. They are mostly prominent in the morning to mid morning and in the evening, when people are commuting to and from work. The primary product sold in these small establishments is *empanadas*. Empanadas are made by folding dough around stuffing of some sort, i.e. cheese, chicken, pork, or eggs, followed by frying in oil. *Yanique Ke* is another breakfast product sold that is made with bread, eggs, and pork. Some kiosks cook the food on location, while others have food premade and ready for consumption. Coffee and fruits are also sold at these stands. These *food kiosks* serve both community members and passing pedestrians. Most are located along Ave Emma Balaguer or in close proximity to high traffic areas. They range in size from 1 to 5 square

meters (10 to 50 square feet), and sometimes smaller if an individual is selling from a cart.

The below establishment (Fig. 4.15) is a prototypical *food kiosk*. This establishment is located on the sidewalk of Avenida Emma Balaguer. Based on my interview with this business owner, she rents out this location on a daily basis. Cooking of goods takes place at her home, which is outside of the community. She and her son then bring the goods to this location each morning.

Figure 4.15: Prototypical Food Kiosk



Source: Strange 2010

The small size of the table and display case makes it easier for her and her son to travel from outside the community. However, this kiosk is not as mobile as others, in that there are no wheels on the table. More mobile kiosks can change location based on where there might be heavier foot traffic. Based on my interviews, being more mobile also allows kiosk owners to avoid paying rents in locations where they would have to set up an operation. However, the majority of these kiosks are comprised of a display case and table, and not the more mobile form; meaning that people are paying rents, or working out of their own residential unit.

These types of businesses fall under the Mobile Food Services sector (NAICS 722330) and Retail Sale Via Stalls under the ISIC system (ISIC 4781). This industry category comprises establishments primarily engaged in preparing and serving meals and snacks for immediate consumption from motorized vehicles, and in this case, non-motorized carts. These establishments also fall under the Limited Eating Service Places (NAICS 72221) and Restaurants and Mobile Food Service Activities (ISIC 5610) under the U.N. coding system as they are providing food service where patrons generally order and pay before eating.

Subsector b: Cafeterías

Table 4.4.b: Cafeterías as they relate to NAICS and ISIC

SECTOR II: FOOD SERVICES (NAICS: 72), (ISIC: I/56)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
b. <i>Cafeterías</i>	Cafeterias: 722212, Limited Eating Service Places: 72221	Restaurants and Mobile Food Service Activities: 5610, Beverage Serving Activities: 5630

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

A little over 7 percent of all business establishments in the community are made up of *cafeterias*. These businesses provide prepared food to community members. While there are fewer *cafeterias* than *colmados*, they serve a very similar purpose by providing a place to eat, drink and socialize. The food sold in these establishments typically comes from the local *colmados*, specialty food shops and vendors, and the *almacén*.

The image below (Fig. 4.16) shows a prototypical *cafeteria* in the community. The interior of the building has storage and cooling equipment, as well as a small cooking area. The sitting area to the left of the main building provides a gathering place for people to eat and socialize. This particular establishment is located in the lower region of Los Platanitos. It is along one of the main walking routes where locals frequent during morning and evening times. It is also located near a popular gathering area for youth, the *Pica Billar* establishment, which serves as a central gathering and leisure place in this part of Los Platanitos.

Figure 4.16: Prototypical Cafetería – Los Amigos



Source: Strange 2010

Other cafeterias are not as large. Some are minor businesses run out of an individual's house or small segments of other larger establishments, at times colmados. While varying in size and service capabilities, these businesses are primarily engaged in preparing and serving meals for immediate consumption on the premises. They fall within the subsector, Cafeterias (NAICS 722212), as well as Limited Eating Service Places (NAICS 72221). Under the ISIC coding system, these establishments fall within Restaurants and Mobile Food Service Activities (ISIC 5610) and Beverage Serving Activities (ISIC 5630) as beverages are served on site.

Sector III: Entertainment and Recreation (NAICS: 71) (ISIC: R/92, 93)

Table 4.5: Entertainment and Recreation Breakdown in Los Platanitos

SECTOR III: ENTERTAINMENT AND RECREATION (NAICS: 71), (ISIC: R/92, 93)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Billar/Dance Hall</i>	Pool Halls: 713990, Dance Halls: 713990, Drinking Places: 722410	Other Amusement and Recreation Activities: 9329, Beverage Serving Activities: 5630
b. <i>Banca</i>	Gambling Industries: 7132	Gambling and Betting Activities: 9200
c. <i>Sports Bar</i>	Gambling Industries: 7132, Drinking Places: 722410	Gambling and Betting Activities: 9200, Beverage Serving Activities: 5630

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

The sector of Entertainment and Recreation (NAICS 71 and ISIC R/92, 93), has a rather prominent place in the culture and lifestyle of the community and make up approximately 11 percent of all establishments. This sector includes a wide range of businesses that operate facilities or provide services to meet varied cultural, entertainment, and recreational interest of local the community. It comprises establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing. It also included

establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interest.

There are three types of entertainment and recreation businesses in the Los Platanitos community. These are 1) *Billar/Dance Halls*, 2) *Bancas*, and 3) *Sports Bars*. Each one of these establishments serves a certain type of activity, which will be discussed below. Of all Entertainment and Recreation establishments, 40 (four of ten establishments) percent are devoted solely to the sale of lottery tickets. As stated earlier, entertainment and recreational activities are an important part of the community. It must be noted that *Colmados* are also defined as establishments that serve as social gathering spots, where dancing and drinking takes place into the night. The following gives a description of these three entertainment and recreation establishment types.

Subsector a: Billares/Dance Halls

Table 4.5.a: Billares/Dance Halls as they relate to NAICS and ISIC

SECTOR III: ENTERTAINMENT AND RECREATION (NAICS: 71), (ISIC: R/92, 93)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Billar/Dance Hall</i>	Pool Halls: 713990, Dance Halls: 713990, Drinking Places: 722410	Other Amusement and Recreation Activities: 9329, Beverage Serving Activities: 5630

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

These establishments are classified as Billar/Dance Halls because where there is a *billar* there is typically a *dance hall*. Dance halls (*pista de baile*) can also exist separately from billar businesses; however, there are none present in Los Platanitos. In my interviews there was mention that a dance was being developed that would open within the year (Fig. 4.17). Five establishments, or 50 percent of the Entertainment and Recreation sector, fall within this subsector. They are commonly open in the evening and

serve as gathering places for young people. Alcoholic beverages are served and loud music is common. Certain *billares* are open during the day, but attendance during that time is rather minimal.

Figure 4.17: Future Dance Hall



Source: Strange 2010

La Picina Billar is a prototypical establishment in Los Platanitos (Fig. 4.18). It is located along Avenida Emma Balaguer and shares a wall with a *colmado*. Patrons purchase beers at this *colmado* and bring them into the *billar*. Also, there is a hole in the wall between the *billar* and the *colmado*. The bartender at the *billar* uses this hole to purchase beers and sell to patrons in the bar. The interior of the *billar* has a musical system and two pool tables with benches along the side of the wall. Other *billar/dance*

halls are located more centrally in the community as well. One such location is that of *Pica Billar*, which is located in the lower segment of Los Platanitos along the channel and serves community members living in the vicinity.

Figure 4.18: Prototypical Billar/Dance Hall – La Picina



Source: Strange 2010

While these establishments are primarily locations where billiards is played, as stated above they are also places where youth gather to dance, socialize, and drink alcoholic beverages. Therefore this type of business falls into a variety of other subsectors. The primary subsector is Pool Halls (NAICS 713990) which lies under All Other Amusement and Recreation Industries. This industry comprises establishments that are primarily engaged in providing recreational and amusement services, except amusement parks and arcades; gambling industries; golf courses and country clubs; skiing facilities; marinas; fitness and recreational sports centers; and bowling centers. These establishments also fall within the Dance Halls subsector (NAICS 713990) and

Drinking Places subsector (NAICS 722410). The correlating ISIC codes are Other Amusement and Recreation Activities (ISIC 9329) and Beverage Serving Activities (ISIC 5630).

Subsector b: Banca

Table 4.5.b: Bancas as they relate to NAICS and ISIC

SECTOR III: ENTERTAINMENT AND RECREATION (NAICS: 71), (ISIC: R/92, 93)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
b. Banca	Gambling Industries: 7132	Gambling and Betting Activities: 9200

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Bancas, which sell tickets for the National Lottery, constitute four out of the recorded ten establishments in the Entertainment and Recreation sector. These establishments are the second most common in the Dominican Republic after colmados (Senci3n 2008). What they offer is aberrant to what one might expect to see in an informal settlement, but their prominence is indicative of their importance or influence. Bancas offer the community a gambling outlet where one may hope to win the national lottery and large sums of cash. Tickets are sold to individuals and once the lottery is pulled people visit them later in the week to determine winnings. These establishments are located at multiple points across the community, meaning that there is a large area of influence for gambling service in Los Platanitos. They are small in size and mostly open in the evening. All bancas in Los Platanitos are owned by individuals from outside the community who tend to employ a single person from the immediate area to work there.

A prototypical banca is Banca Mosquea (Fig. 4.19). This establishment is painted very brightly and is in a small building with a location along a minor road within the

community. Like other bancas it is located near social gathering points, like billars/dance halls, and colmados. Winning lottery numbers are posted on the sign outside of the establishment (in the left of the photo).

Coding for these establishments are Gambling Industries (NAICS 7132) and Gambling and Betting Activities under the ISIC system (ISIC 9200). This industry group comprises businesses primarily engaged in operating gambling facilities, such as lotteries and off-track betting. While this activity is under the Entertainment and Recreation sector, not much entertainment or recreation takes place at these establishments.

Figure 4.19: Prototypical Banca – Mosquea



Source: Strange 2010

Subsector c: Sports Bar

Table 4.5.c: Sports Bars as they relate to NAICS and ISIC

SECTOR III: ENTERTAINMENT AND RECREATION (NAICS: 71), (ISIC: R/92, 93)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
c. <i>Sports Bar</i>	Gambling Industries: 7132, Drinking Places: 722410	Gambling and Betting Activities: 9200, Beverage Serving Activities: 5630

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

There is only one sports bar, Merenque Sport, in Los Platanitos (Fig. 4.20). It is located along Avenida Emma Balaguer and is therefore highly accessible to individuals from outside the community. A large satellite dish is set on top of the building so that the bar can broadcast a wide range of sporting event which patrons bet on while drinking alcoholic beverages. The people attending this establishment were men in their late teens to early twenties. The bar itself is located on the ground floor of a two story building, with the top floor being a residential unit.

Figure 4.20: Prototypical Sports Bar – Merengue Sport



Source: Strange 2010

This establishment falls within the sectors of Gambling Industries (NAICS 7132, ISIC 9200) and Drinking Places (NAICS 722410, ISIC 5630). Both industries have been discussed at length in previous descriptions. This type of establishment differs from other gambling locations, i.e. bancas, in that betting and winnings are based on sporting events and not based on a national lottery. This establishment acts as a social gathering location

as well, where business and social networking takes place. The types of business solicitation were not made clear; however, based on observations and interviews with community members, the establishment is known as a hotbed of illegal activities, including drug trade.

Sector IV: Services (NAICS: 81) (ISIC: G/45, S/95, 96)

Table 4.6: Services Breakdown in Los Platanitos

SECTOR IV: SERVICES (NAICS: 81), (ISIC: G/45, S/95, 96)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Salon/Barber Shops</i>	Hair, Nail, and Skin Care Services: 81211, Beauty Salons: 812113, Barber Shops: 812111	Retail Sale of Perfumery and Cosmetic Articles: 4772, Hairdressing and Other Beauty Treatment: 9602
b. <i>Taller</i>	Automotive Repair and Maintenance: 8111, Automotive Parts and Accessories Stores: 441310, Appliance Repair and Maintenance: 811412, Electronics and Appliance Stores: 443	Repair of Household Appliances: 9522, Maintenance and Repair of Motor Vehicles: 4520, Sale of Motor Vehicle Parts and Accessories: 4530, Sale Maintenance and Repair of Motorcycles and Related Parts and Accessories: 4540
c. <i>Other</i>	Photofinishing Laboratories/Services: 812921, Automobile Parking Lots: 812930	Photographic Activities (Professional Activities): 7420, Other Personal Service Activities: 9609

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

The Services sector comprises establishments that do equipment and machinery repairing, personal care services, photofinishing services, temporary parking services, and other minor service activities. Many of these establishments also fall within the retailing sector.

There are a recorded nineteen business establishments in this sector in Los Platanitos. This puts the sector at about 20 percent of total recorded establishments. Services are a strong sector in the community, since many residents provide a particular expertise to earn an income. Three subsectors will be discussed in this section. These are 1) *Salons/Barber Shops*, 2) *Talleres*, 3) and *Other*. The *other* sector is comprised of

services that do not need to be categorized as their own subsector due to the special niche service offered and due to the minimal economic influence of such services in the area.

Subsector a: Salon/Barber Shops

Table 4.6.a: Salones/Barber Shops as they relate to NAICS and ISIC

SECTOR IV: SERVICES (NAICS: 81), (ISIC: G/45, S/95, 96)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Salon/Barber Shops</i>	Hair, Nail, and Skin Care Services: 81211, Beauty Salons: 812113, Barber Shops: 812111	Retail Sale of Perfumery and Cosmetic Articles: 4772, Hairdressing and Other Beauty Treatment: 9602

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Salons and *Barber Shops* are categorized in the same subsector since they provide the similar services to both males and females. There are ten recorded *salons/barber shops* in the community, which makes up more that 50 percent of the total *Services* sector. Services include hair cutting and styling, and also nail or beauty services in *salons*.

The prototypical *salon* in the community is that of *D'Ruth Salon 2/Centro de Uñas* It is located on Avenida Emma Balaguer and is one of two businesses owned by Señora Ruth. The two businesses shown in the below image are part of the same establishment, since the *salon* and *centro de uñas* work as a single unit (Fig. 4.21). The people who patronize this establishment are local residents and other individuals who pass along Avenida Emma Balaguer. Services provided are hair cutting and styling, nail service and the sale of other beauty products. Women are the primary patrons of this establishment. This establishment fits within the Hair, Nail, and Skin Care Services (NAICS 81211) subsector, but also Beauty Salon (NAICS 812113).

Figure 4.21: Prototypical Salon – D'Ruth Salon



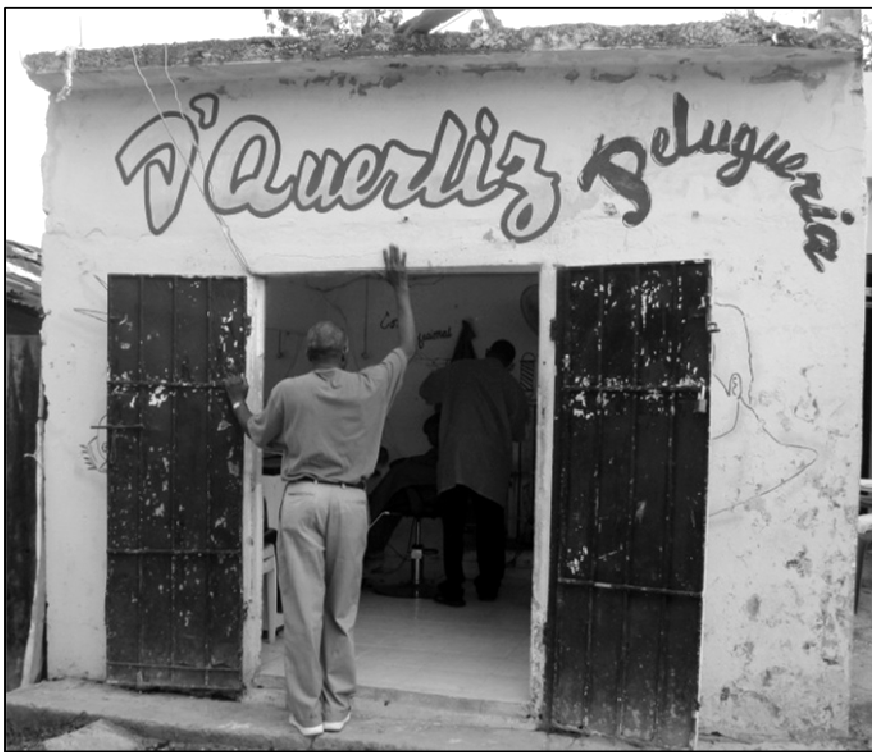
Source: Strange 2010

These industries are comprised of establishments primarily engaged in one or more of the following: 1) providing hair care services, 2) providing nail care services, and 3) providing facials or makeup. Beauty Salons are also engaged in the cutting, trimming, shampooing, coloring, waving, or styling of hair. The ISIC code for this sector is Retail Sale of Perfumery and Cosmetic Articles (ISIC 4772) and Hairdressing and Other Beauty Treatment (ISIC 9602). One of the main differences between the *salons* and *barber shops* is that *salons* tailor their hair cutting services to women and also sell a larger array of products related to hair styling and cosmetics.

D'Quertiz Peluqueria is a prototypical *barber shop*, or *peluqueria* (Fig. 4.22), where males are the primary patrons. Like most establishments of this sort, the size is

small or medium and one individual provides the service. Few, if any, goods are sold at these locations. These establishments are coded under Barber Shops (NAICS 812111). These locations also serve as places where men can spend time talking about issues regarding family, personal life, politics, and employment.

Figure 4.22: Prototypical Barber Shop – D'Quertiz Peluqueria



Source: Strange 2010

Subsector b: Taller

Table 4.6.b: Talleres as they relate to NAICS and ISIC

SECTOR IV: SERVICES (NAICS: 81), (ISIC: G/45, S/95, 96)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
b. Taller	Automotive Repair and Maintenance: 8111, Automotive Parts and Accessories Stores: 441310, Appliance Repair and Maintenance: 811412, Electronics and Appliance Stores: 443	Repair of Household Appliances: 9522, Maintenance and Repair of Motor Vehicles: 4520, Sale of Motor Vehicle Parts and Accessories: 4530, Sale Maintenance and Repair of Motorcycles and Related Parts and Accessories: 4540

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

Within the community of Los Platanitos, there are five recorded *talleres*, or 5.3 percent of all establishments and 26 percent of the Services sector. These establishments provide a valuable service to the community as they are typically made up of skilled and knowledgeable individuals who repair or maintain household goods. The direct translation of *taller* is maintenance garage or workshop. Within the community, these establishments work on minor household electronics, refrigerators, and motor vehicles, primarily *motos* or fuel powered bikes. They also sell repaired goods. Due to the specific nature of this subsector, individuals from outside the immediate community also patronize these establishments.

The prototypical establishments of the motor vehicle *talleres* is *Repuesto Misael* (Fig. 4.23). It is located on Avenida Emma Balaguer and is rather busy during the day with individuals fixing up moto-bikes and other motorized vehicles that need maintenance. This highly trafficked location is good for attracting business and the area behind the shop has adequate space for working on numerous automobiles. Workers at this shop work on vehicles and maintenance can range from simply exchanging seat covers to complex motorcycle repair. As can be seen in the below image (Fig. 4.24) a great range of goods are sold here.

Figure 4.23: Prototypical Taller – Repuesto Misael



Source: Strange 2010

Figure 4.24: Inside Repuesto Misael



Source: Strange 2010

These establishments fall under Automotive Repair and Maintenance (NAICS 8111), and under the U.N. coding system as Maintenance and Repair of Motor Vehicles (ISIC 4520). This industry group comprises establishments involved in providing repair and maintenance services for automobile vehicles. Typically, establishments in this industry employ mechanics with specialized technical skills to diagnose and repair the mechanical and electrical systems. However, in this particular situation, not all individuals have been trained experts in the field; they are often workers who have a natural skill set or interest in the subject. The owner does have technical training and acts as a monitor of quality and a source of higher level knowledge in the field. The second

subsector is that of Automotive Parts and Accessories Stores (NAICS 441310). The correlating U.N. codes for this subsector are Sale of Motor Vehicle Parts and Accessories (ISIC 4530) and Sale, Maintenance, and Repair of Motorcycles and Related Parts Accessories (ISIC 4540). As the names state, this segment of the industry comprises establishments engaged in retailing new, used, and/or rebuilt automotive parts and accessories. These segments also include automobile supply stores that are primarily engaged in both retailing automotive parts and accessories and repairing automobiles; also establishments primarily engaged in installing automotive accessories.

A second category of *taller* comprises establishments that conduct maintenance on household appliances like refrigerators. The below image is a prototypical *taller de frigoríficos* along Avenida Emma Balaguer (Fig. 4.25). Refrigerators are displayed outside as signifiers of store services, and there are many items inside the store for sale. These *talleres* are simply places of sale and maintenance of household appliances and are not as heavily frequented as the automobile maintenance shops. As the subsector definition states below, additional household appliances are serviced at these establishments, such as washers, and air-conditioners.

Figure 4.25: Prototypical Taller de Frigoríficos



Source: Strange 2010

These establishments fall within the Appliance Repair and Maintenance subsector (NAICS 811412). This service subsector comprises establishments primarily engaged in repairing and servicing household appliances without retailing new appliances, such as refrigerators, stoves, washing machines, clothes dryers, and room air-conditioners. The U.N. code is that of Repair of Household Appliances (ISIC 9522). Since certain goods are sold in these establishments, they also fall under Electronics and Appliance Stores (NAICS 443).

Subsector c: Other

Table 4.6.c: Other as they relate to NAICS and ISIC

SECTOR IV: SERVICES (NAICS: 81), (ISIC: G/45, S/95, 96)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
c. <i>Other</i>	Photofinishing Laboratories/Services: 812921, Automobile Parking Lots: 812930	Photographic Activities (Professional Activities): 7420, Other Personal Service Activities: 9609

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

The subsector of *other* services includes two establishments in Los Platanitos, both of which serve the community as well as the surrounding region. This industry comprises establishments (except those known as “one-hour” photofinishing labs) that are primarily engaged in developing film and/or making photographic slides, prints, and enlargements. The U.N. coding is that of Photographic Activities under the sector of Professional Activities (ISIC 7420). The first business is a Photofinishing Laboratory Services (NAICS 812921) called *Foto Estudio Raúl*, which is located along Avenida Emma Balaguer and provides a much valued service to the community (Fig. 4.26). Many community members have photos/portraits of themselves and family members that they purchase from this business. The establishment is owned by a long-time resident of the community.

Figure 4.26: Foto Estudio Raúl



Source: Strange 2010

The second *other* establishment in the community is *Repuesto Los Muchachos*, which provides parking services for residents and visitors, and also for businesses who need a parking facility (Fig. 4.27). A rate is charged per day for parking the vehicle and the vehicles are watched by the family who lives on the property. This type of service is categorized as Automobile Parking Lots (NAICS 812930) and falls within Other Personal Service Activities under the U.N. System (ISIC 9609). This industry comprises

establishments primarily engaged in providing parking space for motor vehicles, usually on an hourly, daily, or monthly basis.

Figure 4.27: Repuesto Los Muchachos



Source: Strange 2010

Sector V: Manufacturing (NAICS: 31-33) (ISIC: C14)

Table 4.7: Manufacturing Breakdown in Los Platanitos

SECTOR V: MANUFACTURING (NAICS: 31-33), (ISIC: C/14)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Tailor</i>	Apparel Manufacturing: 315	Manufacturing of Wearing Apparel: 1410

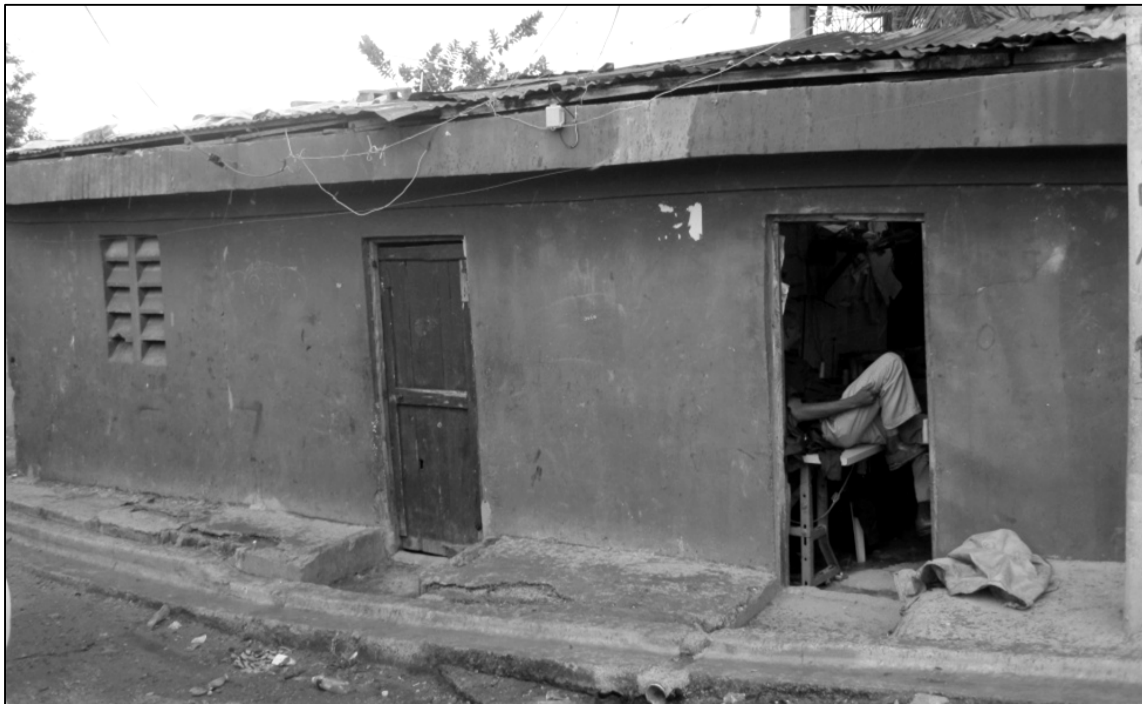
Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The sole Manufacturing establishment in the community falls within the subsector of Apparel Manufacturing (NAICS 315, ISIC 1410). This subsector encompasses two distinct manufacturing processes. The first is that of cut and sew, or the

process of purchasing fabric and cutting and sewing to make a garment and the second process is the manufacturing of garments in establishments that first knit fabric and then cut and sew the fabric into a garment. Based on observation and my interview with the owner, this establishment is in the field of Cut and Sew Apparel Contractors (NAICS 31521). Establishments in this sector also tend to be contracted out by larger apparel companies.

The name of this particular establishment is *Taller de Cultura*, located in the bend of a main arterial road in the community, *El Faro* (Fig. 4.28). The owner lives in the same building and employs five workers, four of whom are residents of Los Platanitos and also members of his direct family. The fifth employee lives outside of the community in the *Alta Gracia* neighborhood, located close to Los Platanitos. The establishment has been in existence for five years and the building is rented. *Taller de Cultura* is contracted to sell goods to the *Batista Grande Company*, which is located in the Distrito Nacional of Santo Domingo.

Figure 4.28: Taller de Cultura



Source: Strange 2010

Sector VI: Waste Management (NAICS: 562) (ISIC: E/38)

Table 4.8: Waste Management Breakdown in Los Platanitos

SECTOR VI: WASTE MANAGEMENT (NAICS: 562), (ISIC: E/38)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Recycling</i>	Recyclable Material Collection Services: 562111, Recyclable Material Hauling, Local: 562111	Materials Recovery: 3830, Collection of Non-Hazardous Waste: 3811,

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

The sector of Waste Management, also known as Waste Management and Remediation Services (NAICS 562), is comprised of establishments engaged in the collection, treatment, and disposal of waste materials. This includes businesses engaged in local hauling of waste materials. Recyclable materials are also collected and sorted

during this process. There are two recorded establishments engaged in this sector, both of which fall within the subsector of Solid Waste Collection (NAICS 562111). This sector comprises establishments that are primarily engaged in the collection and/or hauling of nonhazardous solid waste and collecting and/or hauling of “mixed recyclable materials” within a local area. While the above NAICS code is specific to Solid Waste Collection, these two establishments are primarily engaged in the Recyclable Material Hauling segment. These materials are glass and plastics. The UN coding system puts these establishments into similar subsectors: Materials Recovery (ISIC 3830) and Collection of Non-Hazardous Waste (ISIC 3811).

One of these establishments is the *Puesto de Botella y Caña* (Fig. 4.29). This business has only been in existence for about one year and is operated by an individual who emigrated to the community from Haiti. The owner purchases bottles and sells them to a larger company. Based on the interview with this individual, he buys 3 bottles for 1 peso and then sells them for 3 bottles for 2 pesos at Chi Chi, a larger establishment located along Avenida Emma Balaguer.

Figure 4.29: Puesto de Botella y Caña



Source: Strange 2010

Sector VII: Other Minor Sectors (NAICS: 61, 56) (ISIC: P/85, N/82)

Table 4.9: Other Services Breakdown in Los Platanitos

SECTOR VII: OTHER MINOR SECTORS (NAICS: 61, 56), (ISIC: P/85, N/82)		
Los Platanitos	U.S. NAICS Codes(s) - Subsector	U.N. ISIC Code(s) - Subsector
a. <i>Other Services</i>	Private Schools: 611110, Other Business Service Centers (Copy Shops): 561439	Pre-Primary and Primary Education: 8510, Photocopying, Document Preparation: 8219

Source: Strange 2010, NAICS - U.S. Census Bureau 2007, ISIC - U.N. Statistical Division 2009

The following two establishments fall into the category of Other Minor Sectors, since they are not commercially oriented. The sector codes for these two sectors are Educational Services (NAICS 61, ISIC P/85) and Administrative and Support Services (NAICS 56, ISIC N/82). The Educational Services sector comprises establishments that provide instruction and training in a wide variety of subjects, such as schools and colleges. These establishments can be privately owned and operated for profit or not for profit, or may be publicly owned or operated. They can also offer food and/or accommodation services to their students. These services are usually delivered by teachers or instructors that explain, tell, demonstrate, supervise, and direct learning. This instruction can be imparted in diverse settings, such as educational institutions, the workplace, or the home.

The second sector, Administrative and Support Services, includes establishments engaged in activities that support the day-to-day operations of other organizations. Most establishments classified in this subsector specialize in one or more of these activities and provide services to clients in a variety of industries and, in some cases, to households. Many of the activities conducted in this sector are ongoing routine support functions that all businesses and organizations must do and that they have traditionally done for themselves. Recent trends in developed countries are to contract, or purchase, such

services from businesses that specialize in these activities and can therefore provide the services more efficiently.

To begin, the one recorded establishment under Educational Services is particular to the subsector of Private Schools (NAICS 611110). This particular industry comprises establishments primarily engaged in furnishing academic courses and associated course work that comprise a basic preparatory education. The UN code system classifies these establishments as Pre-Primary and Primary Education (ISIC 8510). This sector includes the provision of instruction designed to introduce very young children to a school-type environment and instruction that gives students a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects. The only recorded establishment in Los Platanitos is an example of educational/private schooling/day care of children. The evaluation and discussion on educational offerings and structure in the community are outside the scope of this project and analysis. This location was simply recorded as it represents an additional business opportunity for individuals in the community. However, commerce of goods is not exchanged here, and these establishments provide a derivative of the above mentioned sector. The *Centro Educativo los Angelitos* is a prototypical establishment in this subsector and is located off of the main arterials along a side street/alley way. The woman who is in charge of the establishment teaches and monitors the children within her own home.

The second *Other Services* subsector is that of Business Service Centers/Copy Shops (NAICS 561439), or Photocopying/Document Processing (ISIC 8219) under the UN coding system. This industry comprises establishments generally known as copy centers or shops and which are primarily engaged in providing photocopying, duplicating, blueprinting, and other related services. In Los Platanitos there's one business named *Copias e Impresión Edipy*. This business is only advertised within the

community (Fig. 4.30). Although this business is located outside Los Platanitos, it is owned by individuals who live in the community. The owners take documents that patrons want copied in the morning and return them at night.

Figure 4.30: Copias e Impresion Edipy

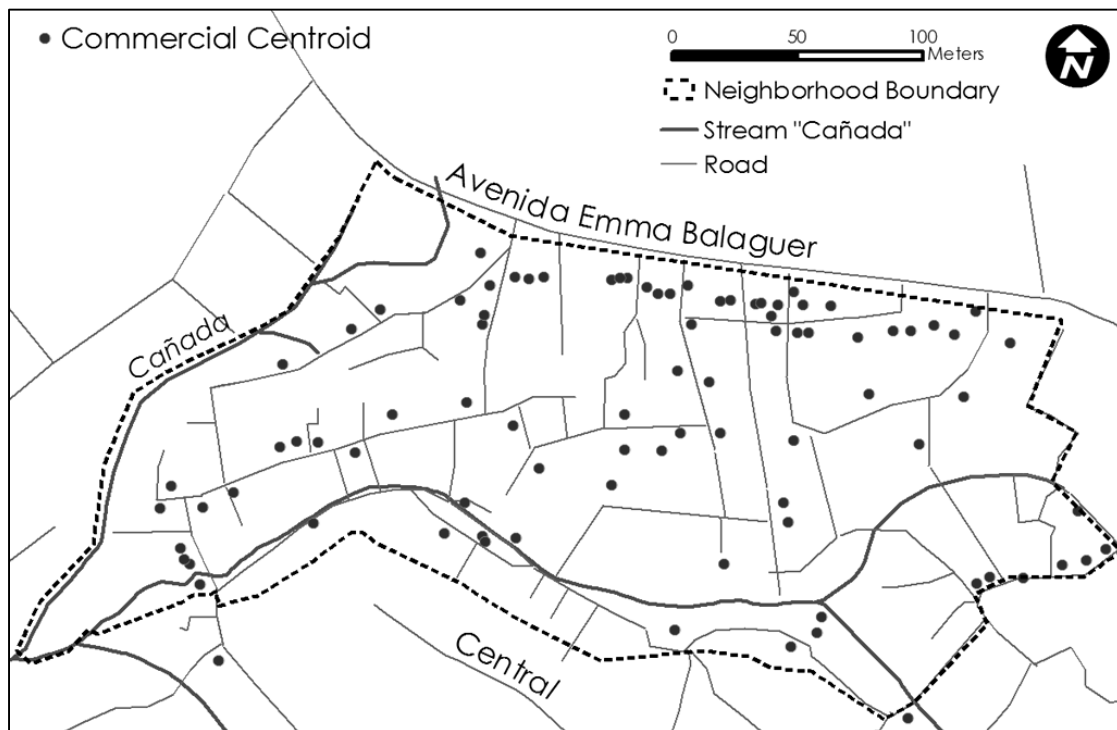


Source: Strange 2010

ANALYSIS OF BUSINESS DISTRIBUTION

Analysis conducted using Geographic Information Systems reveal the spatial distribution and spatial relationships among businesses from different sectors. The map below shows all 95 recorded businesses in Los Platanitos (Fig. 4.31). The points represent the center of the building envelopes for each establishment. It shows a strong concentration of businesses along the busy street, Ave. Emma Balaguer, on the northern fringe of the community. However, there are many businesses in the inner part of Los Platanitos as well.

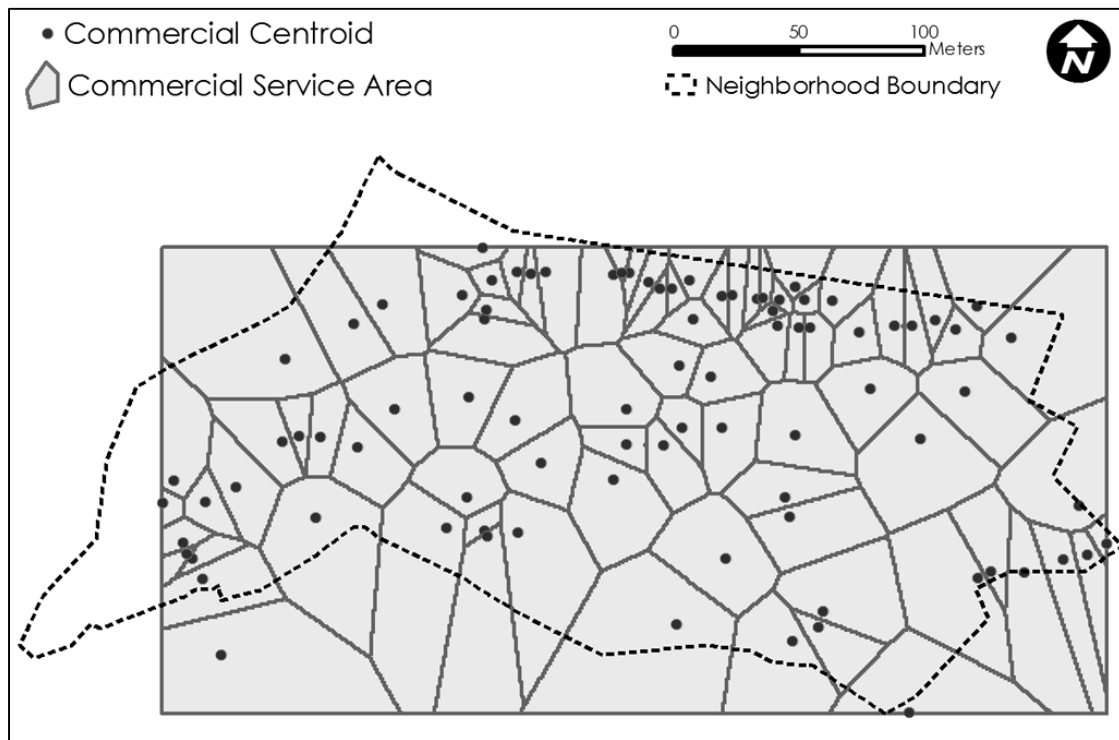
Figure 4.31: Map of Commercial Points in Los Platanitos



Source: Strange 2010

The map below shows the service area, or “area of influence,” for each commercial establishment (Fig. 4.32). Each area of influence is represented with a Thiessen Polygon, which defines a “plane or area of influence around an input point, such that any location on the plane is closer to that point than any other input points” (Pamuk 2006, 43). The service areas for the business establishments in Los Platanitos range from 70 square meters to 3,775 square meters. The smaller commercial service areas are mostly along Avenida Emma Balaguer, which reflects the high level of traffic, patronage, consumer demand, and population density along this street. Emma Balaguer serves as a commercial corridor and businesses here tend to have patrons from outside of the immediate vicinity of Los Platanitos. The larger service areas; i.e. the larger Thiessen Polygons, are located along the lower portion of the community, along the creek that traverses the community. Patrons who frequent business establishments in this area are almost exclusively residents of Los Platanitos. Also, population density is lower in this central part of Los Platanitos and levels of poverty are higher. This shows the variance in local demand and broader regional demand between the two geographical portions of the community.

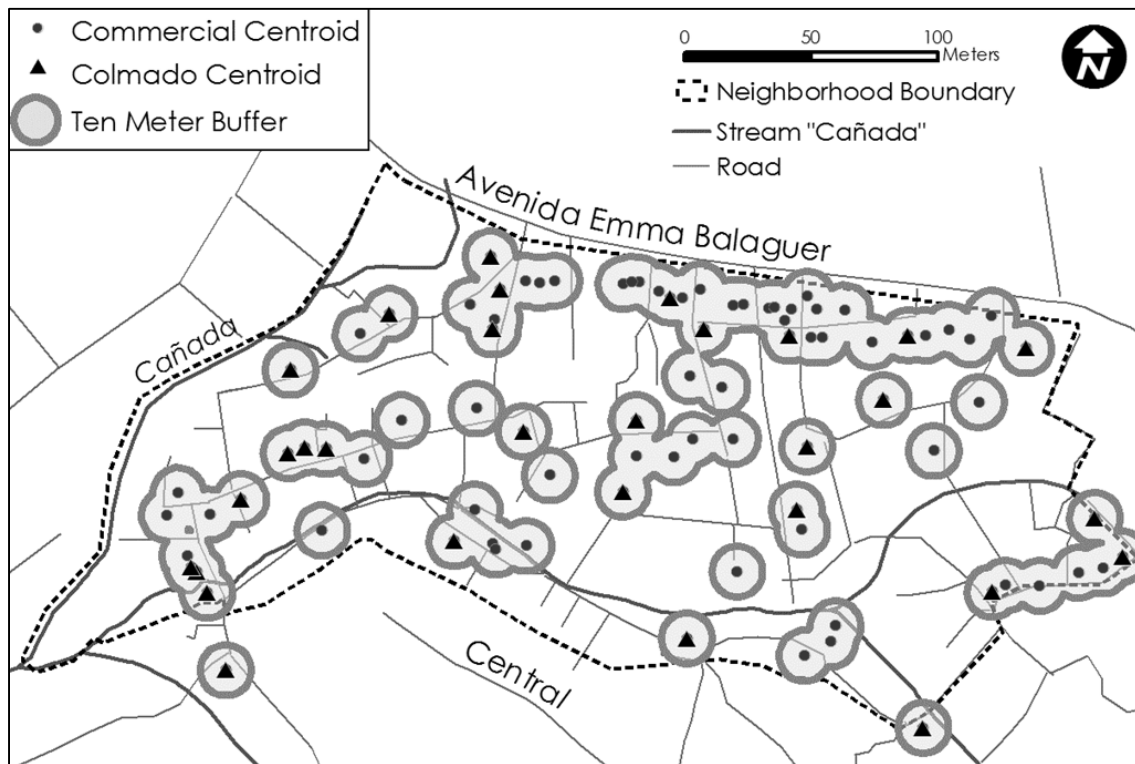
Figure 4.32: Map of Thiessen Polygons (Service Area) of Commercial Points



Source: Strange 2010

The map below shows a ten meter buffer around each these establishments (Fig. 4.33). The buffer indicates the immediate “commercial impact area.” This analysis shows a tight connectivity between businesses along Ave. Emma Balaguer, which serves as the main street of Los Platanitos. While this long series of businesses creates a single strand of commercial impact along Emma Balaguer, businesses in the lower, and poorer, sections of Los Platanitos are more scattered, only forming small commercial nodes at the intersections of minor roads. These commercial nodes are located in the north, east, west, and southern parts of the community, as well as in the center of the community, reflecting the informal network of roads and alleyways.

Figure 4.33: Map of Immediate Commercial Impact Area

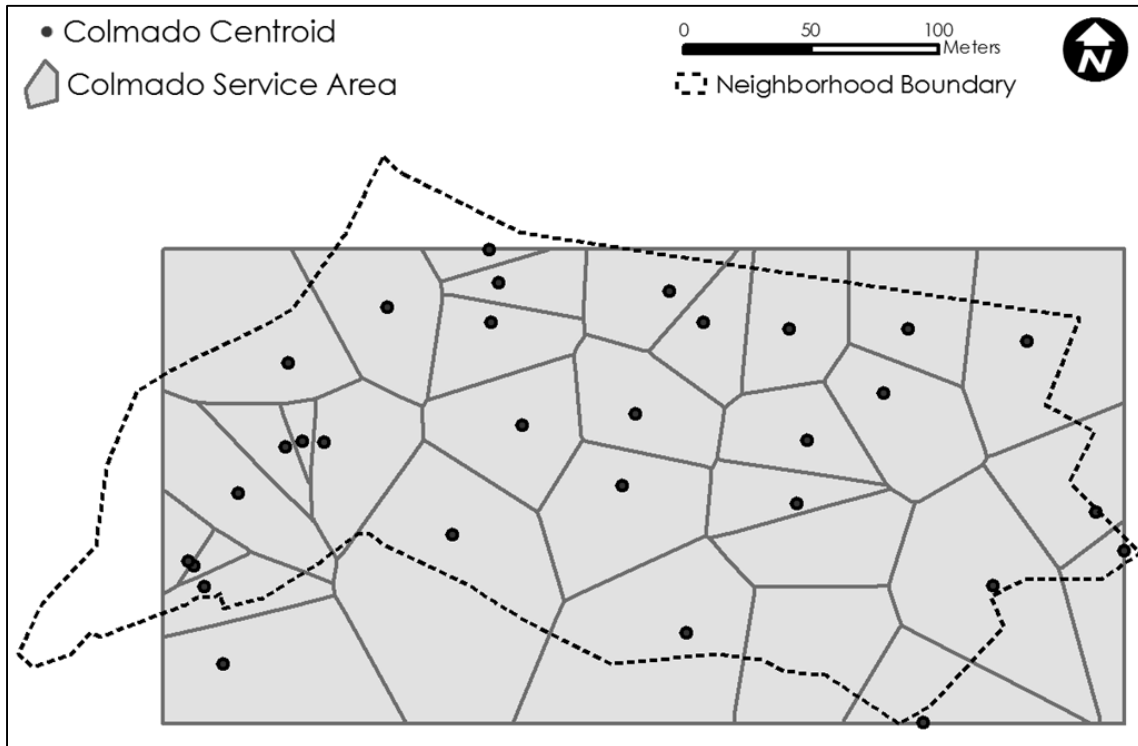


Source: Strange 2010

The black triangles in the above map show the locations of colmadros, the most prominent business establishment in Los Platanitos. Based on interviews and research, colmadros are the most important business type that serves the immediate needs of residents. The map below uses Thiessen Polygons to again represent their service area in the community (Fig. 4.34). The area of these service zones range from 233 square meters to 6,837 square meters. The rather even spatial distribution of these establishments highlights the importance of these establishments and indicates that consumer demand for their goods is high throughout Los Platanitos. Meanwhile, there is only one bakery and one wholesaler in the community, reflecting the lower demand for these services. This

analysis, then, illuminates the historical evolution of a hierarchy of services in Los Platanitos.

Figure 4.34: Map of Thiessen Polygons (Service Area) of Colmado Points



Source: Strange 2010

CONCLUSION TO FINDINGS

This research shows that, as stated by Baharoglu and Leitmann, “in the absence of relevant formal rules, coping strategies – which enable the spontaneous settlements to operate – are formulated by suppliers and consumers” (Baharoglu and Leitmann 1998, 115) These coping strategies have led the community to capitalize on their adaptive potential and entrepreneurship (Pelling 2002) to develop an emergency economy (Simone

2008) that is self sufficient and rooted in place. By conducting a geospatial analysis of Los Platanitos, it is evident that there is 1) a hierarchy of goods and services, and 2) that local demand is met through a wide variety of local establishments. The use of the national and global sector coding system shows that while businesses in Los Platanitos can be categorized under broader sector types, the lack of a formal rule system allows them to be involved in a unique variety of subsectors that meet residents' needs.

Chapter 5: Conclusion

This research highlights how an informal settlement has, through time, developed a self-sustaining community with an economic network that provides the necessary goods and services for everyday life. Vuletin (2008) states that the informal economy is comprised of activities that circumvent the cost of legal and formal social systems, while at the same time not benefiting from the laws that can protect these activities. The rapid increase of these informal settlements (Brown 2006) parallels the growth in informal economies. This increase took place in Santo Domingo during the rapid pace of urbanization in the decades between the 50s and 90s (Haggerty 1989). Because of the lack of an urban development plan in Santo Domingo coupled with an estimated housing deficit of some 400,000 units (Haggerty 1989), squatter settlements grew rapidly during the 1980s (Cela 1996). By 1990, self-built housing in informal settlements accounted for 72 percent of all housing in the urban area (Fernandez 1996).

These communities are afflicted by many environmental and social problems. These issues range from precarious housing on steep valley slopes (Pelling 2002) to high levels of crime and drug use (UN Habitat 2003, United Nations 2005). Given the insecure situation and lack of services in these settlements, residents depend on informal networks and social structures to survive. As found by Baharoglu and Leitmann (1998), even in the absence of formal rules, coping strategies are in place that enable spontaneous settlements to operate. It was also found that “there are actors and modes of behavior inside and outside of the formal rule structure who shape infrastructure and service outcomes” (Baharoglu and Leitman 1998, 188). Mark Pelling (2002) developed the concept of *adaptive potential* from a study of informal communities in Santo Domingo, highlighting how residents are able to survive without state services and legal protection.

Hernando De Soto (2002) argues that by gaining title to their land and businesses, community members can experience legal protections of the law and further the economic development of their communities. His work shows the difficulty that people face when trying to start a business in the developing world. It also illuminates the risk that informal settlement residents face when trying to gain legal ownership. Due to these difficulties, most people decide to opt out of the legal system. Studies have been conducted that support De Soto's claim that governments should have land titling policies in place so that informal residents can have the protection of the law. Gustaff Reerink and Jean-Louis van Gelder (2010) found that land titling policies contribute to the perceived tenure security for residents in informal settlements in Indonesia. Erica Field's (2005) study found that strengthening property rights in urban slums had a significant positive effect on residential investment and that property reforms can be productivity-enhancing in urban settings.

However, De Soto's focus on large land-titling strategies has met with important critiques. Bromley (2008) states that slum dwellers who obtain titles, but who still are without work, cannot leverage credit or gain sufficient income for financial upkeep of property. He also suggests that formalization policies may erode and displace existing social networks and arrangements that offer security. Jan Nijman (2009) counters De Soto's policy prescription by suggesting that existing practices and livelihoods create a stronger sense of place and greater security for slum dwellers, than larger titling programs. Similarly, Sjaastad and Cousins (2008) argue that a generalized, universal approach to formalization is not sufficient. It is necessary to pay greater attention to local settings and develop approaches that are context specific. This wider perspective can recognize the situational complexities of poverty and the realities of existing practices and local livelihoods.

While my work is informed by these critical perspectives on the formalization strategies proposed by De Soto, I have drawn more specifically on Pelling (2002) to document what I see as the adaptive potential of Los Platanitos' residents to create a self sustaining economic network. Through their entrepreneurial activities they have created what Simone (2008) refers to as an *emergency economy*. Given an exceedingly uncertain economic and political environment, residents work outside the legal system to not only survive, but also to create complex economic networks that are strongly founded in place. In my thesis, I have used the NAICS and ISIC coding system to show that in the absence of a formal rule structure, establishments are not confined to one sector alone. Instead, they span a wide variety of sectors and subsectors as they adapt to local needs and conditions.

My report calls attention to the need to develop policy approaches that are context specific while also taking into account the complex economic networks that develop in informal settlements. The city of Santo Domingo has developed initiatives to address issues relating to environmental, social, and cultural conditions of these communities (Navarro 2004, Secretaria Técnica 2009). I propose that context based initiatives be put in place that capitalize on the *adaptive potential* of informal residents. As stated in the Plan de Desarrollo Urbano para la Ciénaga y Los Guandules, the participation of the government, community members, and civil sector is important in developing context specific programs to address the conditions in informal settlements (Navarro 2004). Taking from this idea of participation across these three sectors, development initiatives can begin that look at how these establishments serve their communities in various ways. By working with local business owners and residents, government programs can be developed from the bottom up that are tailored to this unique entrepreneurial environment

where the lack of formality has created a variety of establishments adapted to local situations.

Developing such context-based economic development initiatives would require a clear, enabling policy framework. However, working in the context of informal settlements would prove difficult. The first step would require the government to employ the assistance of the civil sector. Local NGOs, like Ciudad Alternativa and COPADEBA, can act as intermediaries and advisors as they have a wealth of experience in informal settlements. In the early stages, adequate government funding would be needed to support the development process. Over time, increases in local tax revenue would be a sufficient return on investment. Such a strategy would also require robust program administration and oversight on the part of government, NGOs, and the community to meet goals and objectives and evaluate the progress of the program. By working with the local community and business owners, government officials and NGOs can create standards that meet the needs of businesses and residents. By cultivating the entrepreneurial spirit of these residents, policies can be tailored that transform the current legal process for business ownership and land entitlements.

This process would address: 1) the financial limitations of small business owners, 2) the issue of ownership titles, 3) the context based economic network, and 4) the financial revenue needed by municipalities for locally based capital improvement projects. The program would be based on criteria developed through participatory evaluation and information gathering. The result would be a system that would create more incentives for people to gain the legal protection provided by the state. This, in turn, would provide legitimacy for business activities and owners. During the process, the government and NGOs would work with community members to develop a set of codes and standards that incentivize further compliance with these new policies. This would

require a new commercial tax system that is transparent and understood by business owners, and that is again tailored to the small-scale economic environment. The transparency of such a system would maintain accountability for capital improvements which have been funded through this local context-based tax system. Educational programs and information would be provided to residents that are backed by legal and technical support.

This would be a gradual, long term strategy for the economic development of Los Platanitos and other cañadas in Santo Domingo Norte and elsewhere. However, it is necessary to provide ownership rights, legal protections, and government services to these entrepreneurs, who, in turn, play such a central role for the everyday survival of residents in these informal settlements.

Appendix A: Los Platanitos Field Work Maps

LARGE SCALE LAND USE - CODED



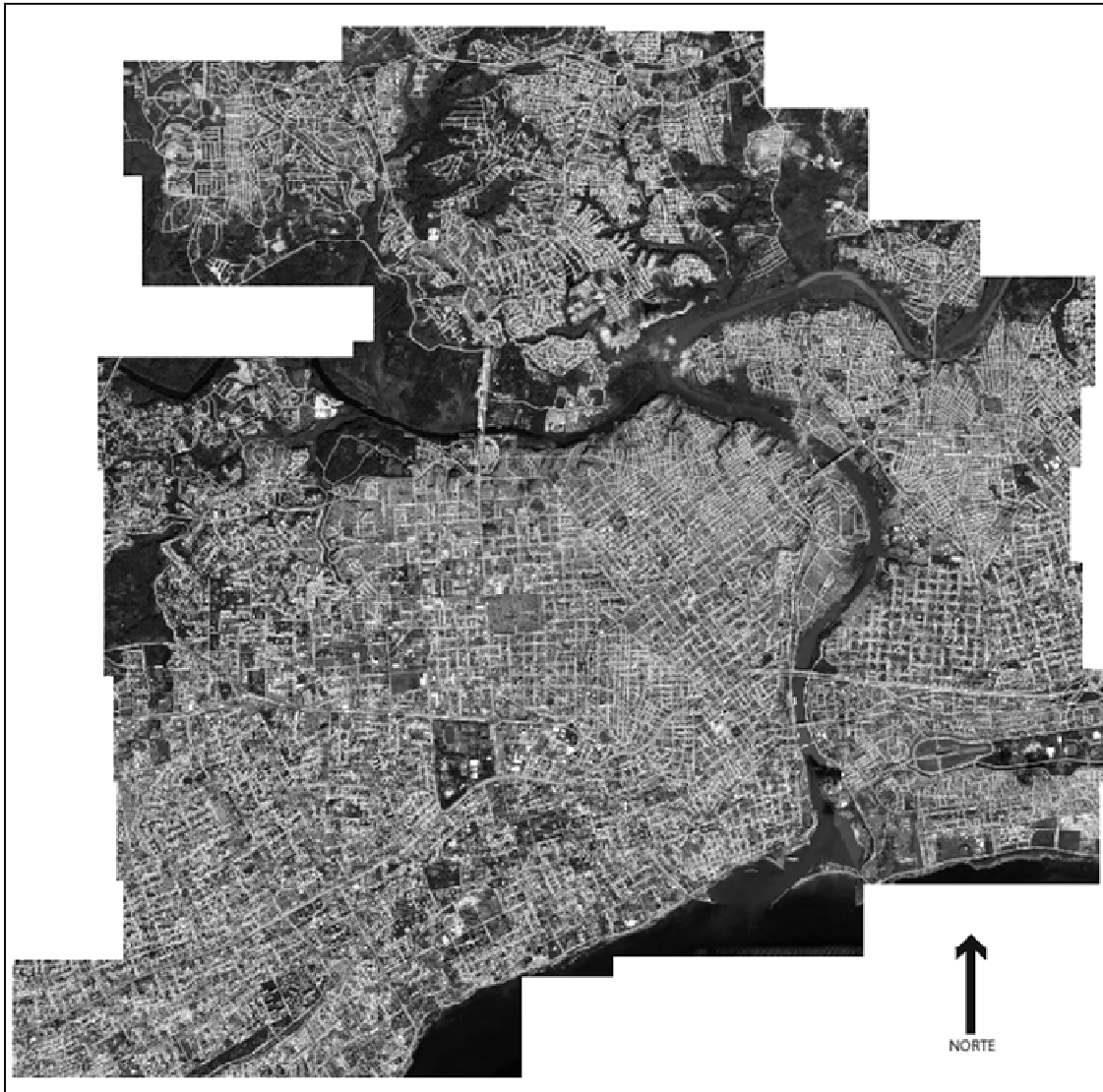
LARGE SCALE BUILDING ENVELOPES - CODED



LARGE SCALE WITH REGIONAL INDEX MAPS



MEDIUM SCALE SANTO DOMINGO NORTE



SMALL SCALE SANTO DOMINGO METRO REGION



Appendix B: Los Platanitos Field Work Forms

INDIVIDUAL INTERVIEW FORM

INDIVIDUAL FORM: NOBRE _____ Fecha _____

- Dónde vas para encontrar trabajo?
- Que haces en este sitio donde buscas trabajo?
 - Habla con gente
 - Con alguien con quien puede ayudarte con un trabajo
- El empleo que encuentras, es como un chiripero, o es un empleo más formal?
- Cuantas veces vas por este sitio para buscar el empleo?
- Cuantas veces tienes empleo?
 - Este empleo es seguro?
 - Que pasa por cada semana?
- Como vas a los sitios de trabajo, por autobús, transito?
- Como vas a los trabajos?
- Cuanto tiempo dura este viaje al sitio?
- Cuanto tiempo dura el viaje al empleo?
- Como sirve el Nuevo Mercado por empleo?
- Como te parece este tipo de trabajo?
 - Seguro?
 - No Seguro?
- Te Gusta haciendo este Trabajo?
- Si Pudiese tener otro trabajo, que quisiera hacer?

BUSINESS ESTABLISHMENT QUESTIONNAIRE

Me llamo Shawn Strange y soy un estudiante posgrado y vengo de la Universidad de Texas para documentar las condiciones de las oportunidades de empleo y ubicaciones de empleo en la comunidad y en la región circundante. Con su permiso, querría realizar una conversación y preguntar algunas preguntas. La conversación durará aproximadamente 20 minutos y sus respuestas serán confidenciales. El reporte que yo haga sobre esta entrevista no incluirá su nombre. Si en cualquier momento de la conversación se siente incómodo o no quiere contestar una pregunta, por favor dime y podemos saltar esa pregunta o dejar de realizar la entrevista.

PUNTOS REFERENCIALES ([740, 177, etc.], lugares públicos [EP1, EP2, etc.])

Código (i.e. 740, 177, etc.) _____ Fecha _____ Uso de terreno _____

Cómo están mapeados? _____

Nombres de personas _____ Ha sido chequeado el lugar? (S/N) _____

Por favor acuerdense de marcar su ubicación en los mapas

Nombre del negocio: _____

Usted es el Dueño/gerente: _____

Este sitio es alquilado o es su propio: _____

Cuánto tiempo ha existido este lugar?: _____

Tipo (tienda, iglesia, etc.): _____

Área de servicio (ciudad, comunidad entera, vecindario?): _____

Este es un sitio donde vives y trabajas? _____

Quanta gente empleas en este sitio? _____

De donde son el dueño/gerente/representante? _____

De donde son la gente que trabajan aquí? _____

Como vienen al negocio (Por carro público, Metro...)? _____

Como has financiado este sitio? _____

De donde son las cosas que se venden aquí? _____

Comentarios: _____

Fotografías

Cuadrícula/Foto # Código (A4-2 etc.): _____ Fotógrafo: _____

Número de Foto: _____

Nombre de Área: _____

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Vita

Shawn Michael Strange has an extensive professional and academic history. He started his international work at the Greater Dallas Chamber of Commerce in international economics and marketing while receiving a BBA in International Business/Spanish from the Honors College at The University of Texas at Arlington. He presented his undergraduate thesis at the 2005 Macro-Marketing conference on consumer patterns in the transforming economy of Southeast China. He then served as the Program Specialist on the 2005 Base Realignment and Closure (BRAC) Strike Force for the State of Texas under the Secretary of State. Shawn then worked as a Corporate Relations Associate at the Council of the Americas in New York City. During his time at The University of Texas at Austin he was a national finalist for the ULI Gerald D. Hines urban design competition in 2008, a candidate for the Presidential Management Fellowship in 2009, and was on the team that won the AICP student project award for best applied research in 2010. Shawn has presented on informal economies and the use of Geographic Information Systems to the municipal government of Santo Domingo and the City of Austin. During 2009 and 2010 he worked as a teaching and research assistant on *The Robert S. Strauss Center for International Security and Law* project on Climate Change and African Political Stability (CCAPS).

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