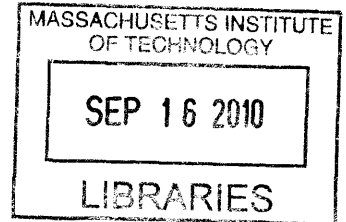


Waste Pickers in Bogotá: From Informal Practice to Policy

By

Andrea Alejandra Betancourt

BA in Growth and Structure of Cities and History of Art
Bryn Mawr College, 2005



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Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of

Master in City Planning

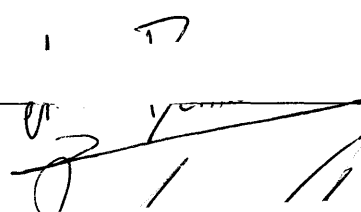
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September 2010

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ABSTRACT

Waste pickers constitute the base and most essential work force of the recycling business in Latin American cities. Waste pickers have overtaken this commercial and environmental task as a survival strategy long before the state and private entities became interested in participating in this profitable business. Waste pickers separate, collect and commercialize recyclables informally and under very precarious working conditions. In Bogotá, the waste picking population has been active in defending their rights to continue working in this business and improve their working conditions by gaining the local government's recognition and inclusion in their solid waste management policies. They have faced strong opposition from local and national authorities, who often show little political will to support the social and environmental roles of recycling. In this paper, I explore how waste pickers in Bogotá have approached government authorities in order to acquire their support and build collaborative initiatives. The Association of Recyclers of Bogotá has led a fifteen year-old struggle to petition formal inclusion in local and national policies and to demand dignified working conditions. Waste pickers' persistence, leadership and high organization has guided them through this struggle, leading to the creation of collaborative spaces between waste pickers and the local government. My analysis of this case finds that collaboration, in the highly political topic of recycling, is not straightforward; it is attained through a push and pull dynamic that puts waste pickers and government authorities in constant confrontation, negotiation and conciliation. This long struggle has generated local and national laws, policies and programs that recognize recyclers' work and sets tools to include informal waste pickers in the recycling and waste management processes of Colombian cities. The practice and application of such political tools remains a challenge. However, this long struggle has been effective in making marginal actors – informal waste pickers – more visible in the urban agenda and in building bridges of communication between them, the local government and, to a lesser degree, private cleaning companies. This case shows that long processes of communication, struggle and negotiation are needed to address recycling and waste management through a comprehensive understanding of its social, economic and environmental dimensions.

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1 Introduction

Waste collection and waste management are essential services in cities. The removal of waste allows cities to maintain healthy and sanitary environments. In recent times, and with a drastic increase in consumption patterns, waste management requires strategic and environmental approaches to handling and reducing the amount of waste. This case holds a significant opportunity of employment, poverty reduction and social inclusion in the framework of environmental sustainability. In cities of the developing countries, however, waste management services have been among the most deficient, leaving poor neighborhoods and informal settlements without this valuable service. For many poor families who are unable to enter the labor force, this deficiency has turned into an employment source and a survival mechanism.

Waste pickers in developing cities and countries dig into other people's waste and extract the reusable materials to then sell them to the industry. In this way, waste pickers devote their time, skills and lives to the recovery of cities' recyclable materials. Many local governments in Latin America have failed to provide recycling services and have been, for the most part, unconcerned with the recovery of raw materials until late in the 20th century. Additionally, the rapid growth of Latin American cities has made it difficult to generate an equally growing amount of jobs for their populations. In this context, waste pickers have had the opportunity to develop and provide recycling while consolidating a source of income in the informal realm.

Waste picking, as an informal activity, has existed for decades; however, waste pickers, as urban/environmental actors, have remained largely invisible and been stigmatized for the precariousness of their working and living conditions, and their association with trash, filthiness and crime. The people and families that embark in the informal sector of waste picking and recycling are generally poor and excluded from mainstream urban life, employment opportunities and decision making processes. Nonetheless, they have executed an important environmental role long before local authorities became aware and concerned about urban environmental sustainability, and before the private sector found profitable business in this area.

Since the Rio Earth Summit of 1992 and the pressure of urban growth in Latin American cities, local governments have attempted to develop better and environmentally sound systems of waste management in their cities. This trend, however, has interfered with the livelihoods of waste pickers, who for decades have earned a living out of this activity. As local governments become more concerned with the environmental sustainability of their cities, in general, and the management (reduction) and regulation of trash, specifically, waste pickers are being displaced from their sources of employment and are receiving no security or recognition for their role. The case of Bogotá City is no different. In fact, Bogotá likely represents one of the longest and most confrontational struggles between informal recyclers and local government authorities. Waste pickers – who have participated in the recycling chain for over four decades and have turned recycling into their survival source – have engaged in a long and productive battle with government authorities. They have challenged laws that penalize their activities and policy making processes that exclude

their presence and participation in waste management. They have pushed authorities to include their recycling services within the waste management system and to regard the recycling sector as an important sector of employment for the unskilled populations. Recyclers' interests are to protect their right to work in recycling – the one activity that they know how to do – attain decent working conditions and receive recognition from public authorities and civil society. In times of abundant waste and global warming, the recycling sector presents itself as an opportunity for the local government to offer opportunities of socio-economic development and address the city's environmental needs.

Among recycling groups and associations worldwide, the recyclers of Bogotá are known for their high level of organization and their achievements at attaining visibility in the political arena. In this paper I explore the process through which waste pickers and government authorities have come to collaborate with one another in the making of more inclusive policies that acknowledge recyclers' activities as a formal work and a service to society and the environment. The collaboration and participation of all stakeholders, which are highly regarded in the contemporary practices of planning (Fainstein, 2004), prove to be long and nuanced processes that develop over time. By looking deeply into the complex case of the mobilization of Bogotá's recycling associations, which merges issues of employment, poverty and the environment, I want to understand how local authorities and marginal social groups with diverging interests can work together in collaboration and produce policies that benefit the several stakeholders. The analysis of this case shows that collaborative results become tangible after a contentious history of struggle. Interest groups often react to institutional injustices with anger and find strategies to claim inconformity,

demand attention and press for change. Public authorities may be unprepared or unequipped to produce effective short-term changes that align with the interest group's demands. Therefore, there is an organic sequence of push and pull events that bring parties together through constant confrontation; nonetheless, they enable instances of communication, recognition of interests and negotiation. By looking at this case and analyzing how waste pickers and public authorities react to one another, one learns that building a collaborative atmosphere between public authorities and marginal interest groups is shaped by internal and external forces over time. Moreover, it is the struggle's evolution that enables actors (e.g. decision makers) to understand each other, have a comprehensive vision of the problem and tackle environmental sustainability, employment and social justice simultaneously.

The city of Bogotá has benefitted from autonomous local governments and progressive leaders who have pushed for the green agenda in the past couple of decades. Both factors allowed local authorities to come up with one of the most comprehensive waste management plans in Latin America. This plan embraces a set of innovative environmental policies that promote recycling; it recognizes the informal sector of waste picking and includes them into the official provision of cleaning services. This, in itself, is a major political contribution and example for other cities in the region and worldwide. In order to get to this position, however, the road was long and complex. Local authorities and informal waste pickers became closer through processes of opposition and negotiation. By undergoing these processes, public authorities gained experience in thinking about the

multidimensional impacts (e.g. social, economic, and environmental) of the policies that they design and implement.

In this paper, I analyze the ways in which Bogotá's local authorities and waste pickers confront each other and interact while progressively constructing solutions that will maintain both of their interests. Interestingly, local authorities face one of the poorest, most vulnerable and invisible groups of the populations; their knowledge on this group is originally limited. Even so, they get to acknowledge their presence and respond to waste pickers' demands. I try to identify the forces that enabled the current collaborative partnership between local authorities and recyclers. I analyze the capacity of waste pickers to step in and influence the policymaking processes, policies and policy makers when coming from a marginalized position. I pay close attention to how informal waste pickers approached government authorities, and how they gained voice to demand their interests and agendas. Moreover, I look at the relationship between recyclers and local authorities, and the influence of this relationship in the process of policy making.

This case shows how a local government initially expands the range of its waste management services to meet environmental concerns, but ignores the socio-economic networks that have been created in the areas where the State was previously absent (recycling). In this example, local authorities pursue certain decisions to improve the environmental quality of the city – while fully supporting the efficiency of private firms – but deepen the social injustice and exclusion of their most vulnerable social groups. As

recycling groups take a stronger stand, authorities learn to respond to their demands and negotiate interests. I ultimately show how the Bogotá government came to respond to informal waste pickers and their recycling activities, and the extent to which they yielded their own government interests with those of the waste pickers.

Collaboration between interest groups (recyclers), the State (local governments) and NGOs, led to interesting policies and initiatives of cooperation, sustainability and inclusion. These can potentially generate important changes that benefit the greater recycling population and open venues for tackling structural problems of injustice and inequality. However, despite the positive achievements of recyclers and public authorities, the most structural elements that alienate informal recyclers from opportunities of socio-economic integration remain present. I acknowledge the successful results that derived from such struggle but I also point at the barriers and challenges that recycling groups and local governments alike continue to face when creating policies of sustainable waste management.

1.1 Methodology

The research for this paper comes from primary and secondary sources. Most of the information on Bogotá and Colombia's history, past policy dynamics of waste management and statistics on recyclers come from academic research papers, newspaper articles and a video documentary. My knowledge of the evolution of past and current conditions of the recyclers' struggle derives from site visits to government and waste picking facilities; and from semi-structured and open interviews to city government workers, leaders and

members of recycling associations, NGOs and university professors who have followed and supported recyclers over the years.

I visited and interviewed recycling cooperatives such as the Association of Recyclers of Bogotá, Ambiental, and the Association of National Recyclers. In July, I participated in a workshop organized by Cali and Bogotá Recyclers where the latter ones trained the former on how to confront the Cali government and participate in the city's new bid for waste management services.¹ At this event, I was able to listen to informal waste pickers and understand their petitions, frustrations and challenges. I also had the opportunity to meet Lawyer Adriana Ruiz, the founder of NGO Civisol and a supporter of the Bogotá and Cali recyclers in their legal battles to reclaim recognition and inclusion from their respective local governments. Additionally, I interviewed several professors and researchers of informal waste picking topics in the Universidad Javeriana de Bogotá and the Universidad de Ciencias Aplicadas y Ambientales. At the Alcaldía de Bogotá (District of Bogotá), I met with several technicians from the Unidad Administrativa Especial de Servicios Públicos (Administrative Unit of Public Services), including the officials who run the Programa Distrital de Reciclaje (District's Recycling Program) who interact and negotiate with the recycling cooperatives of Bogotá. My knowledge on this case was enhanced by my visits to

¹ In June 2008, the environmental authorities of Colombia ordered to close the Cali landfill in Navarro due to its high environmental hazard. Authorities thought of the physical solution of the landfill but they did not offer a solution for the 1200 people (800 families) that worked in the landfill. These people were suddenly left unemployed and with no other alternatives of employment. They took the government to court for not having included recyclers in the new contracts of waste management. The Court created a protection writ that ordered the suspension of the 2009 bid and the formulation of a new bid where recyclers could be included. When I was in Bogotá, Cali recyclers were preparing a proposal for the local government, to get a contract and be in charge separating recyclable waste and returning it to industry.

recycling and cooperative plants (e.g. Rescatar, ARUB, Asociación de Recicladores Rafael Uribe Uribe), to the city's recycling center (Centro de Reciclaje La Alquería) and my exposure to the several journal footages, articles and documentaries that were published and shown during my stay. Moreover, during my night strolls in the city, I observed the work of recyclers and their families, and at times approached them to ask questions about their daily work. My appreciation of this case also relies on the archive of pictures that I made during my field work. During the seven weeks that I was in Bogotá I gained a deep understanding of the complexity and contentious reality of the Waste Management Plan and the collaborative partnership between recycling cooperatives and the local government.

Throughout this time, I learned that this struggle had attained progressive policy changes along the way. Nonetheless, it continued to face limitations in regards to a real and just inclusion of marginal groups.

1.2 Preview of content

This paper is made out of five subsequent chapters. Chapter 2 makes an introductory characterization of waste pickers, their socio-economic conditions, work dynamics and relationship with urban waste management systems (SWM). This chapter contextualizes recycling and recyclers within the framework of public service and waste management. It highlights the relevance of including recyclers within policies of SWM and the potential to mutually collaborate in benefit of the environmental improvement and social justice in cities. Chapter 3 looks at the socio-economic reality of Colombian society which has promoted marginalization, inequality and poverty. It explains how and why recyclers established a strong rapport with waste and scavenging, being this their only survival mechanism. It then looks at the institutional/legal framework that recognizes the work of

this population and that, in a contradictory manner, excludes and displaces them from the recycling industry. Chapter 4 addresses the interaction between recyclers and government authorities that spring from factors of injustice and exclusion. It focuses on the strategies that recyclers relied on to have their interests heard and press local authorities for their inclusion in policy making processes; it analyzes the reactions of local government authorities that often heighten contention; and in a secondary dimension, looks at the role of the private business sector and their small contribution the fair distribution of employment opportunities in the public sector. This chapter unravels the long process of communication between government entities and marginal group of civil society before reaching collaborative actions. Chapter 5 does a critical analysis of the resulting policies and actions that intend to include waste pickers in the waste management system. It identifies the positive advances in creating a political space for this interest group; and the structural voids that will continue to position poor recycling cooperatives in the informal economy. The last chapter of conclusions highlights the successful gains of waste pickers, the limitations of the new laws, policies and programs and the challenges that Bogota recyclers and the local government continue to face. Moreover, it presents an overview of the factors that facilitated collaboration between the local government and waste pickers and that helped create potential opportunities for the latter.

2 The Informal Sector of Recycling and Solid Waste Management

2.1 Informal Recyclers: Who are they and what do they do?

“...tired and sweaty people...that come to big companies to look for or sell waste, while carrying their children on one shoulder and pushing their carts with the other arm, or come in a ramshackle carriage pulled by a horse that is as thin and unpolished as themselves”

Adriana Ruiz-Restrepo, *Las nuevas aventuras de Tom y Jerry*, April 25, 2009

Informal recyclers are situated in the lowest range of the recycling industry. Contrary to common belief, waste pickers did not invent this activity but, rather, they responded to industries' demand of raw and cheaper materials (interview Professor Opazo, Universidad Javeriana, July 2009). Some poor populations have specialized in recovering, selecting, transferring—be it from public dumps, private households and/or larger generators of waste—and supplying reusable materials to small and medium warehouses or intermediaries, who in turn deliver this material to larger intermediaries or small and large industries (Sylvestre, 2003).

Being positioned in the lowest range of this cycle implies two issues that reinforce their socio-economic vulnerability: their bodies undergo severe physical burdens —as they have direct contact with the toxic elements of waste and carry them on their back or by pushing heavy carts— and they receive the lowest and most irregular salaries in all of the recycling industry. According to Sylvestre and several academics who have researched the economic

benefits of recycling in Colombia, informal recyclers face a notorious imbalance of income distribution within the recycling cycle. Given that they often do not have the means to accumulate large quantities of reusable materials, recyclers sell what they collect on a daily basis. They depend on several kinds of middle agents: those with small storehouses and those with medium warehouses. These middle range intermediaries often sell again to larger warehouses, industrial storehouses and sometimes directly to industry. Middlemen who buy from informal cooperatives also depend on what the industry is willing to pay for raw materials. In order for middlemen to secure profit from these transactions, they must offer low prices to the poor recyclers. The final price is ultimately defined based on the supply and demand of materials but do not incorporate the daily labor costs of selecting, separating and collecting recyclable waste –this being one of the primary injustices that recyclers face in the current system of waste management in Bogotá. Sylvestre and ARB recyclers affirm that “there is a qualitative distinction between middlemen or storage owners, which is that middlemen support their commercializing activities through the work of recyclers” (2003, 25). As shown in the graph above, informal recyclers (organized and non-organized) are three or four steps away from the final sale to industry. Although Bogotá lacks economic studies on the recycling value chain, Gutberlet estimates that despite the extreme fluctuation in prices, based on volume paid by small and medium middlemen and large industries Colombian recyclers would earn five times more if they were to bypass middlemen and go directly to industries. Recyclers have little to no capacity to negotiate their payments and are exposed to exploitation, irregular payments and zero bargaining power. This inequality is strengthened by the absence of official regulatory frameworks in the recycling businesses.

Understanding the composition and dynamics of informal waste pickers has not been straightforward and easy to accomplish. For one, they were not among government's priorities or interest for several decades. The first attempt for the local government to learn from waste pickers and include them in their policymaking was in 2003, when the District and the National Department of Statistics launched a research study of their demographic, economic, living and mobile conditions. In addition to this study, ENDA had produced anthropological studies on the mobilization and technology mediums of recyclers. The academic researchers that follow and support the cause of waste pickers usually work with specific associations or groups, but do not have a full picture of the number, the dynamics and the landscape of informal recycling in Bogotá. This incomplete understanding of the presence and dynamics of this group has led authorities to create an inappropriate set of policies in several occasions.

2.2 Characteristics of Bogotá Waste pickers

The recycling population is largely heterogeneous. Bogotá's waste pickers do not necessarily share similar needs, objectives or struggles, and they largely differ in the way they work, organize themselves and relate to waste picking activities. It is hard to speak of one group or community fighting for a particular set of demands. This heterogeneity has made it even more difficult to come to terms with the local government and create successful policies and inclusive waste management systems. During my field work, I noticed that the knowledge on informal waste picking revolved mostly around organized groups, and most especially, around the Bogotá Association of Recyclers. Starting from initial meetings and interviews with UESP officials, the director of the Association of

National Recyclers, street recyclers in middle-high income neighborhoods, ENDA representatives and university researchers of the topic, I was constantly advised to direct my inquiries to the Bogotá Association of Recyclers as they were the leading and most influential group in the struggles with the local government.

Groups of waste pickers differ from each other in the way they experience the activity, in their levels of organization and in the technological complexity of their transportation/carrying devices (Parra, 2003). Recycling families come from different backgrounds and have participated in these activities for various time periods. Many of them have migrated to rural areas in search of better employment opportunities; others have been displaced due to Colombia's internal conflicts; and others were born in recycling families and took over the profession as a family legacy. Some recyclers have been involved in this activity for decades, others for a few years and others exercise this activity temporarily and 'unofficially'. Studies made by ENDA show that there are three kinds of recycling groups: 1) those who do waste picking as a permanent occupation, offer a certain level of specialization and depend primarily on this income; 2) those who exercise recycling as a temporal occupation but are inclined to turn it into a permanent employment; and, 3) those who do it as an immediate survival activity and complement their income with other jobs/sources. Moreover, Parra's ethnographic research on the mobilization and circulation of waste pickers finds that some of them are "mobile" (those who travel the streets and do not have a permanent home) and others are "rooted" (those who have homes). It has therefore been difficult for academics, non-governmental organizations and

the local government to clearly define and classify recycling activities and recyclers (Parra, 2003).

2.2.1 The mobility of informal recyclers

The nature of their work requires them and their families to be highly mobile and exposed to environmental, weather and violence hazards. The high, yet unprotected, mobility, that is characteristic of their work, affects their quality of life and perpetuates their socio-economic and physical vulnerability (health).

Scavenging is a very mobile activity. Because recyclers have to collect useful material from the public space (streets) or in a door-to-door basis, they travel throughout the city during the night (before the municipal collection of waste) with precarious technology. They travel and collect recyclables either by foot, manual pushing carts (*zorras*), horse carts (*carros esferados*) and sometimes small trucks. Recyclers who push carts can take 3 to 8 hours a day to fill in the cart with any kind of recycling material, while those who drive horse carts can take up to several days executing a work journey (Parra, 2006). In average, waste pickers travel between 20 and 30 kilometers a day. Recyclers make up their journey as they go and according to the particular needs of the day and to their experience and knowledge. One recycler defines his territorial mobilization as “where and how I find recycling material; where, how and from whom I have to defend it from; in which sectors I do well, in which I do not do well, which have been my previous recycling routes” (Parra, 2006). The exposure to climatic and/or security factors do not influence their work routines. Therefore, the act of waste picking in the streets of the city requires them to develop great

physical strength. They must endure the travelled distances, the weight of the material, the low nightly temperatures and violent/criminal risks. The burden of exposure to the factors mentioned above falls on men, women, and their children. Recycling activities are often undertaken by the family unit as a whole².

2.2.2 Socio-economic characteristics informal recyclers

In looking at the socio-economic composition of recycling families, the census research executed by the DANE shows that they are mostly made out of families of 2-5 (58%) and 6 to 10 (32,2%) members. There is a close participation of men and women (44.5% and 55.5%, respectively); most men are between 18 and 40 years old (22,7%) and between 5 and 17 (20.9%). Women are much more concentrated in the group between 18 and 40 years old than in the 5 -17. This could be attributed to the fact that recycling is considered a man's duty due to the physical strength that it requires. As women grow older, however, they face the need to participate in this labor opportunity.

It is important to note 35% of the recyclers are classified as 'children', which suggests that a great proportion of the younger generations are unequally exposed to the environmental, health and physical hazards posed by waste. Additionally – and as expected – the levels of education and health for this population – and especially children – is low: 17% of the total population living off recycling is illiterate³, 58% has primary education, 25% has secondary education and only 0.2% has some kind of superior education. Regarding health conditions,

² Generally recyclers and their families work as a single productive unit. All family members, including children and elderly, participate in the collection of recyclables. (Parra, 2006).

³ This illiteracy rate is 7 percentage points higher than the national average rate for illiteracy.

they present a slightly better scenario: 64.7% have access to medical care in case of emergencies (which does not signify social security coverage) and the rest have no access or are unaware that they can enter the emergency section of public hospitals. Clearly, recyclers and their families are a vulnerable group that has received little attention from the state (government) regarding their environmental health and needs.

The environmental health of the recycling population is even further exacerbated by the living conditions they reside in. Federico Parra's (ENDA) ethnographic work finds it hard to clearly define recyclers' domestic-private life from their work-public. Some recyclers have a permanent home to go back to after the collection journey; others live in the carts used for work; and others live in their own recycling plants and warehouses. Although there is little information on where and how recyclers live, the census (DANE 2003) finds that 29.85% of the formal warehouses are situated in danger zones (close to rivers). It is predictable to assume that informal warehouses and recyclers' homes are also situated in informal lands, with little adequate infrastructure and environmental protection. Recyclers are usually placed in strata 1 and 2 and therefore live mostly in the southern outskirts of the city, making it harder and longer to mobilize to work in the areas that generate the most waste –stratas 4, 5 and 6 in the northern part of the city (see Graph 2).

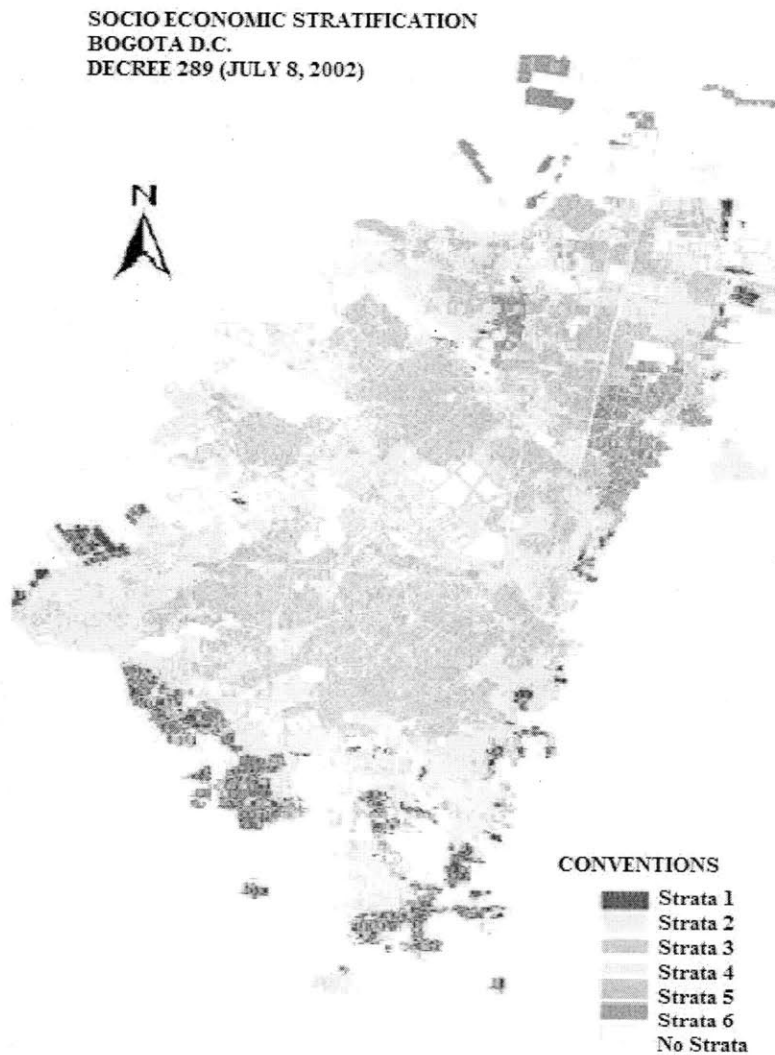
Finally, and in addition to the socio-economic and environmental conditions that reinforce the poverty of these populations, recyclers are exposed to social discrimination and persecution from local authorities. Citizens and political authorities have historically associated recyclers with garbage, delinquency, homelessness and drug addiction (Parra,

2000). They are not only exposed to waste, hazardous toxics, pollution, hunger and physical exhaustion for over-working themselves throughout the night, but are targets of violence, exploitation and explicit discrimination⁴. Later in this paper, I will discuss how informal recyclers resisted discrimination and defended their rights to work in face of waste management policies (PMIRS⁵) that targeted the modernization, environmental sanitation and aesthetics of the city, but excluded the social dimension of recycling. In the following chapters I will look at the elements that helped recyclers resist those policies and influence (pressure) the creation of more inclusive policies.

⁴ During the 1980s and 1990s, for example, Bogotá's neighborhood La Carbonera was characterized for having recyclers who sometimes worked and collected recycling materials for local industries in exchange of drugs (interview with Mr. xxxx, Director of La Alquería). An another example, one of the most controversial violence acts against recyclers took place at the Universidad Libre in Barranquilla, when a reporter discovered that 11 recyclers had been murdered by Medicine students at the university for the study and commercialization of their organs.

⁵ Bogotá's Master Plan for the Comprehensive Management and Treatment of Solid Waste (PMIRS)

Graph 2: Map of the distribution of the socioeconomic stratification in Bogotá



Source: Bogotá en Datos, RedBogotá.com, Last Revision: May 2010

2.3 The Problem of Waste Management

The management, collection and disposition of solid waste have been difficult problems to tackle with in many Latin American countries and other developing regions. These are essential areas for the development of cities but are usually not among the public agenda's priorities. They are, in a way, fields that generate little concern in the general

public and are often perceived as dirty, infectious and anti-social. Working with waste is perceived as one of the most low-leveled and marginalized jobs that a society can offer.

Most Latin American cities do not have the capacity to collect and give proper treatment to most of the waste generated by their citizens and industries. According to Martin Medina, an expert on waste management in the region, the service of solid waste collection and treatment is inferior to the provision of other services – such as water, electricity and sanitation (Medina, 1999). At the same time, however, waste collection poses one of the biggest challenges for cities as urban populations increase and as consumption patterns intensify. According to the Public Private Infrastructure Advisory Faculty in the World Bank, “today the region’s urban areas generate about 369,000 tons a day of solid waste” and it projects that it will increase from 131 million tons in 2005 to approximately 179 million in 2030, out of which not all can be collected and recovered (Hoornweg and Giannelli, 2007) . During the 1990s, the larger cities of the region (e.g. Mexico City, Buenos Aires) collected between 50 and 70% of the total waste, while the smaller ones collected between 85 and 90% (Ibid).

Solid Waste Management (SWM) is the field that executes all of the activities required to remove waste from the streets (public and private spaces) and treat them in a way that they do not interfere with or damage the health of citizens and their environments. The operation, management and financing of solid waste services have been performed by local governments since the earliest stages of urban settlements. The regulation, planning,

supervision and evaluation of these sources come from higher state and/or national levels (e.g. Ministry of the Environment). With the privatization of public services in place, municipalities make concessions and contract out their waste management duties fully or partially to private companies (Acurio et. al, 1997).

Nowadays, waste management is encompassed within a larger and more complex system operated by public and private agents, and within formal and informal realms. In addition to government institutions, the private sector is usually composed of companies, individuals or consortiums (usually created between local, national and foreign companies) that act as contractors or concessionaires of solid waste management services⁶. International organizations such as the IDB, PAHO/WHO, UNDP (among several others) provide funds, technical assistance, institutional development, training and environmental assessments to activities related to waste management (Ibid). Parallel to formal actors, there are informal scavengers and small business initiatives performed by individuals, families/households or small cooperatives that work outside the official regulations but that overtake the recycling duties as a means of generating income. Informal waste scavengers and waste picking cooperatives are often supported by local and international non-governmental organizations as well as by local/national universities. The recycling activities that arise in the informal sector usually respond to a mix of market forces (e.g. industry's demand for raw materials) and socio-economic needs (e.g. scarce employment for poor populations) rather than to

⁶ Other formal private agents could be consulting groups that are hired by government agencies to execute environmental assessments, to give support and advice in the design of waste management plans, etc.

government interests of promoting such activities and including them in the formal system of waste management.

2.3.1 Privatization of Waste Management Services in Latin America

The privatization of waste collection services in most Latin American cities plays a defining role in the struggle of informal recyclers. In Bogotá, the tension between private companies and informal recyclers is high. The private system works parallel to the informal one. For recyclers, private companies are a big threat to the livelihoods and possibilities of formalization. For these big companies, recyclers' work is inefficient and ineffective. Furthermore, privatization may indeed be more effective for Latin American cities, but they also take away large possibilities of employing large unskilled populations.

The neoliberal policies of the 1980s influenced and strengthened the privatization of waste management services in Latin America. The local government, which had traditionally managed this service, contracted private companies or consortiums to take over the collection, transportation and final disposal of waste. During that time, the region was not concerned with waste reduction and therefore did not create recycling policies. The duties of recycling, reusing and recovering waste are taken over by informal agents that were often not recognized or contracted by government authorities. The disparity between privatized areas of waste management and the informal dimension of the same will be further analyzed in this paper.

During the 1980s state owned enterprises stood out for their poor performance and inefficient operations. They were perceived as corrupt institutions where managers sought to maximize their political careers and make inefficient decisions that led to excessive employment and low quality services. International financial institutes suggested and supported the privatization of services by the end of the 1980s and during the 1990s. Most Latin American countries embraced privatization policies at higher and faster rates than other regions. Latin America experienced the largest decline in the state's share of production in the last twenty years; between 1980-1997 public enterprises' output as percentage of GDP decreased from 11 to 5 in middle income countries (like Colombia) and total employment in stated owned enterprises went from thirteen percent to two percent (Estache, A., 2003). Such successful embrace of privatization policies were easily filtered into society during a time where citizens were strongly affected by the poor quality and rationed nature of public services. Latin America made the largest investment (361 billion) made by any region in private infrastructure. Compared to the public provision of services in the 1970s and 1980s, the profit incentive has allowed for private contractors to offer better quality services, to expand their provision networks and increase output and competitiveness (Ibid). Nonetheless, the benefits of privatization continue to be contended.

The main criticisms of the privatization of services in Latin America revolves around the inaccessibility of the poorest segments of the population; tariffs are usually higher and they exclude those who do not have the means to consume services, unless appropriate cross-subsidy systems accompany these reforms. Nonetheless, privatization still requires collaborative work between the public and the private sector, in which the latter continues

to hold control over the financing, infrastructure and the regulation of contractors. The World Bank, in a 2003 report on privatization in Latin America, points out that the failure to identify and finance the needs of the poorest has a strong incidence on them, but it continues to be a deficiency from the State, not of the private sector (Chong and Lopez de Silanes, 2003). In the context of municipalities, the local government is no longer the provider of services but it still holds a crucial role in selecting contractors, designing and enforcing regulatory frameworks, and supervising that they meet the needs and expectations of citizens. In privatization, the role of the State (be it at the national, regional or local levels) continues to be essential. In the case of Bogotá, private companies threaten the livelihoods of recyclers; however, it is up to the local government to regulate the system and ensure recyclers' participation.

What is important to highlight for the purpose of this paper is that privatization led to reformulating the role and ways of operating public services; they were expected to function with the same logic of profit-making businesses and they were evaluated through the lens of efficiency and output. The definition of producing services as private goods geared to consumers (rather than citizens) blurred the intrinsic characteristics of public services and of state-owned enterprises. The ILO explains the downside of transferring public services to the private sector in relation to labor, in the following passage:

“ A distinguishing feature of public services is that their ethos is informed by a wider range of objectives and responsibilities than that of commercially driven business. Indeed, they owe their existence to market failure of various kinds. Rather than their mission being to maximize shareholder value, they exist to meet a range of economic and social needs in accordance with public policy. They have responsibilities to use public money in efficient and effective ways... but must do so at the same time as meeting standards of fairness and social responsibility not expected of private business.” (Martin, 2001, p.18)

The concerns of privatization posed by the ILO in 2001 come up when analyzing the case of informal waste pickers in Bogotá, Colombia. Rather than strictly evaluating privatized services' productivity, efficiency and compliance with acceptable labor standards, it becomes relevant to go back to the values of public services –previously defined by the ILO– and analyze their current modus operandi in light of increased employment opportunities and reduction of poverty (Martin, 2001, p.16).

Similar to the management model of private companies, levels of output and efficiency are used as common evaluation indicators for privatized services, while the social responsibilities of public services take a backseat role. Effectiveness, which can be defined as the achievement of increasing the 'public good', is a less powerful value than the first two, mostly because of the difficulty of finding suitable measures for it (Ibid). The District of Bogotá, for example, appraises and selects waste management concessionaires based on the number of clean city areas that they achieve (produce). In addition to looking at the quality and efficiency performance, it is perhaps relevant to take a more comprehensive stand by analyzing the impacts of privatizing services beyond the quality and efficiency of service provision. It is important that local authorities pay attention to the informal activities that arise around the waste management systems and the relations (and interactions) between private service providers and other social actors related to this service, while thinking of recycling as a major area of employment opportunity.

As noted by the World Bank, the IDB and the ILO in the papers mentioned previously the privatization of services in Latin America tends to affect unskilled labor as private

companies require more formal levels of education. The poorest populations, who lack any kind of education, and have traditionally turned to waste as their only accessible source of income, cannot access the employment opportunities in the private realm. Processes of privatization, where concerns of social justice are excluded, reinforce the poor's confinement to informality. This latter aspect has an even more perverse effect in countries with a weak potential for productive adaptation, low technological development and a feeble performance in the globalized economy, which translates into unemployment and marginalization.

As I highlight in the development of my paper, the processes of privatization in Colombia improved the provision of public services but failed to contribute to aspects of employment and social justice. Certainly, however, the government (state) continues to have the role and power to set the terms under which the private sector can support and collaborate with other social actors. Therefore, I am interested in exploring the relationships between the marginalized informal waste pickers and government authorities within the framework of privatized waste management public services in Bogotá. Due to the privatized nature of waste management services, and the fact that recycling falls under such services, I also look at the relationship between informal waste picking cooperatives and waste management companies. Despite the potential alliances that could derive from this relationship –and the parallel work that they execute in Bogotá –they have a rather contentious interaction. Private companies and consortiums have become opponent actors of informal waste pickers as they tend to displace the latter ones from the recycling business. Recyclers find it difficult to compete with private infrastructure, and as more private recycling companies arise to compete over this market, the less clients and recycling material that informal

recyclers have access to. What is important to notices is that unlike any other free market, recycling continues to be part of a public service that must act under the State's regulation. It is for this reason that recycling can indeed be regulated and delivered to the populations that have been providing it for decades, who have the necessary experience and the urgent economic need of an employment –as well as the constitutional right to the minimum vital.

2.3.2 The Challenges of Waste Management in Latin America

Latin American cities face several challenges and deficiencies in the service of waste management that do not allow for the inclusion of informal recyclers: first, cities collect and concentrate most of their waste in dump sites or landfills without diverting the reusable portion of it; and, second, they have parallel formal and informal providers of waste management services. Nowadays, government authorities face population growth, stronger patterns of consumption and higher restrictions for purchasing suitable lands for the storage and treatment of waste. Under these conditions, reducing the production of waste through recycling becomes one of the most essential strategies for addressing waste management deficiencies. Unfortunately, recycling has not yet become part of the formal provision and treatment of waste, which is reflected in the low diversion rate of the Latin American region when compared to other similar economies (Hoornweg and Gianneli, 2007)⁷. This shortcoming has not enabled cities to take full advantage of a beneficial partnership between the local government and qualified workforce (informal waste pickers and private companies alike) to promote and increase recycling practices.

⁷ <http://www.ppiaf.org/documents/gridlines/28lacsw.pdf>

The inability of local governments to organize its formal and informal actors in a comprehensive and sustainable system of waste management, responds to a whole set of institutional restrictions of the Latin American countries. The different agencies that participate in the waste management services lack clear definitions of the scope of their actions; there is a duplication of efforts and functions, an absence of integral information systems and a lack of leadership in this sector. The most limiting restrictions, from the standpoint of this paper, is the limited institutional capacity of most of the relevant institutional agencies and a lack of political will at the decision-making levels. Politicians have shown little concern for modifying the current system. Informal waste pickers have had to persistently press local authorities, and municipal officials and technicians, to recognize their work. By doing so, they have led the latter to pay greater attention to recycling and to listen to their needs and demands.

2.4 Current waste treatment methods

Most cities in Latin America use open-air dumpsites and sanitary landfills for the management of their waste. Dumpsites have been found to severely threaten the environment, citizens' health, and the lives of communities close to the dumps sites. They emanate strong sickening smells that attract rats, insects and flies, and they expel contaminating gases and toxic lixiviates that contribute to global warming and damage the quality of water sources (Medina, 1999). Bigger and better equipped cities have transitioned to the use of sanitary landfills—in addition to dumps—but are running out of space to further accumulate waste and are failing to give it proper treatment once it is in the landfill. Additionally, Medina's report on Latin America's waste management systems

(Ibid) shows that only half of the collected waste is deposited in sanitary landfills. In other words, there is a large portion of waste that remains untreated and threatens to pollute its surrounding environments and populations.

Contrary to Latin American cities, local governments in developed countries, where waste production per capita is significantly higher than in the developing ones, have long established and promoted recycling policies. Experience in European countries and in the United States of America shows that sanitary landfills are not the most optimal solution for waste treatment, as they expel toxic gases, lixiviates and affect the environmental quality of cities. Although authorities have come up with mechanisms to mitigate the environmental damage produced by landfills, more and more local communities oppose to the establishment of landfills close to their homes, and influence the rising costs of building landfills (which have to be located farther away from cities). Therefore, cities and communities are sometimes obliged to reduce the amount of waste that they generate and to include recycling programs in their waste management strategies. Local governments in Latin America, however, are only recently raising concerns of waste reduction and diversion. They are starting to design recycling policies as part of their environmental initiatives to become more sustainable and create more efficient systems of waste management.

Latin American cities may have not embraced recycling as a formal policy, but many groups of citizens have commonly practiced this activity for decades. In fact, recycling has

been the main source of income for poor and unemployed populations. Untreated waste in developing countries presents itself as an income opportunity for the poor –a population that is often comprised of rural migrants who move from the country side to the big cities in search of jobs opportunities. When faced with the scarcity of resources and employment, these populations are forced to settle in informal lands and build their own homes out of used materials (cartons, metals, wood, etc.); they are usually disconnected from public service networks and have to survive under extremely precarious conditions. By digging, picking and separating reusable materials from conventional waste –and then collecting and commercializing it in accordance to the demand of the industry –these families find in garbage a source of income. In the words of Samson, “for a growing number of people what others have deemed garbage provides an important source of livelihood” (2009, 3).

Some informal waste pickers operate in open air dumps; others execute the waste collection service in poor areas where public provision of services does not reach; and, others are banned from working in dumpsites or sanitary landfills, and must therefore travel the city streets to collect waste in a door-to-door basis with very inappropriate technological mediums (wheel carts, horses, by foot and with back carriages)–such as in the case of Bogotá.

Picture 1: Informal scavenger collecting paper and cardboard in the streets of Bogotá



Source: Andrea Betancourt, Bogotá, June 2009

When waste pickers live off of recyclable garbage they are not only developing innovative mechanisms of survival but are also performing a very valuable environmental role: they are helping the city reduce the amount of waste that is deposited in dumps and landfills and are pushing forward the recycling agenda. In many developing regions waste pickers take over this important role but are seldom incorporated in the legislation related to waste management. In Colombia, for example, research finds that Bogotá produces approximately 6500 tons of waste daily, out of which 1200 is recovered by recyclers (Civisol, 2009). Like in other developing regions, Colombian waste pickers are slightly acknowledged in the national legislation but have no real participation in official waste management systems.

Waste pickers are common actors in Latin American cities, despite their political exclusion. Although the economic dynamics of their activities happen in the informal environment, the recycling sector is in constant interaction with private actors and government agencies. The recycling sector is comprised of many actors that go from street waste pickers, to warehouse owners, recycling plant operators and industrial buyers. The actors that I will refer to in this paper are the ones who do the most essential and the most physically demanding work within the recycling chain: waste pickers. They dig into citizens' garbage to recover the materials that can later be reused or transformed into new products. Recyclers or waste pickers can be defined as the "people who recover recyclable solid waste" and usually operate in the first link of the complex chain of the recycling circuit and within the informal realm. Parra defines this circuit as a "chain of complex actors and processes through which the products made out of recycling materials go through from the moment they are consumed, thrown out, recovered, commercialized, transformed, until they are reutilized" (Parra, 2005). The materials that waste pickers are the mostly inclined to collect are paper, cardboard, plastics, cans and glass. These are the materials that can be easily recovered from the street and that have a greater demand in the industrial sector.

The case of waste pickers providing informal services of collection and recycling is not particular to Colombia. This is a common phenomenon in the developing world. After years of extensive research, the international NGO Wiego (Women in Informal Employment: Globalizing and Organizing) explains the following:

"In nearly every city of the developing world, thousands can be found collecting household waste from the curbside, commercial and industrial waste from dumpsters, and litter from the streets, as well as canals and other urban waterways. Others live and work in municipal dumps – as many as

20,000 people in Calcutta, 12,000 in Manila, and 15,000 in Mexico City". (Medina for WIEGO, 2005)⁸

The World Bank too estimates that one percent of the urban population in developing countries earns a living through waste collection and/or recycling; and in the poorest countries, up to two percent survive thanks to these activities. A significant number of the participants of informal waste picking are women and children because, out of the marginalized populations in the developing world, these categories face even less probabilities to find a job, and therefore are forced to turn to waste to meet the threshold required for basic survival of themselves and their families. During a capacity-building workshop in Bogotá, a woman who worked at the Cali landfill asserted that "when I lost my job I had nowhere to go and three starving children. My friend took me to the landfill and told me not to tell anyone... at first, I was ashamed and disgusted but I reminded myself that I needed the money. I picked up paper... I sold it that afternoon and took some dinner food home. I realized then that the landfill was a treasure box for me" (July 2008).

Despite the considerable urban visibility as well as the economic and social benefits that waste pickers generate, they usually operate in hostile social environments and are disregarded in urban and environmental policies. "Public authorities often treat them as nuisances, embarrassments, or even criminals", claims WIEGO (WIEGO webpage, 2010). Legislation usually disregards waste pickers' role. Waste management policy-makers craft decisions without calling for their participation and without taking into account the impacts that their policies have on these populations. Because informal waste pickers around the world are not connected to the official network of this service, they often have to illegally

⁸ Waste Collector in Focus, WIEGO, http://wiego.org/occupational_groups/waste_collectors/index.php

dump the waste that they recover in vacant lots, river banks or ravines (Medina, 2006). Authorities have started to oppose and condemn these actions as they are concerned with the risk that waste poses to human health and the environment. They, however, offer no alternatives and are seldom willing to support the economic and environmental activities of poor populations. They ignore that informal recyclers in many developing cities are at the frontlines of the fight against climate change; they recover, recycle and thereby reduce the demand for natural resources and the emission of greenhouse gases (Deccan Herald, August 4, 2009). Yet, waste pickers have to fight when government authorities ban them from collecting waste in public dumpsites, landfills or any other public space. In Melanie Samson's research on waste picking in Africa she highlights that:

“whilst reclaimers [waste collectors] are rendered virtually invisible in the sphere of legislation, key waste management documents that do refer to them make it clear that it is government's intention to actually eliminate reclaimers themselves in the long term...Government is correct in identifying that salvaging at landfill sites has problematic health and safety implications. However, advocating its elimination without a clear process to ensure that reclaimers are involved in future recycling initiatives threatens to undermine the livelihood strategies of people who are already struggling to support themselves and their families” (Samson, 2009, 4).

The struggle of informal waste pickers around the world seeks to defend their work and to protect the only source of survival that they have. Such defense does not hope to maintain the current working conditions of waste pickers; it does however intend to reclaim the work of traditional recyclers, who lack the skills to be integrated in other economic activities and who, out of necessity and absence of alternatives, found in waste a survival opportunity. This defense does not counter-argue government's concerns with the precarious living and working conditions of this population, or the inefficiency of the informal system of recycling. However, in Colombia, it questions the State's lack of good regulation over this sector –which has allowed for private companies to displace informal recyclers– and it questions the government's incapacity of offering employment and development

alternatives for these populations after privatizing these services. Furthermore, recyclers also lead a more symbolic struggle that has to do with claiming their visibility as citizens and demanding their recognition as contributors to cities' reduction and management of waste.

In a context where local and national governments face increasing amounts of waste generation and pressing needs to lead cities towards sustainable environments, the why informal waste pickers and their valuable activities have not been incorporated in the mainstream of waste management remains a mystery. Government authorities would gain on multiple fronts if they were to bring informal waste pickers into a formal program. The former would have better control over waste pickers' operations and monitor that they abide to regulations of human and environmental safety. If their recycling activities were included in the management and treatment of waste, the city would divert and reduce the amount of waste that reaches the landfill at much greater levels. Furthermore, if waste pickers were incentivized (and compensated) for their work (collection, transportation and segregation of waste) they would have clear roles and responsibilities in the city system, and would have to be accountable for their activities (Medina, 2006). This collaboration between local authorities, private waste companies and waste pickers would result in improved practices of recycling, in more sustainable systems of waste management and in greater employment rates for the poor unskilled populations. Perhaps a more comprehensive definition of waste management needs to be pushed forth in the near future to tackle problems of unavailability of space for waste and to prevent perverse effects of badly treated waste on human health and urban environments. Likewise, it is necessary to

revaluate the contributions of public services prior to privatization and rescue values of employment opportunities, decent livelihoods and social justice.

2.5 Recycling and Recyclers- Alliances and cooperation within the SWM

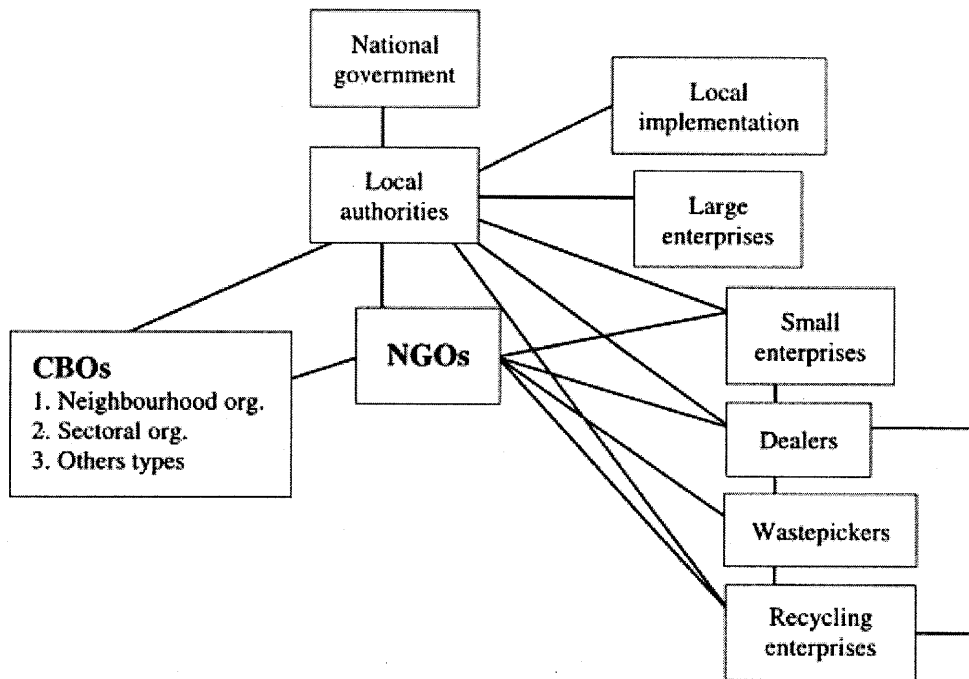
The subject of recycling is often analyzed as a phenomenon within the management of solid waste. At the same time, research on solid waste is usually discussed in the context of the provision of public services and from the perspective of building a sustainable environment in the urban realm (Baud, 2001). In Latin America, cities like Bogotá , have been urged to address the recycling topic as a means to manage and reduce solid waste. Local governments are concerned with the private/public nature of this service; and, for the past two decades they have favored the privatization of services. As previously discussed, local governments contract private companies to provide the service, but retain the power to create the regulations for privatized services, to select the concessionaire companies and to monitor their operations.

In recent times, local governments have become quickly acquainted with the brown/green agENDA and started initiatives to decrease pollution and promote sustainability in cities (Baud, 2001). Back in the Bogotá administration of mayor Enrique Peñalosa (2000) and Mayor Antanas Mockus (2001-2003), authorities addressed the possibility of reducing waste through recycling. This is why public officials and development agencies (e.g. World Bank) tend to discuss recycling as an additional technical service within the management of solid waste. Recycling has been discussed as a technical service and a sustainability driver, but not as an existing informal service employing poor populations. Moreover, besides being providers of a service, recyclers are an interest group that pushes the State to pay

attention to the social and environmental qualities of recycling; to include recycling in their policies and design recycling regulations and promotion campaigns. In cities like Bogotá, waste pickers have been essential players for bringing about changes in the political arena of recycling.

It is normal to find that in the developing world there are multiple contributors to solid waste management that are often not clearly integrated within a system for sustainability. Isa Baud (2001) maps out the actors and potential alliances that are created in SWM practices (Graph 3). She points out four main sectors: the public sector, the private sector, the small-scale non-recognized private sector (where waste pickers would fall) and local community organizations (NGOs and CBOs). In this analysis, the author provides a list of conditions that SWMs must meet in order to operate within the sustainability framework and comply with socio-economic and public health standards. The author stresses that the goals of an efficient SWM must minimize the production of waste, maximize reuse and recycling of materials and control the process of waste disposal so as not to exceed the absorption capacity of local landfills. In regards to meeting the needs of the population, SWMs must have good coordination among its different actors; it must provide its workers with minimum wages, as well as health and safety warranties that must be accessible and affordable to all citizens. Furthermore, the sustainable SWM must guarantee a cleaner environment and become a legitimate system in the eyes of its internal suppliers and consumers (citizens). These are ideas and opportunities that come up as the Bogotá local government strives for a sustainable and effective waste management system and informal recycling cooperatives fight for maintaining their businesses and their jobs.

Graph 3: Possible Alliances in Urban Solid Waste Management



Source: Baud, I. S. A., S. Grafakos, M. Hordijk, and J. Post (2001), p. 5

Researchers on SWM systems in developing countries have faced the informal sector and analyzed its relationship with governments and private companies (although to a lesser extent, as private companies do not tend to work alongside waste pickers unless they hire them and turn them into their employees). The studies of SWM in these countries point out the presence of informal waste pickers. In cities like Chennai (India) and Lima (Perú), local governments work in alliance with waste pickers—often through the mediation of NGOs— in small scale projects of service provision. According to Baud’s research, these alliances impact the socio-economic conditions of waste pickers and may reduce the cost of the SWM system, but are unable to reduce the total amount of waste. Baud finds in his comparative research that there are alliances among the different actors of the SWM sector;

however, he also claims that local governments have a stronger inclination towards privatizing services and are more hesitant to work with the informal sector. He notes that “official attitudes towards such undertakings in many countries are still overwhelmingly hostile, especially when they relate to activities that are socially stigmatized as dirty, unhealthy, chaotic and illegal” (2001, 11).

2.6 Partnering the Local Government with Waste Pickers

In research on SWM conducted in Asia, Azam Ahmed and Mansoor Ali (2005) add to the discussion of the effectiveness of privatizing services in the developing world. Contrary to the stream of pro-privatization in contexts where the public sector is constrained from providing an effective and extensive provision of services, Ahmed and Ali find that citizens can have an active role in supporting public-private SWM systems. Their research in Bangladesh shows that citizens can help improve the system by facilitating the work (through primary collection) and thus reducing costs and increasing institutional accountability. They therefore support alliances among several actors beyond government and private sectors; they call for the involvement of NGOs and CBOs as a way of increasing accountability, improving this service in the areas that are underserved and enhancing the environmental quality of cities. Even though these authors do not focus on the specific role of informal waste pickers and the benefits of recycling, they add to my discussion in two ways: on the one hand, they assert that having cooperating actors working on sustainable systems of waste management is beneficial for cities, and, on the other hand, they define the private sector category as the group of activities that are executed through business initiatives. Under these terms, recyclers can be included within the private sector

category, given that they too execute their recycling activities as a business. Furthermore, in another study, Ahmed and Ali claim that cooperation among organizations (be it formal, informal, small or large scale) can best exploit each of their comparative advantages and improve the system of waste management; they, however, warn that poorly designed attempts of partnership may worsen the situation by opening new avenues of inefficiency and corruption (2003, 467). This is a crucial aspect to keep in mind as Bogotá creates partnerships, in which private actors and waste pickers are open to working and negotiating on the recycling issue, but the government has yet to define and strengthen its position, policies and regulatory frameworks.

Given that solid waste management is a public service that is executed by the local government (public officials and technicians), the public sector is usually forced to employ large numbers of people. The enlarged size of this sector, in contrast with its low budget, often leads to low productivity of staff, inadequate supervision and unsatisfactory equipment (Ahmed and Ali, 2003), which, in turn, results in underprovided areas and inequality in urban cleanliness and sanitation. In this context, Ahmed and Ali point out the importance of creating partnerships among the different actors. They define partnerships as “shared commitments to pursue common goals” (Kolzow, 1994 in Ahmen and Ali, 2005, 471) and call for four essential requirements that need to be met in order to establish more successful public-private partnerships. 1) PPPs must arise in an environment that promotes leadership and citizen participation; 2) all of the stakeholders must share a realistic commonly accepted vision of the strengths and capabilities of the local government, the private sector (formal and informal actors) and of the community; 3) there must be

mediating organizations that can blend the self-interest of individual actors with the broader interest of the community; and 4) policies must be able change and adapt to ongoing circumstances in a way that they can economically benefit businesses and individuals operating within the system (Ibid, 472).

In practicality, it occurs that local governments focus on improving the effectiveness of waste management in cities, through applying full privatization and allying with large scale companies, rather than considering alliances with the different actors (at different levels) that currently participate in the private and informal stages of waste management. In this way, local governments can also think about building alliances with waste picker organizations, cooperatives, NGOs and communities. Ahmed and Ali acknowledge that “countries with large metropolitan cities the informal sector should be stabilized and brought into the mainstream economy for growth. The informal sector should be encouraged to take part in market expansion” (Ibid, 476). Indeed, partnering with waste pickers may be a way of creating a public-private-community partnership that addresses political, social and environmental relationships.

Ahmed and Ali (2003) agree that developing countries face certain challenges when implementing public-private-community initiatives. Regulatory frameworks are usually weak in these nations and do not facilitate the integration of the different sectors; in general, interests in power strongly oppose any changes to the status quo and the public sector may not have the size and capacity to integrate new actors effectively. The results of creating partnerships in this context might worsen the quality and efficiency of the solid

waste management services. Furthermore, these results may push waste pickers even farther away from formalization, while reinforcing the negative perception of their work in the eyes of society. Bogotá is undergoing the formation of a partnership similar to the public-private-community partnership that Ahmed and Ali (2003) refer to, but in an environment of weak regulations and strong interests in power (the private sector).

2.7 Recyclers: influencing policy and policy makers

Waste pickers are active urban actors in the cities of the developing countries who come from deeply marginalized backgrounds, but that have developed a deep connection with waste and their waste picking activities. When facing hostile measures from city government authorities, waste pickers rise to defend their work and their identity. In the past two decades, Bogotá's growth and efforts of modernization, discipline and competitiveness—that try to move the capital away from the reality of the Colombian conflict – have put waste pickers' jobs at risk; at the same time, they have opened opportunities for them to speak out, reach out to and influence politicians and decision makers..

In most cases of informal waste pickers in the developing world, they lead the efforts to integrate their work within the local policies of waste management. Often, waste pickers seek support from NGOs to organize themselves into cooperatives and to confront local authorities. The intervention of NGOs in increasing the visibility of waste pickers varies from locality to locality. In Bogotá, NGOs helped waste pickers organize in local and national networks; they have assisted them in the commercialization of materials (by

helping them find clients and create contracts) and, most important, have prepared waste pickers to use legal tools to defend their rights and work. Nonetheless, the efforts, persistence and commitment of waste pickers was the essential ingredient for overcoming social, economic and political barriers. Political will to formalize and create a holistic waste management system –that includes the interests of all of the stakeholders–is not an innate driver of these processes. In Bogotá, the local government moved from a position of high repression towards informal waste pickers to a collaborative one. Waste pickers pushed for and molded that “will”.

Recyclers are continuously seeking for ways to leverage their human conditions and be less vulnerable to the social, economic and political injustices that they face. In many cities around the world, they have organized in cooperatives with the idea of accumulating large quantities of recyclable materials and selling them to industries without having to rely on middlemen. Cooperatives are indeed mediums of mutual support and protection and have provided waste pickers with higher bargaining power. According to Medina (1997), joining cooperative and bypassing middlemen is a way of breaking with the vicious circle of poverty. Medina finds successful cases of scavenger cooperatives in Pune, El Cairo, Manila, Bogotá and Bellorizonte where their levels of organization has increased their income generation significantly. However, he also finds that scavenger cooperatives usually face obstacles that inhibit their growth and sustainability: scavengers have very low levels of education, scarce financial resources or access to credit and little to none business experience. Thus, they have a hard time finding clients in the private sector and supporters in the public sector. The most defining obstacle that they deal with is the informal nature of their work (Medina, 1997 UNU/IAS). As previously mentioned, waste management is a

service that is controlled by the local government; for recyclers to escape informality they need that government authorities reorganize them as part of waste management systems and recognize their labor efforts financially.

The drive to become formalized or integrated into the system of waste management derives from situations in which waste pickers have their livelihoods at risk. When authorities close dumpsites, privatize landfills and criminalize informal scavenging, but offer waste pickers no alternative work opportunities, they have to rise to defend their work and the survival of their families. Samson's case studies in Africa show that "efforts to exclude reclaimers from recycling processes not only have negative socio-economic effects, but are also costly and not likely to succeed in eradicating reclaiming". In fact, when the privatization of landfill occurs and recyclers are banned from accessing waste, they move their work to the streets where informality is reinforced and their vulnerability exacerbated. Samson notes that recyclers (to whom she refers to as reclaimers) desire to work within the system, in a structured way, and to collaborate with public authorities, but feel that no one ever asks for their opinion and policy decisions are made without consulting or acknowledging their presence. In Colombia, the Association of Bogotá Recyclers claim to have come up with innovative ideas to integrate the recycling service into the standard waste services, but that authorities take away those ideas without including recyclers in the implementation (interviews June 2009).

Informal waste pickers in developing cities execute their work parallel to the standard services of waste management services contracted by the local government. Any real change to the lives and quality of working conditions of waste pickers comes from a

structural bridging of both economies, which can only be attained through formal policies and initiatives led by the State. As Samson asserts, “the two economies are seen to be separated by a structural divide and the government has a key role to play in building bridges to help people move from the informal to the formal economy” (Samson, 2009). This is why the more organized and experienced waste picker cooperatives in cities like Mexico City⁹ or Bogotá have moved from seeking NGO support and pressing for support from government authorities.

On the local government’s side there have also been simultaneous attempts to engage in integrated sustainable waste management models. Cities are becoming proactive in reducing waste and promoting recycling. Bogotá, for example, re-designed its waste management system and in 2002-03 came up with a comprehensive waste management plan. According to WASTE (a Netherlands-based organization that works for better waste management in the developing world) “waste management encompasses a complex system of actors and activities with different interests and priorities that require proper management and coordination and an integrated approach at all levels”. An integrated sustainable waste management approach is one that focuses primarily on the participation of all of the stakeholders –including recyclers.

The challenge of this approach is to get stakeholders to agree to co-operate or ally for a common purpose: improving the waste management system (ILO, 2004). There are often

⁹ In Mexico City, the leaders of scavenger groups have close ties with government officials and the PRI (one of Mexico’s two ruling parties). They bribe politicians to let scavengers work in legitimacy and stability in exchange of political support from scavengers (Medina, 1997).

tensions and contradictions between waste pickers' demands, public authorities' interests and those of the private sector. Likewise, the challenge of government authorities is to secure social justice to the most affected and vulnerable stakeholders, such as waste pickers. In order to avoid devastating effects on recyclers' livelihoods local authorities need to take them into consideration when policies and processes are designed. Waste pickers on the other hand need to press local authorities to ensure that they understand their work dynamics and their needs. Reforming the system of waste management services and designing inclusive policies at the local and national levels can ensure more defining and structural changes that can improve and recognize waste picking activities at a larger scale, and in a more sustainable manner than in smaller and localized projects.

Furthermore, it is authorities' duty to recognize that waste management is a profoundly social issue (Samson, 2004). On the one hand, it is an activity that has the potential to employ a vulnerable and unskilled section of the population that would not otherwise find jobs. On the other hand, the social relations underpinning the production, collection, disposal and reclaiming of waste in the formal and informal economies have a profound influence on the viability and effect of recycling initiatives. The levels of recycling that Bogotá and Colombia had before the government adopted policies on recycling were due to recyclers' efforts and abilities to persuade households and commercial establishments to classify waste; in this way, waste pickers introduced citizens to the initial ideas of recycling. It is important that municipalities see waste management as a matter of social policy and develop the ability to work, consult and negotiate with informal waste pickers.

By analyzing the case of waste pickers in Bogotá, their relationship with policymakers and the policies that derived from their common agreements, one can appreciate the potential of a triple alliance between the government, grassroots organizations (recycling cooperatives) and market institutions (Sanyal, 1978). Organized waste pickers, even when operating in the informal realm, have the ability to reach citizens and spread recycling practices. More importantly, they are also the basic workforce that initiates the recycling chain by recovering reusable materials from the bulk of the city's waste. The government creates the policy environment to legitimize this practice and maximize waste pickers' effectiveness and the city's recycling capacity. The government can also ensure that positive coalitions are created between recycling cooperatives and private consortiums, where they both share common goals (cleaning and recycling for the city), gain profitability from these activities and follow environmental and social conditions. The market pushes each agency to be more productive, effective and competitive. Thus far, the case of informal scavengers in Bogotá is one where recyclers, the local government and the private sector of service provision have come together to improve the city's solid waste management, while trying to respond to the needs and interests of each one of the stakeholders. In the development of this paper, I focus on the role of recyclers, and in how they relate to the other two agents. I highlight mostly their relationship to government authorities as they are crucial for setting the environment and allowing for this alliance to take place.

3 Context of Case and Location

“One of the central effects of the accentuation of inequality at all scales is a tendency for the effective exclusion of big sections of the world population from the global process of capital accumulation. The fact that the global contemporary economy has reached unprecedented growth levels, at the time that the number of people who live on the margins increases –the permanently unemployed, the landless countrymen...and the urban population that do informal activities of survival– makes us think, as noted by Friedmann, that ‘contemporary capitalism can live without them’ ...’and the message for these people is: for all practical purposes, they have become redundant in the global accumulation of capital’(1992:14)...

But the process of exclusion does not move forward without resistance. The excluded resist on a daily basis through diverse individual and collective actions that go from survival strategies to national global projects of opposition, passing through countless local initiatives”.

Rodríguez Garavito, César, *In Times of Economic Alternatives in the Times of Globalization* (2004: 4)

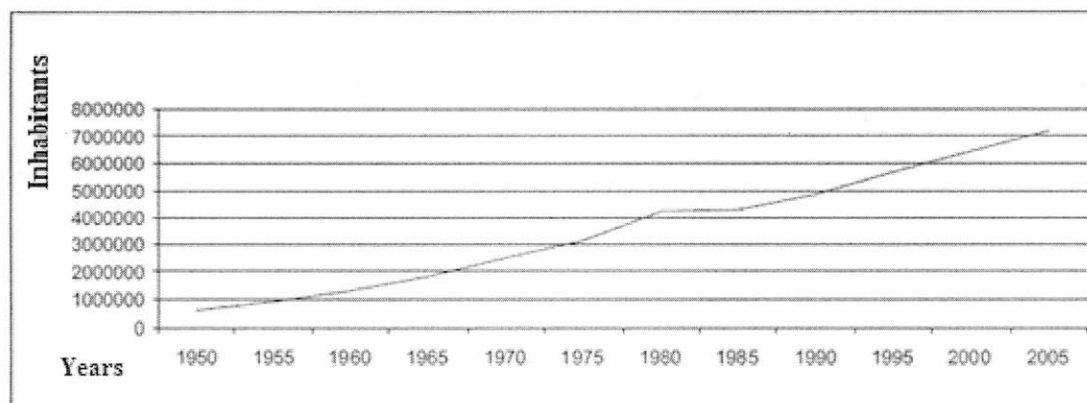
The existence of groups that turn to waste as a survival strategy is the product of an unequal society that excludes them from the mainstream economy. In Latin America the exclusion of larger sections of the population and the levels of poverty increased in the past couple of decades. They are closely related to the application of neoliberal policies (the Washington Consensus) in the 1980s and 1990s. In this context, the growing sector of informal recycling appears as one of the most visible manifestations of such inequality and exclusion. In this chapter I introduce the most highlighting characteristics of the socio-economic dynamics of the city of Bogotá that shape and reinforce the presence of informal waste pickers and that push for their collective resistance to their continuing marginalization. I will also situate recycling as a survival strategy in relation to, and as economic niche within the context of the privatization of waste management services.

Bogotá is the capital and the largest city of Colombia. The city is made up of 20 localities, which have been added to the Metropolitan area since 1538, over an urban area of 28.153 acres and a rural area of 12.759. Currently, Bogotá has a population of approximately 8

million. What is important to highlight is that Bogotá is one of the main destinations of immigrant families coming from rural areas and other cities of the country –in particular for families that escape the violence of Colombia’s armed conflict or that have been forcefully displaced from their lands by FARC member or paramilitaries.

Although Bogotá continues to grow and is the largest urban concentration of the country, its growth rates are declining. Bogotá is also the fastest growing city in Colombia. Between 1964 and 1993, Bogotá’s growth rates have declined from 5.25% to 3.31%, but continue to be the highest in the country. The graph below shows the rapid increase in its population between 1950, with 1’000.000 inhabitants, and 2005, with a little over 7’000.000 inhabitants. Its rapid growth and large population is made up of a wide and unequal range of socio-economic conditions that demands more and better employment opportunities.

Graph 4: Population Growth in the city of Bogotá



Source: Graph was elaborated from the data taken from Table 10.01 “Total Population and by Sex 1951-2005”. The data was extracted from the statistic annuals from DANE which was elaborated by the Administrative Department of District Planning, 2000.

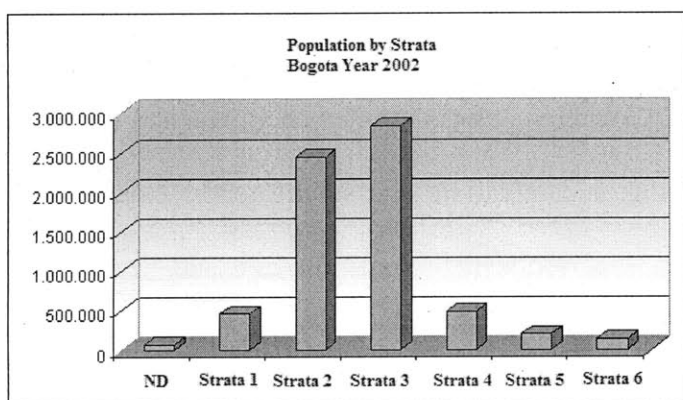
3.1 Socio-economic characteristics of Bogotá

Bogotá's economy has grown with relatively slow, but with positive growth rates. Most of its GDP is concentrated in services (21.5%), real estate (17.5%) and industry (15.19%) sectors—the three most important ones—and financial mediation (10.54%), commerce (10,10%) and transportation and communications (9.48%). Its GDP growth between 2000-2001 was of 2.8%, 0,7 percentage points higher than the National level —representing a 22% of the national GDP. Income per capita places Bogotá in the middle income category of developing cities, even though its economic growth tends to decline due to its high national devaluation rates. Bogotá's economic growth makes it an attractive destination for Colombians coming from smaller cities and rural areas of the country. As the economy diversifies and expands, and as the Bogotána population grows, the local government has had to adapt its plans and policies to new needs and demands, especially in regards to public services.

The main method that Colombia uses to define its socio-economic conditions is stratification. In 2004, the National Department of Planning designed a new methodology of stratification in which they classified houses and neighborhoods in 6 strata by focusing on their physical and environmental conditions. The first strata encompass families with the lowest income per capita, while the sixth stratum represents the wealthiest sector of Bogotá's society. According to the latest census for Bogotá (2002), 64.85% of the total population is distributed in strata 2 and 3, earning between one and five minimum monthly salaries; 14.64% is placed in strata 1 and earns less than one minimum monthly salary and

only 2% is in stratum 6 and makes more than 16 minimum monthly salaries ¹⁰ (See Graph 5 and Table 1). This stratification system is used to determine the level of payments and allocation of subsidies for public domestic services—assuming that housing is a proper indicator of people’s payment capacity.

Graph 5: Population by Strata



Source: Secretaría de Hacienda, Bogotágov.co, Last revisión: May 2010

Table 1: Strata Distribution in Bogotá by income per capita

Bogotá Strata*	Income per capita	Percentage
1 (Low- Very low)	Less than 1 SML**	14.64
2 (Low)	Between 1 - 3 SML	36.06
3 (Medium - Low)	Between 3 - 5 SML	28.79
4 (Medium)	Between 5 - 8 SML	5.73
5 (Medium - High)	Between 8 - 16 SML	2.46
6 (High)	More than 16 SML	1.98

**Minimum Legal Monthly Salaries

Source: Bogotá en Datos, RedBogotá.com, Data for 2002. Last revision: May 2010

¹⁰ In the context of Bogotá, Stratum 1 has an income lower than one legal minimum monthly salary (SML); Stratum 2 receives between 1 and 3 SMLs; Stratum 3 between 3 and 5 SMLs, Stratum 4 between 5 and 8, Stratum 5 gets between 8 and 16 and Stratum 6 gains more than 16 SMLs.

3.2 Socio-economic Strata and the Provision of Public Services

In Colombia, the quantity of subsidy corresponds to the amount of basic subsistence, which is covered by residences and industries in strata 4, 5 and 6. This innovative system has allowed some Colombian cities (and specifically Bogotá) to expand the provision of public services and better manage the waste produced throughout the city. Perhaps this situation helps to explain why, contrary to other cities such as Sao Paulo or El Cairo¹¹, Bogotá's waste pickers need not to execute waste collection duties, but they can focus and specialize on recycling activities (collection, sorting, accumulation, and selling to the industry) and work parallel to the standard waste services (collection, transportation and treatment of waste).

Ironically, however, while Colombia and Bogotá execute policies that address socio-economic equalities –such as universal access to public services –the social disparities continue and are even accentuated by certain public policies. On the one hand, stratification policies as a tool to expand the effective provision of public services has secured profitable revenues for the private businesses that deliver these services. On the other hand, the solid presence of private companies in waste collection services- as I will later explain- displace waste pickers from their areas of work and weaken their opportunities of employment and participation in recycling activities. I will thoroughly analyze the ways in which policies concerned with the effective and environmental management of waste in Bogotá reinforced

¹¹ In large metropolitan cities like Sao Paulo and El Cairo, waste pickers provide the standard waste collection services in areas where the State does not reach.

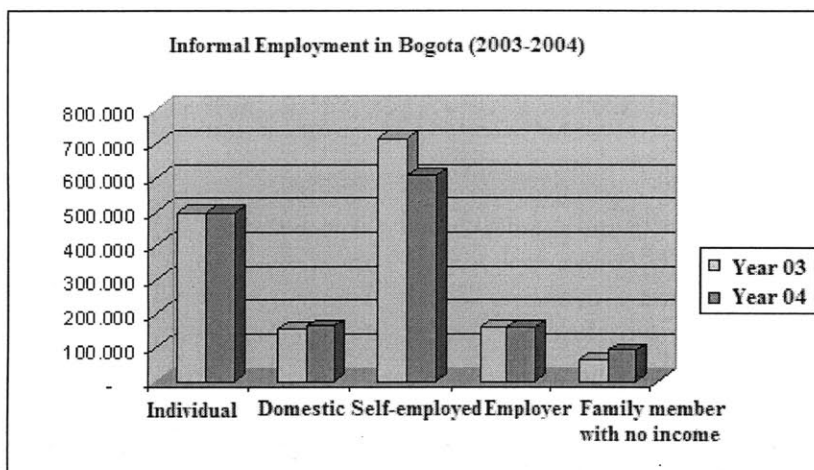
situations of inequality and injustice in waste pickers' livelihoods, while weakening their access to work and threatening their rights to survival.

3.3 Informal Economies in Bogotá

Recyclers in Bogotá work within the informal economy, which in the developing countries constitutes an important economic sector. According to data from the National Department of Planning (2004), the unemployment rate in Bogotá is of 12.9%, which represents 462.174 people out of 3.5 million economically active inhabitants. The medium occupation rate that measures the employed population in relation to the economically active population is of 56.7%, corresponding to 3'129,147 employed people. Twenty two percent (1.5 million approximately) of the Bogotá population is informally employed. Even though this figure represents a substantial part of the total population and contributes significantly to the city's economy, it is hard to determine the levels of growth of this sector as well as to determine its participation in the overall economy. Informal workers are usually defined as 'informal' when they contribute to the economy but have no accounting follow-ups, tax or fiscal contributions and show low active assets. Recyclers operate within the informal economy and are part of the largest groups of informal workers – 'individuals' and 'self-employed'¹², which are shown Graph 6 for years 2003 and 2004. The individuals are those who are informally employed by a private agent, and the self-employed are those who execute their own economic activity without working for anyone else.

¹² http://www.shd.gov.co/portal/page/portal/portal_internet/siec/BED/Indisoc/Pobreza/Gini

Graph 6: Informal Employment in Bogotá



Source: Secretaría de Hacienda, Bogotágov.co, Last revisión: May 2010

Waste pickers in Bogotá and Colombia participate in the informal economy by auto-employing themselves in sorting and collecting the city's waste. They are positioned in the lowest range of the recycling chain and receive less than a legal minimum monthly salary, which places them among the poorest of the poor populations. According to the National Statistics Department, most waste pickers are placed in the lower two strata of society.

3.4 Inequality and segregation in Bogotá

As indicated by the Gini coefficient¹³, Colombia and Bogotá present high levels of inequality and are characterized for their deep social exclusion. Recyclers are one of the populations that embody that social exclusion and are therefore positioned at the lower end of the socio-economic spectrum.

¹³ The Gini is an indicator that measures the difference in income and wealth accumulation of the richest segments of the population in relation to the poorest.

When compared to other Latin American countries, only Guatemala (0.585) and Brazil (0.59) exceeded Colombia's 2008 Gini coefficient of 0.584 (Cepal, 2009). Forty five percent of the Colombian population lived under the poverty line (earned a dollar per day) and twelve percent were in the indigent category (El Tiempo, April 2010)¹⁴, signaling that almost sixty percent of the total population are poor, and more than eleven million Colombians earn less than a dollar per day. The most affected group was rural inhabitants; eighty percent live in poverty and sixty percent are destitute (Garay, J.L., 2003)¹⁵. Concentration of wealth has continued to increase and is even filtered through by illegal capital coming from the drug industry and the civil armed conflict. Likewise, access to land and resources is highly unequal. According to economist Garay, a little over one percent of landowners own 55 percent of exploitable Colombian land.

Furthermore, Jorge Luis Garay claims that three out every five economically active Colombians work in the informal economy under very precarious conditions. He asserts that one of the most perverse signs of exclusion is that poverty is highly reproduced and difficult to escape. One of main issues that he finds is that the family unit, as the essential environment for human development, is progressively depreciating and making it impossible to reproduce human capital.

¹⁴¹⁴ <http://www.eltiempo.com/mundo/latinoamerica/relaciones/desigualdad-erosiona-movilidad-social-en-colombia-4581744-1>

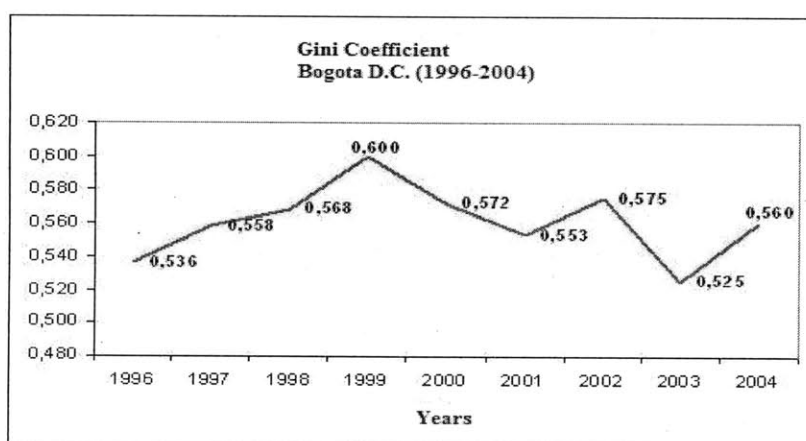
¹⁵ <http://www.drclas.harvard.edu/revista/articles/view/239>

What becomes even more concerning is that Colombia's macro policies do not point at overcoming inequality and social exclusion. Nurturing and educating the Colombian youth, for example, is not a priority for the State when compared to issues of public and private security. Economist J.L. Garay finds that the Colombian State spends less than 0.7 percent of its GNP in nutrition for the poor youth, and it would need 2,3 percent of its GNP to provide sufficient food to the 11 million destitute Colombians. Likewise, it would require 1.4 percent of the GNP to educate the 3 million children and youngsters that are currently not attending school and 1.3 percent of the GNP to provide health care to 40 percent of the population that lacks basic services. Colombia has not been able to meet these needs and, on the contrary, has spent between 4.2 and 6.4 of its GNP on national defense and security (this figure does not include the expenses made on private security). Overall, the priorities of the Colombian state do not seem to mitigate inequality, but, on the contrary, to exacerbate it. According to Senator Cecilia López, Colombia was the only country in the Latin American region that worsened its levels of inequality in the past 10 years, as the Gini coefficient went from 0.57 in 2002-2005 to 0.58 in 2005-2009 (cited in Ibid).

Bogotá has shown a Gini of over 0.5 in the past thirteen years. The most critical point was reached in 1999 with a Gini of 0.6, which signaled that the richest segment of the population earned 60 times more than the poorest segment. Furthermore, research on the socio-economic stratification of Bogotá shows that the geographical segregation corresponds to socio-economic stratification; in other words, populations coming from different strata do not usually share the same urban spaces. In fact, Uribe Mallarino describes Bogotá's segregation as "elevated, secular and has the tendency to reproduce

itself. The history of Bogotá has incentivized segregation... stratification has not attained the homogeneity it seeks for” (González et al, 2007, 12-13 in Uribe Mallarino, 2008¹⁶).

Graph 7: Gini Coefficient of Bogotá



Source: DNP-MERPD in Secretaria Distrital de Hacienda, Bogotágov.com. Last Revision: May 2010

Informal waste pickers are one of the populations that are mostly affected by social exclusion, or are even a product of such inequalities. Many recycling families join the informal economy of waste picking as a last resort of survival. Having chosen the path of waste picking in the Colombian context is in itself a symptom of deep exclusion, in which the lack of social support from the State or the hampered access to resources and formal employment, force vulnerable families and populations to turn to what society discards and rejects. Even though they have managed to survive through this path for decades, they continue to be immersed in the reproductive cycles of poverty. They are excluded from the formal paths of employment and are incapable of providing better opportunities of human development to their future generations. As waste gains value and the private sector

¹⁶ <http://redalyc.uaemex.mx/redalyc/src/inicio/ArtPdfRed.jsp?iCve=79106508>

overtakes the recycling business, informal recyclers may be further exacerbated—which is the case in Bogotá. This may be only an example of growing social disparities in the Colombian society.

3.5 Waste Production in Bogotá

Colombia is among the developing countries with the highest numbers in total national waste production and kilograms of waste per person. Colombia generates 27,000 tons of waste per day and 9'855,000 per year. Compared to developing countries, Colombia (and its generation of solid waste in tons per person per day) has a high level of 0.74 kg./day/person when compared to countries like Nepal (0.5), Blangadesh (0.49) and Guatemala (0.50); but a lower level than Western European countries, where levels oscillate between 0.9 and 1.65 kg/day/person, and significantly lower than the USA (2.1 kg/day/person) (Area Metropolitana, 2005)¹⁷. These numbers point at the fact that Colombia is a consumer country that generates considerable amounts of waste and therefore requires careful management and waste reduction policies (See Annex 1 for information on the kinds of recyclable waste and quantities that are produced in Bogotá).

According to current estimates from the local government, Bogotá produces 7000 tons of waste per day, which represent 25% of the national waste production (PNUD, 2008)¹⁸.

¹⁷

<http://www.corantioquia.gov.co/docs/PGIRS/VVISIONREGIONAL/ANEXO/Presentaciones/Formulacion%20PGIRS%20R%20-%20Luis%20Anibal%20Sepulveda.pdf>

¹⁸ PNUD, Informe de Desarrollo Humano de Bogotá para el 2008, PNUD: Colombia (2008)

Waste pickers collect 600 (9.4%) out of the total city solid waste and industrial companies take care of approximately 1000 tons per day through internal mechanisms (15.6%) (Recicladores sin Fronteras, June 2009). Altogether, Bogotá presents better recycling practices than other cities in Latin America. Sao Paulo and Rio de Janeiro in Brazil, for example, recycle 0.4% and 4% respectively out of the total waste, while Mexico and Montevideo have higher standards and recycle 7% and 15% respectively. These numbers show that a significant part of the recycling activities in Bogotá have been performed informally by waste pickers, without being recognized or compensated by society.

3.6 The privatization of SWM in Bogotá

Informal recycling and scavengers have existed since five decades ago. For a long time, waste collection was a public duty and waste was an invaluable production of society. Since privatization, waste management services became profitable businesses. With the rise of consumption and waste generation, recycling and recyclable waste has increased in value and in competition between, and among, informal recyclers and private companies. Wendy Arenas, Director of Avina Foundation in Bogotá, declares that “today we are living in a world and a half; if the consumption rate continues to be the way it is now, in fifty years we’ll need two planets to maintain our life style. That’s why recycling becomes so important.” (Pirry Special Documentary on Recyclers, Aired in July 2009) Arena’s declaration may help explain why recycling became such an attractive business opportunity for powerful entrepreneurs and political figures –among them the sons of the current president of Colombia, Mr. Álvaro Uribe.

Waste management is one of the public services that were reformed as a result of the structural adjustment policies adopted by the Colombian state during the 1980 and 1990s. The process of privatization and modernization of the services of waste collection in Bogotá started in the early 1990s, and is the reflection of the State's transition from being a provider of "social rights" to facilitating access to services that turned into "merchandises" (León Paine, 2006). The replacement of an open air dumps for sanitary landfill, in 1989, was the first major infrastructure change towards a modern waste management service. This transformation played a major role in displacing waste pickers' work to the public space. Informal waste pickers were no longer allowed to enter privately managed landfills. From sorting their recyclable materials in one specific location –the open air dump – they were forced to relocate and sort reusable materials from public garbage cans, and door-to-door collection in residential houses and industries. The service of waste collection and sanitation was initially performed solely by Bogotá's public company, Edis, which overtook these duties until 1989. Like several other public companies in Latin America during the time of structural adjustment, Edis was labeled as a highly inefficient and corrupt organization.

Edis was created during the 1950s in face of rapid urbanization and an uncontrolled growth of the population; the State created large public companies to manage and provide basic urban services as a way of building adequate infrastructure for the establishment of industrial activities during the import-substitution economic period. According to Edis' researcher Edyson León Paine, the political system of alternation between the liberal and the conservative parties disrupted the possibility of creating a strong technocratic base and led to the creation of a State and of public companies that operated under relationships of

patronage. He states that the “management of the social construction processes and the configuration of the universe of the public were restricted to particular interests, which found in companies of public services one of the most favorable spaces for such distribution of power” (147). The lack of institutional planning and coordination, made Edis grow uncontrollably, gain a dispersed vision of their duties and respond mainly to particular profit-making interests.

In the 1980s and 1990s, the violent conflict in Colombia had taken control over rural areas and pushed rural populations to the capital city while the economy was suffering processes of de-industrialization. Both situations accelerated the conditions of urban overcrowding, the growth of informal settlements and the deterioration of infrastructure. By the end of the 1980s, Bogotá increased its population by five times compared to 1950. This population boom resulted in extensive overcrowding, more production of waste (and more inorganic waste) and higher demands of hygiene and sanitation, to which Edis was not prepared to respond effectively. In 1971, Bogotá had a population of 2,672,000 and produced 1890 tons of waste per day; in 1988 the population doubled to 4,885,102 and waste tripled to 5,520,166 tons per day (Table 5) (León Paime, 2006). Edis had problems attending the collection activities and they neglected other secondary activities, such as the cleaning of cemeteries and public markets—which did not represent much returns for the company. Moreover, the company started to suffer a financial crisis due to the extensive number of loans versus little investment in macro projects of sanitation, as well as due to situations of corruption. Altogether, the operational and financial deficiency of Edis had a direct impact in the sanitation of the city and promoted severe citizen dissatisfaction towards the company’s performance and its public management. Additionally, my interviews with

waste pickers in Bogotá pointed out that Edis workers had turned into one of their most fierce enemies during the 1980s. The high disorganization and lack of authority within Edis led its workers to leave behind their competencies and, instead, use public equipment to dig out the recyclable materials and sell them for personal profit.

Table 2: Waste Production in Bogotá (1970-1988)

Year	Source	Inhabitants	Production Kg/day	Production Tons	PPC Kg/inhab.
1971	EDIS	2,672,400	1,890,000	1890	0.70722946
1972	--	2,792,800	2,600,000	2600	0.93096534
1974	EDIS	3,135,900	2,400,000	2400	0.76533053
1979	EDIS	4,291,000	3,820,000	3820	0.89023538
1984	Planeación distrital	4,885,102	5,520,166	5520.166	1.13000015
1985	Cámara de Comercio	4,885,102	5,520,166	5520.166	1.13000015
1988	Planeación distrital	4,885,102	5,520,166	5520.166	1.13000015

Source: Blandon (1992) in León Paimé (2006)

In 1988 the Mayor was forced to declare an environmental emergency, as Edis had stopped serving in two of the largest areas at the northwest and southwest of Bogotá. This event pushed the District to contract private sanitary and cleaning services for both of these areas, while Edis continued to take care of the rest of the city. In the 1990s, however, neoliberal ideas from the Washington Consensus –through advice from the Inter-American Development Bank (1997) – labeled the public management of Edis as corrupt and inefficient, and pushed for the privatization of the service provision of the entire city. The Bogotá government called for private companies to provide the collection and transportation of waste, the sweeping of streets, public spaces and the maintenance of parks. LIME and CIUDAD LIMPIA were the first companies that were contracted but continued to work alongside Edis, which remained responsible for a section of the city. By 1995, privatization proved to be more efficient than public-managed services: private

cleaning companies hired 25% less staff than Edis, they collected a waste volume three times higher than the latter and owned a much larger set of modern equipment (Sylvestre, 2003). Throughout these processes of change, the District sought to attend immediate situations of urban hygiene and efficiency without focusing on the longer vision of reduction and management of waste. Leon Paimé (2006) mentions that Edis had wanted to incorporate recycling among its activities in 1990, but the transition to private hands left this point aside. Waste pickers continued to execute their activities independently and to sell their recyclable waste at the prices set by industries. Many recyclers do acknowledge that their economic returns were favorably impacted when Edis ceased its operations completely (Workshop in ARB, 2009).

3.6.1 Waste Management as a Privatized Service

In a privatized system of waste management services in Colombia, the stakeholders are the State, private contractors, recyclers and citizens. The participation of private companies with much better capacity and technology than waste pickers make it harder for the latter ones to become integrated into the system and be considered as contractors. This is one of the major tensions that waste pickers in Bogotá face when trying to become integrated in a market-driven system that guides the contracting procedures of waste management services in Bogotá.

Sanitary services are one of the main competencies of the city governments in Colombia. Currently, the responsible office for handling this service is the Special Administrative Unit

of Public Services (UAESP)¹⁹. Authorities and technicians in this unit produce the Plans of Operation (Plan for the Integral Management of Solid Waste –PGIRS – and the Master Plan of Integral Operations of Solid Waste Management –PMIRS) and oversee the proper application of these plans as well as the performance of the concessionary private companies. Solid waste management services are privatized and performed by four private consortiums: ATESA, LIME, ASEO CAPITAL and CIUDAD LIMPIA. The concessions are distributed to companies through areas of the city. For these purposes, Bogotá’s territory is divided in six Areas of Exclusive Service (ASE)²⁰ and each one of these ASEs is contracted out to one of the four companies. Companies take care of door-to-door residential collection of solid waste during the day and the nighttime on a daily basis (they circulate more often depending on the needs of each locality) and transport waste to the Doña Juana sanitary landfill, Bogotá’s only landfill. They provide their services to large commercial, industrial, official and institutional agencies. Companies are graded on the level of cleanliness of each one of their ASEs.

According to city guidelines and regulations (PGIRS, 2003), companies of waste management are expected to collect within all of the urban perimeter of Bogotá, with the exception of inaccessible areas for waste trucks and in places of large volumes of waste generation (where alternative collection methods are required). Consequently, recyclers

¹⁹ UAESP is the nomenclature in Spanish that stands for Unidad Administrativa Especial de Servicios Públicos.

²⁰ ASE stands for Areas de Servicio Exclusivo, which in English is translated into Areas of Exclusive Service.

often overlap with the route of the standard waste trucks, although they do so with a very different set of collection and transportation technology.

Compared to Edis, privatization has indeed proven to be more efficient. As of 2003, the staff for collection and transportation of solid waste was of 1,516 workers and they have provided better services than Edis. The table below (Table 3) shows the number of people working for each one of the four companies that clean the city.

Table 3: Operative staff in numbers for collection and transportation of solid waste by concessionaire

Concessionaire	Staff
LIME	434
Aseo Capital	618
Ciudad Limpia	248
ATESA	216

Source: Interventory Report ISP for the month for June of 2004, extracted from the PGIRS, 2003

The above data shows that the company Aseo Capital has the largest staff, which responds to the fact that it serves the largest number of localities. It is worth noticing that the total number of employees working in the formal system of waste management is much smaller than the number of recyclers in the streets of Bogotá. Even though the private sector gains

in efficiency in one part of the waste management, it loses in the capacity of employing larger pools of populations in need. At the same time, these company employees do not sort and separate waste, which is among the most time consuming and least liked activity of waste management. They collect the waste that has been previously sorted by street recyclers and take less waste to the landfill. These are duties that have been taken over by informal recyclers. In this way, the private and the informal sector have been working in a parallel and complementary manner.

3.7 Legislation and Regulatory Framework

The regulation on competencies and operations of the management of solid waste by private concessionaires has undergone modifications in the past ten years. In 2004, a national decree (190) defined the competencies of this system as:

“the infrastructure and specific methods for the collection, transportation, use, treatment and temporal and final disposition of solid waste of domestic, industrial and hospital origin; the collection, separation, stocking, use and disposition of recyclable residuals; the collection, use and disposition of rubble; the collection, transportation and final disposition of hazardous residuals; the pruning, collection, transportation and final disposition of vegetal material coming from parks, garden street divides and public areas of the city”

This same decree establishes that the integral management of solid waste should contemplate the following duties and equipments (Art.122): “prevention, recycling and reuse of materials; collection and transportation; transfer, treatment and final disposition”.

By 2004, city regulations did indeed incorporate recycling in the waste management system and acknowledged that the quantity of waste that arrived to the landfill had to be reduced.

The treatment and management of solid waste in the cities of Colombia fall under the Ministry of Environment, Housing and Territorial Development, which demands that cleaning services incorporate the integral management of solid waste within their scope of duties (National Decree no. 1713, 2002). Additionally, the National Plan of Territorial Ordering (POT) requires the capital city to issue master plans regarding their urban equipment and public services (e.g. management of solid waste). The POT is the main urban planning document that sets the national standards of operation of public services of cities and pushes local government to settle proper infrastructure and operation plans to improve the life conditions of citizens and make cities more competitive.

Furthermore, Resolution no. 1045 (2003) from the Ministry of Environment demands metropolitan cities –like Bogotá– to create and articulate a Plan for the Integral Management of Solid Waste (PGIRS) and the Plan for the Integral Operations of Solid Waste (PMIRS). These are the two guiding plans for the city’s waste management system. Back in 2003, Resolution 1045 called for the participation of the recycling sector (waste pickers) in the design of both plans. In other words, the management and treatment of solid waste is a competency that is executed and applied at the city level—through the PGIRS and the PMIRS—but it follows general specifications set by the National government level and it requires that local authorities recognize the informal sector of waste picking and include them in their policy and plan designs.

Both the Plan for the Integral Management of Solid Waste (PGIRS) and the Master Plan for the Integral Operations of Solid Waste (PMIRS) are complementary. The former sets the main environmental, social and economic policies that guide and integrate the different stages and services of the waste management. The latter plan sets the details and specific steps that each one of the stakeholders will take to follow the PGIRS and execute the kind of waste management that the local government has decided to attain.

The PGIRS is designed by the City Government and establishes the objectives that each government administration will accomplish in regards to the solid waste management system (described in the PMIRS) during its term. The PGIRS must meet the requirements of the POT and the Ministry of Environment, Housing and Territorial Development, as well as those of the City's Development Plan (for each government administration). This Plan analyses the socio-economic, environmental, technical, administrative, commercial and financial conditions of the city and looks at the future projections of population and waste production to determine how to better improve the waste management services and expand its provision. The PGIRS for 2004-2008 acknowledges the presence of the informal recycling sector and presents a quantitative and qualitative diagnosis executed by the National Administrative Department of Statistics. In their conclusions they highlight the absence of organization among waste pickers and the existence of only 26 organizations out of 8,479 individual recyclers. According to researchers outside the government, this is an inadequate understanding of the recycling population. There is a much higher number of recyclers (13.000) and greater organization. The current government administration of Bogotá has yet not presented a new PGIRS and continues to guide its actions and decision through the previous plan and previous studies of waste pickers.

Among the documents that guide the system of solid waste management in Colombian cities, the PMIRS is perhaps the most important one. The PMIRS is a detailed plan that delineates the policies, strategies, programs and short, medium and long-term projects. It speaks of the arrangements and locations of equipments and infrastructure that will allow the system to operate on the ground and attain the objectives of the PGIRS. This is a key document for the city government as it guides authorities and technicians through the steps and processes for a coordinated solid waste management system. This document was also created, designed and modified in the midst of tensions and legal battles between recycling groups and government authorities. It turned into the main political arena for recyclers to demand participation and inclusive policies and practices. Therefore, the PMIRS addresses the ways in which the city government (and more specifically, the UESP) will include informal waste pickers within the operation of the solid waste management system.

According to Decree 190 (2004) it is a priority of the local governments to create master plans for public services of Aqueduct, Sewage and Solid Waste. The decree requires the Mayor to oversee the creation and execution of the PMIRS and to make sure that such Plan is in alignment with the POT (Masters plans had to be completed by 2006). In Bogotá, the PMIRS was created in 2000 and approved in 2004. This is the document on which the current waste management system and policy decision are based upon. The office responsible of supervising the planning, coordination, supervision and control of public services' performance in the capital city is the Executive Unit of Public Services (UESP).

The PMIRS has undergone severe criticism and has been mandated to modify its terms of operation regarding informal waste pickers. In 2003, the Constitutional Court, through Sentence (protection writ) T-724, ordered the Executive Unit of Public Services to include affirmative action policies to incorporate the informal recycling population in future contracts for city cleaning and waste collection services, “with the objective of achieving conditions of real equality and to accomplish the social duties of the State, and to never repeat the omissions incurred in Bid no. 1 in 2002, in regards to Bogotá recyclers” (Sentence T 724, 2003). Even though the Sentence was vague in specifying the ways in which waste pickers would be included in waste management processes, it forced the UAESP to approach, negotiate and partner with informal recyclers for the past seven years. The inclusion of the informal sector has been interpreted in different ways by city officials and by recyclers. This has led to a long struggle of interests; nonetheless, it has also led to interaction and communication between both actors and, consequently, to more inclusive policies.

4 Recycling and Recyclers: Gaining Leverage

For years, waste was worth nothing, not even the concept that there was something to recover existed. Mayors picked it up; they threw it into a dump and charged citizens for this service. Only waste pickers would dig into the waste, separate the useful from the rotten, gather papers and cardboards, pile cans and metals, collect glass and crystals and then sell what they recovered so that industries could process it again. I still remember the impoverished woman who, with a sack on her shoulder, would roam the streets yelling “boootles, boootles, paaaaaper”. The rich kids would look out the door and give the woman empty bottles and piles of newspaper, and then an aberrant image that will accompany me to hell was produced: the woman would bring out her little money pouch and pay the kids for their waste (Samper Pizano, Journalist, 2009)²¹

Between the 1950s and 1980s, informal waste collectors focused mainly on the collection, sorting, classification and sale of reusable waste. In the beginning of the 1980s, the Colombian government mandated that cities introduce more modern mechanisms of waste disposal to replace the traditional open-air dump; Bogotá’s public company of domestic services, Edis, built and opened the Doña Juana landfill (Relleno sanitario Doña Juana). The larger and most industrialized cities replaced landfills for open air dumps and, as described earlier, started a process of privatization of public services, which included the collection, transportation and final disposition of waste. The restructuring of the system of waste management displaced informal waste collectors from their present source of employment and forced them to change their ways of living and working. With privatization, landfills were privately managed and waste pickers were no longer allowed to enter these spaces; they had to transfer their waste picking activities to the streets of Bogotá, and sort, collect and classify waste from public garbage cans and door-to-door collection in houses, offices, banks, stores and industries. Informal recyclers’ conditions of vulnerability and precariousness were further aggravated. “From their conditions of

²¹ http://www.eltiempo.com/opinion/columnistas/danielsamperpizano/basuriegos-a-la-caneca_5118772-1

excluded inhabitants and travelers, and from within the conditions of their work, informal recyclers travel the streets of the city..., occupy, use, appropriate and abandon them or are expelled from them” (Parra, 2003). This situation was not specific to Bogotá, but was a recurrent scenario in the growing cities of Latin America where services were privatized and where solid waste management systems had to adopt more modern infrastructures and equipments.

Researchers and followers of the dynamics of informal recyclers remember and assert that waste pickers gained visibility and became part of the daily urban landscape after the closure of Bogotá’s dumpsite. However, they also agree in that their activities continued to be informal, marginalized and discriminated in the social and political realm – not even when the Colombian government and private entities came to recognize the value of waste during the last decade.

The social and political visibility, space and inclusion policies that Colombian recyclers have achieved in the past years derive from a long road of battles, negotiations and partnerships attempts with the local government and the private sector. This is not an easy task for vulnerable interest groups like waste pickers and it requires a set of elements that favor their disadvantageous position. In this chapter, I analyze the factors that distinguished Bogotá recyclers –from groups of recyclers in other parts of the world– and that provided them with the capacities to act upon the local government and produce significant changes in their recognition, inclusion and participation. During my field research, I found that

Bogotá recyclers are highly organized and have a clear leadership that guides their common objectives and helps them maintain a clear position in face of local authorities. This organizational and proactive character has helped them get support from local and international NGOs, and in particular, get legal advice on how to defend their rights to work and their access to waste. Moreover, Bogotá recyclers took advantage of strategic moments in which local authorities were questioning and reforming the waste management policies. Recyclers have used these opportunities of change to insert themselves in the formal system, get the attention of decision makers and secure a space of negotiation/collaboration. The achievements of Bogotá recyclers (in particular of the Bogotá Association of Recyclers), their strong leadership and innovation have inspired recycling groups and NGOs around the world. The ARB, along with the Association of National Recyclers, created a global network of recycling groups – Recicladores sin Fronteras – to provide recycling groups with mentoring, support and greater visibility. The global dynamics of Bogotá recyclers, and the media attention that they have received in the past years, has also served to put pressure on local authorities to provide alternative solutions for the recycling population. Therefore, I found that Bogotá recyclers were able to interact with the local government and advance significantly due to their high levels of organization, experience and leadership; their capacity to act upon opportunities of political change and to use legal instruments to defend their rights and interests. Finally, their local and global networks have made them more visible and have added strength to their voice.

4.1 Growing visibility and demanding recognition

Recyclers received formal recognition by the Colombian State in 1999 – in commemoration of the murder of 11 recyclers in Barranquilla (1992). Law 511 assigned the Day of the Recycler on March 1st of every year and defined *recycler* as “the natural person or corporate body who is characterized for developing activities in the process of recovering recyclable waste for its latter treatment and use”. The law requested local governments to honor this day and to award the most distinguished and committed recycler of the year. According to the people working at the UAESP in Bogotá, this was not a law that was enforced in any way. Additionally, the law requested that several national offices ‘adopt’ and ‘promote’ social programs (e.g. education, housing, family wellbeing, inclusion of recycling community in public waste management) geared towards the improvement of the quality of life of recyclers. Although this is a general and somewhat vague law, with little impact at the time of its release, it contributed by giving recyclers some form of legal visibility and legitimacy to press further demands on local and national government levels.

There were a variety of forces and opportunities that this group strategically used to gain visibility and approach political authorities. The long experience and tradition in running a large association (such as the ARB), the knowledge transfer and training received by the NGO sector (e.g. Civisol, Fundación Social, ENDA, Avina) and the perseverance of a highly empowered leader (Nohra Padilla, director of the ARB) prepared waste pickers to set common goals, trust each other and stand together in face of government authorities. During the training sessions of Cali recyclers, one of the ARB members confessed her deep appreciation for having a group to fight with:

“ I have been in the recycling business since I was child...my parents too were in this business. We lived in the outskirts of the El Cortijo dump, but they threw us out in the early 1980s without providing any additional support. My family and I, and some of my recycling peers moved to the city to form a cooperative. Things were going well and we were collecting recyclables, I had a house in the informal settlements of the West and I invested my savings in a fund. Five years ago the government displaced me from my house and the fund took away all of our money. My family lost everything. Nohra helped me stay calm and keep working to defend our rights. I am grateful for my peers and the ARB. Together we have worked hard and stood united despite our losses. Nohra motivated us to support one another in difficult times, to learn the laws and understand the government’s role and to keep fighting, because this is all we have...” (July, 2009)

Looking at the timeline of events in the past two decades, it becomes evident that recyclers leveraged their voice and became influential during a time where the local government was redesigning the waste management system – after dealing with the sanitary emergency of 1988 and the Doña Juana landslide of 1997. The new Waste Management Plan (which started in 2000 and was approved in 2003) and its recycling policies and programs did not come from an environmental or social concern on recycling and recyclers, but from concerns around the urban image and hygiene. Like in other cities, where recycling is still not a component of waste management, authorities become concerned when the human health of large populations is being directly affected (Gutberlet, 2003). This latter motivation led the District to redesign the Waste Management system and, consequently, to confront and assume the issues of waste reduction and recycling. Having the issue of recycling reach the political agenda then became an opportunity for organized waste pickers – in particular the ARB – to use it as a step stone to move their inclusion forward. This process, however, was long and it developed in the midst of tensions, confrontations, contradictions and negotiations.

4.2 Organization of Recyclers in Bogotá

Bogotá recyclers hold a strong reputation for their high levels of organization at the local and national levels. Recycling groups in cities around the world (e.g. Sao Paulo and Mumbai) as well as supporting NGOs (e.g. AVINA, WEIGO) recognize the highly sophisticated organization of Colombian recycling co-ops – and specifically that of the ARB and their leader Nohra Padilla. The organizational capacity of the ARB comes from a long generational tradition of working in the recycling business. “When my grandmother started to recycle she was 20 years old and she died when she was 78. My grandfather too...everyone at home has been in this. In other words, all of our ancestors have been in the recycling business” (Anonymous recycler from Cali, July 2009). Strategic alliances with key NGOs and actors provided them with the necessary skills to reach out, negotiate and confront public authorities, when needed. Also important is to note that the ARB has been led by one of the strongest, most out-spoken and persistent leaders in the global struggle of waste pickers. ENDA members affirmed that her personality plays an important role: “she is very strong, fearless and, often times, knows more than the authorities of the Special Unit of Public Services”. Nohra Padilla, current director of ARB, has not only been key in training and motivating other informal recycling cooperatives to demand recognition and compensation worldwide; she has been essential in confronting local authorities, proposing partnership ideas, negotiating with the local government and empowering other recycling groups in Colombia and abroad. In the case of Colombia, recyclers have attained high levels of managerial and organizational skills through a mix of strong leaders and a long tradition of practicing these activities.

Organization among Colombian recyclers came through as a strategy of protection, support and coalition. Their exposure to waste, hazardous toxics, pollution, hunger and physical exhaustion for over-working throughout the night, as well as to violence, exploitation and explicit discrimination incentivized them to form protection networks. By 1988, waste collectors around the country, and especially in the fastest growing cities – Bogotá and Medellín – organized themselves in cooperatives that later merged into second grade associations.

In 1986, recycling groups from the major Colombian cities, with support from the religious organization Fundación Social²², came together to create a third grade association, the Association of National Recyclers (ANR). The goals of this association were to improve the working and living conditions of its members, by helping them add value to their recycling activities and serving as a social security system. The ANR strengthened its members' business activities by facilitating the building and acquiring of storage places, enhancing their means of transportation and helping them elaborate professional contracts with local communities. These network connections allowed waste pickers to agglomerate recycling materials for wholesale, which gave them greater leverage when commercializing their recyclable waste. Having such a large national network also made them more visible

²² Fundación Social is a Jesuit NGO, comprised of financial enterprises, that raises money and supports the development of poor communities. In 1986, Fundación Social helped Colombian recyclers organize themselves in local associations (in each city) and in a national one (Association of National Recyclers) . The objective was to provide them with a supporting network to leverage their position in face of government authorities and improve their working and living conditions. This was an important contribution in that it allowed recyclers to build up the tradition of working as organized entities and allowed for groups like the Bogotá Recycling Association to solidify over time, learn from each other and become an active and influential actor in the public realm.

in face of public authorities (interview with Mr. Martínez, President of ANR, 2009). Additionally, a monthly contribution to the ANR was used to secure health benefits for the member families and for children's education. In 1996, the ANR received a UNESCO prize for Best Practice in Human Settlements. UNESCO awarded and recognized ANR's efforts to promote recycler's work – within and outside the association – to generate better contracts for its members and for improving the health care and working conditions of recyclers and their families. The ANR model was replicated in several other cities, and was considered the most advanced organizational initiative of waste pickers in Latin America (Gutberlet, 2003). According to the director of NGO Avina – an active supporter of recyclers in Latin American for the past decade – Colombian recyclers have the highest levels of organization in the region and she suggests that “it is time to spread the innovative know-how of Colombia” (Avina's Director, 2009).

The skills and experience in internal and operational organization is not a common feature among all recyclers. In fact, the levels of experience and organization define which groups are more likely to approach, challenge and influence local authorities. Bogotá and Colombia, in a larger scale, presented a variety of recyclers with distinct characteristics and interests. Although it was difficult to determine the exact number of organized recyclers in Bogotá, the National Administrative Department of Statistics estimated that 23% of waste pickers were organized and belonged to some kind of association (Parra, 2003; Distrito de Bogotá, 2003). Despite being praised for their high levels of organization, Bogotá recyclers have highly differing types of organizations. A study made in 2004 by Sylvestre, categorized the organized groups of recyclers and found that most organizations are newly

born. Eighteen percent of the recycling population was considered a 'consolidated organization'. This category refers to associations comprised mostly of permanent recyclers. Due to their yearly experience in this business, recyclers in this category have managed to establish agreements with large waste generators (e.g. malls, schools, industries); they have defined clear principles of internal operations, they own a few recycling facilities (e.g. warehouses or facilities to pre-transform waste into raw materials) and have developed complementary cleaning services (e.g. gardening). ARB is a clear example of this kind of organization, as I will further analyze later in this paper.

Thirty six percent of the recycling organizations are found to be in a highly insecure working condition; they have participated in the sector for many years, but have not sufficiently developed organizational capacities enough to elaborate contracts with private clients. Usually, their activities are limited to the sorting and collection of waste from the public space. Most of the organizations (46%) fall in the category of the extremely precarious; they are less than a year old, are focused mainly on collection, have little capacity to create and execute collective projects and do not have the means to own their own recycling facilities. Furthermore, in a simpler way of categorizing waste pickers, researchers refer to them as recyclers of 'permanent occupation' (de oficio), for those that are part of well consolidated associations and organizations, and recyclers of 'temporal occupation' for those who are highly precarious and newly born (Parra, 2003; Sylvestre, 2004). As for independent recyclers, they are characterized under the *rebusque* (sorting) occupation, which is exercised purely as a survival mechanism when the extreme need comes, but that do not exercise it as a specialized or permanent occupation. These ways of

classifying recyclers show that there are different forms of exercising this activity as well as different needs and interests within the recycling population. In the same lines, it shows that the recyclers, who have been involved in this activity for longer, are better organized, have experience in contracting and are better equipped to participate in the recycling market and policies, have their voices heard and address local authorities – in the ways that ARB has been able to do in the past decade. Good internal and operational organization is key for recycling groups and associations to become more visible and better integrated in the formal sector of the recycling chain. At the same time, however, this aspect has also provoked fragmentation among recyclers. Lack of organization prevents other groups from having the same impact and strength as the ARB when demanding recognition and inclusion.

4.2.1 Fragmentation among recyclers

The ARB has persistently addressed the local government through proposals of inclusion, collaborative negotiations and legal court settlements. ARB is clear in that any sustainable change for recyclers and any possibilities of formalization will have to come through political intervention of both local and national governments; hence, their direct battle towards local public authorities.

Nonetheless the recycling population is large and highly heterogeneous. Their heterogeneity poses difficulties in targeting the entire ‘recycling population’ and implementing policies that can equally benefit them all. The differences highlighted earlier have probably been influential in creating fragmentation and diversity within this group,

which, by itself, is highly excluded and has limited capacity to make a more efficient impact on policymaking. In fact, in interviews larger organizations of recyclers (e.g. the ARB, Arambiental and ARUB) preferred not to be associated with independent and temporal recyclers. “We work very differently. We have done this for generations and this is our profession. Temporal recyclers do it only when they are jobless and need money on the spot. Some of them are homeless and then spend their money on vices...then people think we all do that”, explained one of the ARB members. The ARB, in particular, was clear in that the struggle for recyclers’ inclusion in formal employment represented the particular desires of their organization and not of all of the recycling populations (interviews with members of ARB and ARUB, 2009). After decades of working in an organized manner and of operating in the recycling business, they have gained experience in confronting political actors and breaking into difficulties of accessing the local government. ARB leaders are therefore protective of the space of action and influence that they have attained so far. They also acknowledge that their struggle addressed their interests primarily (e.g. inclusion in the contracting process for waste management services), rather than attempting to meet the needs and petitions of other groups or of the entire population of informal recyclers. On the one hand, this fragmentation may have in fact turned into a barrier that prevented ‘recyclers’, in general, from accessing the system; on the other hand, the legal and political spaces that the ARB has earned in Bogotá are now equally useful and accessible for other recycling groups in the capital and in the rest of Colombian cities.

4.3 The Bogotá Association of Recyclers: a leading organized co-op

“ARB Mission Statement: The ARB is a provider of Public Services that is composed of 22 grassroots recycler organizations that contributes to the improvement of life conditions of the recycler in relation to: livelihood, work, health, education and culture. Unionized representation, awareness programs and motivational processes enable us to manage economic and social projects, for the benefit of our communities and societies in general” (Printed in ARB Headquarters, July 2009).

The Bogotá Association of Recyclers started with three cooperatives (Rescatar, Porvenir and Triunfo). The members of these cooperatives chose to form an association in order to provide its members with decent working conditions, to enroll them in the system of social security and to facilitate the sale of their waste²³. The founding members shared a vision where their work would be properly recognized, compensated and dignified by public authorities and the Colombian society. In addition to having an association, they also created the Cooperativa Triunfo for recyclers who wanted to join the ARB, but that could not afford to contribute with monthly fees for their social security.

Despite the minimum capital that they have, the ARB is highly organized. Its members are very close, professional and they create an environment of kinship. All of the members I interviewed with were very firm in that the ARB is ready to serve the city as a contractor of waste treatment and recycling. They assured “we will not give up until the local government employs us formally” (ARB, June 2009). Currently, the ARB has 22 member cooperatives that operate in the 21 localities of Bogotá (see Annex 2); they follow a clear

²³ They facilitate the commercialization of materials by compiling the waste gatherings of each individual cooperative and wholesaling it directly to the industry without having to go through middlemen.

organizational structure and are led by the executive director leader, Nohra Padilla (see Graph 8). Their organization chart is presided by a General Assembly where all of the member cooperatives participate to discuss contending subjects, evaluate their commercial activities and come up with further steps for the association. Under the General Assembly there is the Administrative Council, which is comprised of representatives for each member cooperative, and is in charge of making managerial decisions to ensure the effective operation of the entire association. The subsequent Surveillance Board regulates that the decisions taken at the Assembly and the Council levels are properly passed to the Executive Director and properly applied and adopted by the lower levels of the organizational chart.

The association diversifies in five main areas of action: the public policy area, the social area, the unions area, the administrative area and the services area. The first three areas are essential for public relations with the government, private companies, clients and the surrounding communities. The public policy area is essential for following up negotiations and communications with the local government (UAESP). The managers of this area make sure that public authorities design and enforce affirmative policies of inclusion and they communicate authorities about recyclers' interests and disagreements (when relevant). They also regulate that the temporal management partnership (between recycling associations and the UAESP) of the Recycling Center La Alquería – to which I will refer to later on – is running smoothly. The *social area* manages a public dining room for low-income children from the ARB headquarter's surrounding neighborhood in downtown

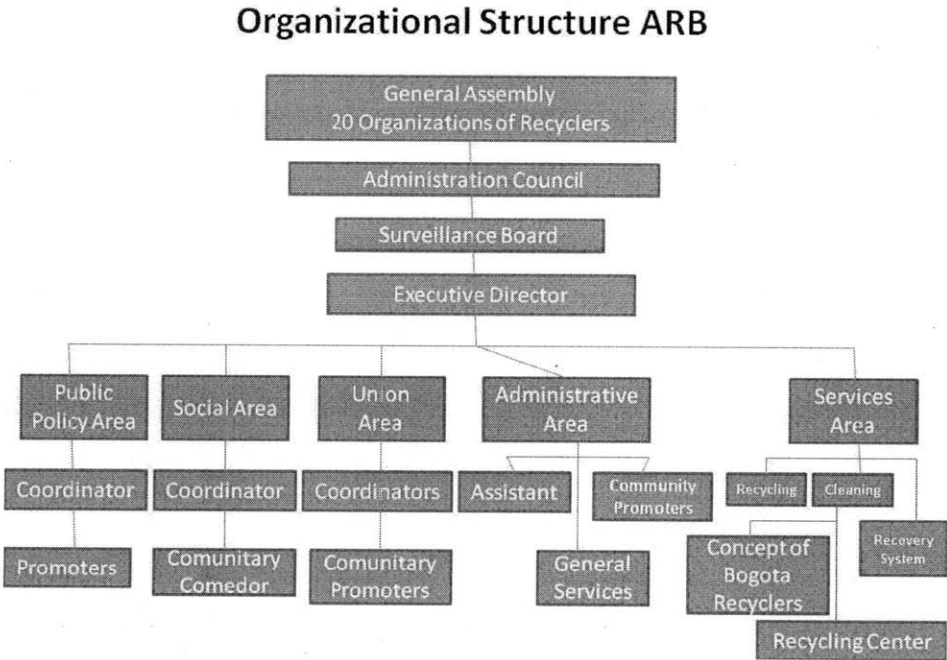
Bogotá²⁴. The *administrative area* supports each of the ARB cooperatives in their business operations, contracts and sales. The *services area* coordinates the work of the three services that the ARB offers: recycling, cleaning and waste treatment and recovery. They work on the promotion and outreach of their services and facilitate contracts for their member organizations. More specifically, the cleaning section within the services area is in charge of supervising the operations of the Recycling Center La Alquería and of the workers that are positioned in that facility. The ARB is aware that the possibility of being included and fully recognized by public authorities requires acceptance and cooperation from civil society as well. Therefore, several of the areas have created the figure of promoters. Their role is to advertise ARB's good performance and contribution to waste management and urban sustainability, while maintaining harmonic relations with public authorities and citizens.

The ARB understands that gaining trust from public authorities can greatly favor the possibility of attaining a contract in the bid process of waste management services for 2010. Likewise, ARB members are conscious that they need to have citizens understand and appreciate their role – rather than associate them with the negative imagery of waste pickers; and to nurture a recycling culture in citizens so that they can support and demand the inclusion of recycling in the waste management system as well as to contribute to an appropriate separation of solid waste at the source. Having citizens separate waste at the source can increase the city's recycling potential, it can significantly reduce the amount of

²⁴The ARB receives food provisions from the state and is committed to cooking and serving on a daily basis.

residuals that arrive to the Doña Juana sanitary landfill and alleviate the health risks that recyclers undergo when sorting reusable material from loads of mixed waste. Similar to recyclers in other cities, the Bogotá recyclers face occupational risks from the contamination of hazardous materials or the sharpness of glass and metal objects (Gutberlet, 2008).

Graph 8: Organization chart ARB



Source: Poster at the ARB Headquarters, July 2009 (this chart was executed in 2007, when there were only 20 member organizations).

4.4 Expertise and Progress of ARB

In my interviews with ARB recyclers I learned that many of them were second or third generation recyclers. Padilla (current director of ARB) and Silvio Ruiz (previous director) were raised in a family of recyclers. They learned to sort reusable materials in their early childhood years. Different from contemporary times, they recall having initiated their waste picking activities in the public city dumpsite. When speaking of their work, they show a profound appreciation, respect and gratification for the activity that feeds them and their families on a daily basis. Most of the ARB members grew up in recycling families and have therefore been exposed to waste sorting and the recycling industry for a very long time. This firsthand experience on the topic has given them a privileged knowledge that is not shared by temporal recyclers or by operators of waste management companies. “Company operators are kids that finished high school but have no experience in waste picking and are even disgusted by it. They would rather do something else. I can’t imagine them taking over our role and digging into waste to separate it properly” (ARB member, July 2009). This is why organized recyclers, such as the ARB, battle to defend the know-how that they have accumulated over the years.

The experience and expertise of ARB has allowed them to scale up in the recycling chain by joining efforts to acquire three storage warehouses for paper and plastics. They have also built a transformation plant for plastics and have two bigger storage places where cooperatives accumulate their recyclables. Detaching from middlemen has given ARB’s recycling activities a higher value and greater power to negotiate with industries in order to get a higher price for their material. The workers who ran these facilities, were proud to

have moved up the chain, and claimed that “ They asserted that having their own storage places made it easier to get contracts with larger industries, collect material (mostly paper and plasticss) on a regular basis and sell it directly to industries.

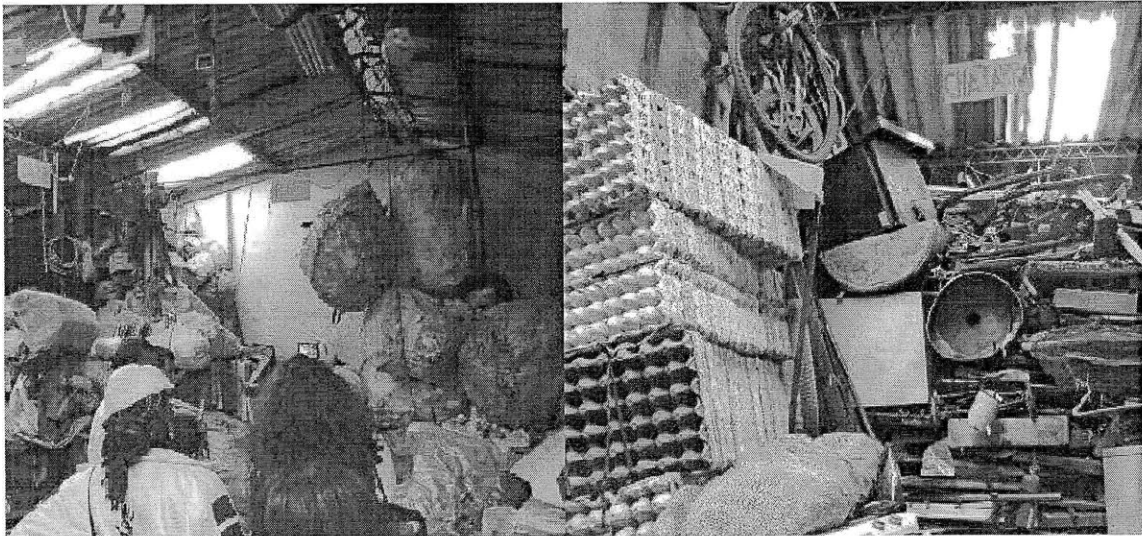
I visited two storage places of ARB cooperatives (the first owned by Rescatar and the second by the Association Rafael Uribe). Despite the limited space, lack of infrastructure and density of materials and collection carts, waste pickers had managed to create their own system of classification of materials. They followed strict schedules of work, were disciplined when depositing their waste and maximized spaces. In the second storage place recyclers had several carts that would be rented to temporal or new recyclers who needed to try the business. Uribe members claimed that “sometimes we have new people join and help us in the cooperative...other times they disappear with the carts” (ARU, July 2009). They acknowledged that it was a difficult business and that it became harder and harder to distinguish professional recyclers from the temporal ones. At the same time, they felt incapable of denying the entrance of poor people who, once like them, were in desperate need of a job.

Picture 2: Cans section, Storage house of Rescatar, ARB



Source: Andrea Betancourt, July 2009

Picture 3: Storage house, Association of Recyclers Rafael Uribe Uribe, ARB



Source: Andrea Betancourt, July 2009

Picture 4: Carts for rent, Association of Recyclers Rafael Uribe Uribe, ARB



Source: Andrea Betancourt, July 2009

The pelletizing machine that they owned was even more beneficial because it allowed recyclers to move two steps up the recycling chain. They stored large amounts of plastics, separated them, cleaned them and turned them into small flakes. These flakes were subsequently sold to industries – where they were melted and transformed into new items for consumption. Being able to execute most of the recycling cycle of plastics adds a much higher value to the product that waste pickers sell to industry (see Annex 3 for the Recycling Cycle of Plastics).

Picture 5: Classification of plastics at the plastics store house, ARB



Source: Andrea Betancourt, July 2009

The sense of solidarity, appropriation and accomplishment in cooperative members were obvious. Unfortunately, according to members of the ARB, the District had requested that their spaces were closed because their activities did not comply with the zoning regulations. Yet again, authorities offered no alternatives or solutions to help them continue their businesses in other locations.

4.5 The Waste Management Plan (PMIRS): an opportunity for the inclusion of informal waste pickers

Although the Plan, in its original form, supported recycling, it did not include recyclers in the waste management system in a concrete way. This generated controversy and anger in waste pickers and their allies (NGOs and universities) and provoked them to critically

respond to that document, confront local authorities and use the legal devices to restructure the Plan and find their way in.

The Waste Management Plan (and its application) has been the process that has impacted recyclers the most (Parra, 2003). After the collapse of 800,000 tons of waste in the District's landfill Doña Juana in 1997, the local government – then led by Mayor Enrique Peñalosa²⁵ – came to the realization that the landfill had limited capacity and that a more appropriate plan for the management of waste was needed to meet the needs of the growing population. Thus, the District set a bid competition in search of an alternative approach to the waste problem. The German-Colombian consulting group, Fitschner/Cyder, won the task and presented the final report named *Comprehensive Plan of Waste Management for Bogotá* in 2001. This group chose to tackle the problem by reducing waste. The main strategy for waste reduction was recycling and the formal implementation of a system of recycling.

One of the most important contributions of the plan was the creation of the System of Recycling (SOR), which complied with some of the terms of law 1713 (2002) – a law that sets national guidelines for designing holistic systems of solid waste management with recycling. The SOR presented itself as an innovative opportunity of public management at

²⁵ Mayor Enrique Peñalosa has been one of the most influential mayors the city has had in the past decade. He started and inaugurated Bogotá's first rapid bus transit system, Transmilenio; he made strong efforts to recover the public space and promoted the reduction of car-use and car-pollution in the city. Peñalosa, along with Antanas Mockus, are considered to be among the most progressive mayors; besides decreasing crime rates significantly and improving the urban infrastructure, they put forward a green agENDA for Bogotá. The Master Plan for the Waste Management was crafted under Peñalosa's leadership, but was executed by Mockus.

the local level and as a pillar for the success of waste management in Bogotá. Given the limited capacity of the Doña Juana landfill²⁶, SOR offered a solution to decrease levels of waste, improve the recycling system (which was informally operated by recyclers) by working together with the population and the private sector, and promised to acknowledge the work of recyclers. In seeking for efficiency, however, the plan did not take into account the socio-economic impacts that these policies would have on recyclers, and instead it threatened with a working crisis for this population (Parra, 2003).

In an analysis of the plan made in 2003, NGO ENDA Colombia identified the contradictions and failures of this plan in regards to the inclusion of waste pickers. Authorities and technicians realized that, while solid waste accounted for 96% of the waste produced in Bogotá, 40% was potentially recyclable, and therefore paid more attention to recycling. Fichtner/Cydep (2000) found that in 1999 44,42% of waste was recovered (by recyclers, industries and other agents) and that waste pickers recovered almost 10% of the total 6104 tons of waste produced by the city in that year. The new plan sought to recover 40% out of the total amount of waste of Bogotá, and to have informal recyclers take care of 68% of that amount. Taking advantage of reusable waste was crucial for the District to lower its dependence on the landfill and therefore working with recyclers turned into one of the main objectives of the plan. The District wanted to replace the informal system of recyclers by an organized, uniform, stable and formal system; however, the plan also clarified that “the future of the recycling system is developed over the current system: The

²⁶ The Doña Juana landfill is expected to reach its maximum capacity in 2013, even after having expanded it. The District does not have available lands to build a new landfill. This restriction pushed the District to think of ways to give the landfill a more long-lasting sustainable life.

objective is (was) not to develop a completely new system but to correct the weaknesses of the current one” (UESP, Fichtner/Cydep, 2000, p. 30). The Bogotá government and Fichtner/Cydep came up with methods to incorporate waste pickers in the waste management system but offered no financial compensation for this service (Sylvestre, 2003). Restraining from compensating recyclers in the same way that they compensate the bigger private contractors shows that it is not the local government’s interest to fully recognize them and that it is perhaps not in the private concessionaires’ interests to split their revenues with other – much more vulnerable – stakeholders. Additionally the SOR²⁷ came up with a system for the selective collection of waste (Selective Route), which was included in the contracts of private companies. This meant that recyclers would no longer be in charge of that duty formally or informally. The official service of recycling would be ran and operated by the same private companies that did the rest of the waste management duties. The PMIRS explicitly states that contractors will be in charge of recycling:

“The current contractors of the cleaning services have the responsibility to promote recycling and the treatment of waste for reuse. Likewise, they will have to assign one of their collection routes for the collection and transportation of selected waste at the source and make it into a selective route. Also, they will get an incentive for the reduction of waste that arrives to the landfill...Additionally, they must pursue awareness-raising and training campaigns” (Document of Technical Support for the PMIRS, 39).

According to technicians at the UAESP, private companies already had the technological equipment (trucks) for executing the selective route and were more effective, efficient and reliable at collecting. Also, explained one of the office engineers that private companies were being asked (yet not obliged) to hire informal recyclers as part of their operating teams. The selective route trucks would deposit their reusable waste in two or four public

²⁷ In 2006, the SOR changed its name to Programa Distrital de Reciclaje - Recycling Program of the District .

recycling parks. This is where the District would hire 800 recyclers to separate, compile and commercialize recyclable waste. I will refer back and extend further on these policies in my next chapter, as they evolved and were applied after having the District gone through several court cases where recyclers demanded a more practical inclusion.

One of the main weaknesses of this Plan and the District's stated interest of inclusion is contradicted by the lack of financial remuneration for recycler's work. Even though the Plan stated that the financial distribution required a "better distribution of income that (the service of waste collection) generates and, consequently, avoid a concentration of benefits in favor of certain actors of the model and at the expense of others" (UAESP and Fichtner/Cydep, 2000), in practicality, recyclers' work and services remain unpaid. The Plan proposed to create a Recycling Fund (Fondo de Reciclaje), where private companies would contribute with approximately 46% of their initial income²⁸; the objective was to use waste collection savings in order to finance the recycling system, rather than having users (citizens) pay an extra tariff for recycling. Additionally, the Fund would contribute with 21% of the costs of the recycling system, while the remaining 79% would be covered by the commercialization of reusable materials. In practice, however, the proposition was inapplicable for two reasons: 1) as recyclable waste increases, companies receive lower income²⁹ and thus contribute with fewer resources to the recycling system³⁰; 2) recyclers

²⁸ This reduction was expected to come from the cost saving of having to collect and transport less waste from the city to the landfill, assuming that people are recycling.

²⁹ Waste collection companies in Colombia charge for the number of tons they transport to the landfill.

³⁰ It is also important to consider that private companies will not necessarily save money by collecting less waste, as they need to cover minimum costs at a minimum number of routes.

would continue to work without proper/fair compensation for their services, especially considering that, if the Plan went accordingly, they would be in charge of the management of almost half of the city's waste. Moreover, most of the funding from the Recycling Fund was allocated towards the evaluation and monitoring of contracts (with private companies), the financial department of the District and education programs to teach citizens about recycling.

Despite verbal efforts to include informal recyclers within the new Plan of Waste Management, the District left them reiteratively excluded from the process, be it because they could not legally compete or because they could not access waste anymore. The plan succeeded in strengthening recycling as an activity but failed to meet the needs of the people that had operated this system (Sylvestre, 2004). Recyclers were again facing an obstacle that had developed from the informal character of their activities when they were not recognized by the District: they were not remunerated for the act of separating, collecting and transporting (carrying) reusable waste to warehouses or industries. Recyclers exposure to waste – and its toxics – and the physical burden of carrying bulks of paper, plasticss and metals on their back, or pushing manual wheelbarrows during the night, remained unchanged even when being formally recognized by the District 's Plan of Solid Waste Management. In a system where citizens pay for services, having recyclers provide a service without receiving any compensation showed that they enjoyed of less benefits and had less interest in power than the privileged business sector.

4.5.1 Transitioning to privatization and fighting the contracting rules

The transition to the privatization of public services had a two-fold effect for informal recyclers: it presented itself as an opportunity for organized waste pickers to develop their businesses and offer their recycling services to the city; at the same time, it posed strong barriers that kept informal recyclers outside the competition. The two main barriers that recyclers encountered were the presumption that the efficiency of private cleaning consortiums was the best and only option for the execution of waste management services. Local authorities in Bogotá hold a strong belief that private consortiums have improved and expanded the provision of waste management services. The other barrier has to do with the non-recognition of recycling as an essential process of waste management. Until this day the District has been unable to make recycling one of the city's official strategies for waste reduction and treatment. Therefore, recycling in the hands of recycling cooperatives remains a service that is not financially compensated. To this Ruiz (ARB's former director) commented that "they think we don't know these things. We have to be well prepared and knowledgeable to fight them".

Once the service was shared with private companies, there were several changes that defined a new era in the provision of the waste management service. Soon after signing contracts with Lime and Ciudad Limpia companies, Edis' diminishing participation accelerated until ceasing its operations in 1994 – when the service was handed over to private company consortiums. Additionally, the payment of *fees by tons* was replaced by *fees per clean zone*, to ensure that companies serve and clean all of their zones, independent of which had less or more waste. This new financial system of retribution was introduced

by the concessionaire companies. Each one of the four cleaning companies presented technical and economical proposals to “cover administrative, financial, operational, publicity and promotion, fiscal costs and any other costs corresponding to the provision of cleaning services, as well as the retribution of capital, work and the technical and scientific knowledge of the concessionaire” (clause 8 from concession contracts for 1994 in Sylvestre, 2004).

Getting the Bogotá population accustomed to paying for waste collection services has been one of the strongest challenges faced by public authorities (interviews with ANR president and UAESP technicians, June 2009). The absence of a paying tradition for public services is one that directly affects waste pickers and helps explain why the recycling activity has not been considered as a service for which citizens should pay. For twelve years Edis provided the services of waste collection and transportation through 20% of the property taxes collected by the District. Service fees were not based on the quantity of waste produced nor on the distance of transportation to the final dumpsite; in fact, Edis authorities agreed in that it was not feasible to determine the amount of waste generated per household, due to fluctuations in time, weather, holidays and socio-economic conditions of households (Sylvestre, 2004, 127). The cleaning fee was finally created in 1970 and was implemented in the following year, with the objective of having its users pay for the amount and quality of services they were consuming. Waste and cleaning fees were unified with the sewage fee to force people to pay for the former services. However, according to Sylvestre’s estimates, less than half of the population paid their fees in 1988 and a little more than half (55,5%) paid their fees in 1993. The collected funds were not sufficient to cover the operating costs of Edis, and had to be complemented by public subsidies from the District of Bogotá.

Furthermore, as explained earlier, Edis' performance was deficient and led to the environmental emergency of 1988.

In the first two contracts signed with companies Lime and Ciudad Limpia, the District paid per ton of waste that each company collected. The idea was to incentivize companies to collect as much waste as possible from the streets and prevent the city from having another environmental emergency. The concessionaires proved to be more efficient than Edis in cleaning the city; they had less staff, better equipment and collected three times as much waste as their public counter-partner. In this context, it seemed that "the privatization of the provision of waste was an accurate decision for Bogotá"³¹ (Sylvestre, 2004, 132).

The financial system of compensation for waste management services, which was designed by the main contracting firms, has set an even stronger barrier for the integration of informal recyclers. During the transition to privatization, the District implemented a new system of financial compensation to manage the contracting of the four private consortiums operating in the provision of cleaning services. Given that the District applied cleaning fees through the stratification system, cleaning zones with higher income households brought more revenue (from cleaning fees) than others. Therefore, the companies that served the

³¹ Among the reasons that led to the closure of Edis and favored privatization instead, the Bogotá District found that Edis produced significantly higher costs per ton of waste compared to the private sector and it was not financially sustainable. Even though these reasons were partially true, further research executed by Sylvestre (2004) shows that in 1992, Edis did indeed spend 66.602 pesos per ton of waste versus 18.492 pesos by private companies, but they do not acknowledge that Edis' total cost number used to estimate the total cost per ton did already encompass the payment made to both private companies. Additionally, she finds that in addition to the inefficiency and corruption, the main reason that made Edis unsustainable financially was the fact that there was a great portion of the population not paying for these services, and the District did not control the situation in any way.

wealthiest areas (e.g. Ciudad Limpia) collected more earnings than the companies that served in lower income areas (e.g. Lime). Companies with a surplus received a fixed percentage of the total income (with no upper boundaries on the total profit that they could gain) and put the remaining value in the Compensation Stock (Bolsa de Compensación). Companies with a deficit in revenues received an additional income (according to the number of cleaning zones that they served) from the Compensation Stock. Eighty six percent of the cleaning tariffs were used to pay companies for the provision of their services.

Privatization and the new financing system were more effective than the previous public system in that significantly increases the number of payers/consumers. The possibility of incrementing the companies' profit unlimitedly, incentivized them and the Enterprise for the Commercialization of Cleaning Services (Empresa Comercializadora del Servicio de Aseo-ECSA)³² to effectively collect tariffs from the city's users. Sylvestre's data shows that privatization did not necessarily expand the provision of this service at the time of the transition – as often argued. Between 1995 and 1999 the number of consumers increased by 62%, mostly because those, who were previously benefitted from this service but were not contributing to Edis, were now paying and registered in ECSA's consumer base. At the same time, waste collection increased by 14% -significantly lower than the number of users – which points at a less convincing argument regarding the expansion of the service provision under private management. Furthermore, the possibility of earning revenues without a roof was not a legal possibility according to the Colombian Constitution allows

³² This privately managed agency is responsible for collecting waste management fees and distributing the revenue among the four companies.

them to gain up to 16% of the total revenue from public services. In this case, the management waste management services in Bogotá calls for a careful revision of contracts of the private concessionaires (Interview with Ruiz, A., 2009).

The prices that companies charge for their services included direct costs of operation (according to the levels of efforts), administrative costs for each of their services (collection, sweeping, special cleaning programs) and indirect costs. This system compensated for the time, effort and expertise of private contractors but refused to apply the same principles to the recycling activities. Costs for each service vary and are based on the following elements: the volume of waste produced in each one of the sources, the distance between the collection routes and the landfill, and the conditions of the roads and infrastructure where waste trucks circulate³³. Sylvestre's data (2004), shows that the cost for waste collection was of 40,239 pesos per ton while for sweeping it was 146,826 pesos per ton. Given that recycling was not officially included in the privatization contracts, even after having been recognized by the law, it was neither practiced nor included in the distribution of costs and payments of the city's solid waste management plan. What is the most interesting when looking at the compensation model of privatized waste management is to see that recycling (and the presence and role of recyclers) was completely excluded from the District and concessionaires' understanding of waste management. The exclusion is evident not only in the description of their services but, most importantly, in the composition of their finances. Given that the cleaning tariff was officially created in 1970,

³³ Costs for sweeping, for example, are higher than for collecting, primarily because the former one requires more physical effort while the second one requires a split of efforts between households/ other waste generation sources, that conglomerate their waste and prepare to it to be removed, and the cleaning company that collects it, puts it in the truck and transports it to the landfill.

and was universally enforced only in 1994, paying for waste collection has been a relatively new practice in Bogotá. “People are not used to paying these things and they are certainly not familiar with the idea of paying officially paying recyclers”, mentioned Professor Cáceres from the Javeriana University. Furthermore, the absence of recycling within that service explains why society is reluctant to pay for recyclers’ services (in addition to the standard service) and why the District has not introduced it, to this day, into the official cleaning tariff.

ENDA’s estimate of costs for recyclers proved that the collection time and the sorting efforts (which require more time and effort than standard collection and less than sweeping) amounted to 9.3 million pesos per year (Sylvestre, 2004). In other words, recyclers saved the District and the city of Bogotá approximately 46.5 million pesos between 1995 and 1999. The complete exclusion of recycling as a component of the waste management service in this first stage of privatization became a structural barrier that prevents recyclers from being formally included in the current waste management system. Therefore, they are not compensated for their time, work, efforts, experience and knowledge in the same way that private concessionaires are compensated for potentially similar assets – as announced in the financial model proposal that the four concessionaires presented to the District at the beginning of their contracts (cited earlier). Looking at the compensation system of private consortiums, there was no financial space or opportunity for recyclers to access a share of the cleaning tariff in exchange for their efforts, as the distribution of total revenues was designed to be split among the four contracted concessionaires that executed the standard collection, transportation and final disposition of waste.

4.6 Bidding for a City Contract

The first bid for cleaning contracts took place in 2002. The Association of Recyclers of Bogotá prepared to compete for a contract as providers of cleaning, collection and recycling services. They relied on Law 142 of 1994, which stated that the state would “support and promote the people who execute public services” (Art. 3.1) and assure them “the management and acquirement of resources” (Art. 3.2). Having formalized the nature of their association and having acquired a legal status as a private enterprise, they complied with all of the conditions stated in this law to become a cleaning service provider. With the help of McKinsey Colombia, ARB prepared a business plan and proposed it to the District of Bogotá for the 2002 bidding competition. To their surprise, however, they encountered several legal obstacles and were granted none of the city’s six cleaning areas. For one, they were not eligible to compete for a contract because they did not comply with Article 17 of the previous law which stated that “the companies of public services are societies by stocks whose objectives are the provision of the public services described in this law”. ARB held the legal position of a cooperative, but it was not a stock company and was automatically removed from the bid competition. Recyclers were confined to work in (in accordance to Art. 15) in the smaller municipalities outside Bogotá as well as in rural areas closer to the city. Law 142 was explicitly exclusive because it allowed only that societies of capital to provide services in the larger cities; cooperatives and smaller associations could not formally compete for this business in the metropolitan cities. This condition, of course, meant that recyclers had much less waste to collect, less materials to recover and, ultimately, less income and fewer opportunities to leverage recyclers’ working conditions and their real participation in the solid waste management system.

The second obstacle that recyclers faced was Bogotá's Terms of Reference for the bid competition which, according to Lawyer Ruiz (2009), were extremely specific on the requirements regarding the competitors' capital and equipment. "The rules of the game were so closed that it was impossible for recyclers to enter the bid competition; if they could not enter the competition and could not win a contract, the entire privatization of this service was turned into a death sentence for these people (recyclers)" (Ibid, 2009).

Both the law and the Terms of Reference for the 2002 Bid Competition left recyclers neither with the possibility of formally providing their services nor of continuing to work informally. This time, however, they encountered a third obstacle that affected ARB as well as the rest of the recycling population. Law 1713 of 2002 mandated that waste became private property of the concessionaire companies once it was taken out of the private space and placed onto the public space (streets, public garbage disposals, etc). This law explicitly excluded and criminalized the activities of recyclers as their access to waste was considered a theft³⁴.

4.7 Legal battles as a mechanism of inclusion

These obstacles trapped ARB and the rest of recyclers in a situation in which they could not compete for the provision of public services as a formal cooperative and could no longer access waste through their informal mobilization. They had been displaced both from the formal and informal realms of waste management; most importantly, they had been denied

³⁴ Ironically, this law had contradictory functions. On the one hand it recognized recyclers and acknowledged the environmental contributions of their work for the past 60 years; on the other hand, it cut recyclers' access to waste in the public space and did not mandate cities to include recyclers in the recycling system.

all possibilities of working in the only field that, by force, they had specialized in and lived off for the past five decades. This situation incentivized the ARB to make an aggressive push by moving forward two consecutive legal cases: the first was to correct Law 142 and the second was about taking the local government to court based on the allegation that they were being unfairly excluded from the bidding competition. Prominent Colombia lawyer Adriana Ruiz accompanied the ARB in this endeavor. She has dedicated her professional career to help Colombian waste pickers break the “traps of poverty” established by the legal system and defend their rights to have the minimum survival. Ruiz claims that “If one takes away the rights of competition to the people that one has forced to become entrepreneurs there will never be reduction of poverty “ (July 2009). Recyclers could not accept that they were being obstructed from developing their human capabilities and attaining some kind of decent livelihoods through their work in recycling. And, they were enraged by the fact that they were not offered any other alternative.

The first success of recyclers’ battle came through when the court ordered an amendment in Law 142. The Constitutional Court emended the law by stating that non-profit organizations were equally conducive to the efficient provision of public services as anonymous (capital) associations. Furthermore, ARB and Ruiz went beyond Law 142.

They took the District to the Constitutional Court alleging the following:

“equal treatment in face of the law was violated to the point of denying waste recyclers the mere opportunity to access and compete within the business market of privatized public services...we argued that those provisions were founded on the false premise of the higher efficiency of stock corporations as compared to non-profit organizations of either a civic or a solidarity nature. By doing so the legislator had confined the poor to life in poverty, i.e. non-formalization and limited growth by means of normative exclusion. Regulation had thus introduced a market barrier that, without even considering the real possibility of success in the bidding, excluded and refrained these poor citizens from enjoying their right to equal entrepreneurship opportunities” (Ruiz, 2009)

Allying with an influential and highly knowledgeable lawyer in Colombia proved to be a key (and later for recyclers in Cali) in getting becoming well equipped to fight the local government and the State. The Constitutional Court did indeed consider and review their case promptly. They later confirmed that their case was related to an issue of inequality of rights and inequality of opportunities of human development. Recyclers also petitioned a protection writ to safeguard their rights and access to employment as a way of ensuring that local authorities give them equal opportunities to work on recycling activities and profit from reusable waste. This measure ensures that the District provides measures to mitigate the social impact that the privatization of this service had incurred on informal waste pickers³⁵. Moreover, the ARB argued that by not considering recycling as an independent service in city contracts, the District was condemning organized recyclers to the precarious street separation of waste, and were reinforcing their exclusion from the numerous working possibilities coming out of waste, “which is the only universe they know well and where they can be competitive” (Ibid). Recyclers continued to claim that when the District speaks of “supporting recyclers” they were in fact supporting a recycling culture in the city of Bogotá but were not addressing the social actors behind those activities (T-724, 2003).

³⁵ In Colombia a writ of protection of this kind is understood as a legal instrument “for the effective and immediate protection of the fundamental constitutional rights, when these are violated or threatened by an action or an omission of any public authority or a particular in cases determined by the law. This said, the effectiveness of the action resides in the possibility that, if the judge can see that there is indeed a violation or alleged threat, he/she gives an order oriented towards the current and true defense of the right in dispute... Nonetheless, if the condition of the fact that produces the violation or threat has been overcome, the constitutional tool of defense loses its reason of being...” (T-724, 2003).

The petition for a writ of protection was originally taken to Bogotá's Municipal juries (no. 15 and no. 1) where it failed to succeed twice. The Municipal juries decided that the allegations on violation of human rights were invalid. The District argued that the bid competition of 2002 sought to contract companies that provided the services of collection, sweeping, cleaning and transportation of solid waste, as well as the gardening of public spaces, but did not consider recycling as a main service. Therefore, the jury found that recycling was not a service that was being evaluated at the municipal bidding process of waste management services. Moreover, the jury defended the District of Bogotá by reminding recyclers that the terms of reference did indeed incorporate measures of inclusion through a "compromise of integration of the displaced and the recycling population". According to the jury and the District, the selected concessionaires were obliged to employ 15% of their gardening employees from a list of displaced people and informal recyclers registered at the Social Solidarity Network and the District's Administrative Department of Social Wellbeing³⁶. However, by looking at this case, one can identify the rise of two of the main tensions that have perpetually troubled recyclers. On the one hand, the District – along with waste concessionaires – addressed integration of recyclers through the idea of turning them into employees rather than entrepreneurs of their own business. On the other hand, the District's approach to recycling was again taken from a sanitary, environmental and technical standpoint, as a way of reducing waste levels and solving issues related to landfill space. The social impacts of informal recyclers were

³⁶ The Social Solidarity Network and the District's Administrative Department of Social Well Being are social welfare programs designed to help displaced families and unemployed individuals become integrated into the economic activities of the Colombian society. Recyclers from the ARB were not registered in either of these programs, as they identified themselves as independent workers and entrepreneurs of the recycling business, and as members of the ARB cooperative, rather than unemployed and displaced persons (interview with ARB recyclers, 2009).

marginally comprehended and their decisions were far from addressing issues of socio-economic exclusion.

After having failed to attain a protection writ from the Bogotá Jury, Ruiz and the ARB took their case to the Constitutional Court and reinforced their claim by denouncing that local authorities had violated recyclers' constitutional right to the 'minimum vital'. This time, the case argued that by excluding recyclers from the possibility of gaining a formal city contract and penalizing their waste collection activities in the public space, the local government was cutting all of recyclers' access to their only means of survival³⁷. In response, the Court agreed with the ARB in that the local government was not protecting the claimant's rights by having private concessionaries hire groups of displaced and recycling populations. These employees would be hired for activities other than their specialized training and they would be sharing their placements with other vulnerable populations (displaced refugees). The Constitutional Court recognized the nature of ARB recyclers, not only as a vulnerable and excluded population, but as a group of people that had worked and contributed to society through recycling activities. In fact, the court acknowledged that the UAESP was "accentuating the conditions of marginalization and discrimination of recyclers" by handing the recycling of solid waste to private concessionaires, as indicated in the PMIRS and the current contracts. Additionally, the Constitutional Court questioned and nullified the decision of the Municipal Juries, but was unable to intervene in the bid of city contracts for waste management services, which took

³⁷ It is worthwhile mentioning that the Constitutional Court chose this case –out of hundreds – due to insistence and support letters from the Office of Colombia's Public Defendant and one of the members of the Constitutional Court. Lawyer Adriana Ruiz personally contacted these authorities and asked for their support.

place two months before the revision of the case. In this context, and with the unfortunate limitation of having revised the case after the bidding process, the Constitutional Court granted the writ of protection (T-247/2003) to Bogotá recyclers by ordering the local government to:

1) design policies of affirmative action to include vulnerable populations in their future contracting activities; 2) to include affirmative action policies to integrate Bogotá recyclers, specifically, in waste management contracts – given that their work experience was, and continues to be, directly linked to this service – so as “to attain conditions of real equality and compliance with the State’s social duties” (Resolution no. 3, T-274, 2003). This court case became the first and most important success of ARB recyclers – and of Bogotá’s informal recyclers who are equally protected by the protection writ – and a tool to pressure Bogotá authorities to open venues of negotiation and cooperation with these groups. Furthermore, this writ of protection acquired a national scope, paving the way “for the recognition of waste recycler co-ops as legitimate economic actors and potential public contractors in every future bidding process related to public cleaning services” (Ruiz, 2009). This writ became even more important in the past year (2009), when Cali’s recyclers used it to demand that their local authorities consider them in the bid for city contracts – after having closed and privatized the public landfill where they previously worked. This writ helped stop Cali’s bidding process and allowed for recyclers to organize themselves and present a proposal of inclusion in the city’s contracts.

As explained by Adriana Ruiz, this writ provides Colombian recycling groups with more leverage to demand their inclusion in cleaning services and contracts and to denounce if

authorities continue to discriminate against them and violate the Sentence T-274. This case shows that the law and the use of legal instruments can help vulnerable populations gain power in the political realm and pressure local authorities to come to common agreements, partnerships and inclusive policies. It is important to note, however, that the expertise and influence of lawyer Ruiz was essential for having this case reach the Constitutional Court and gain a sentence that can be more powerful than the local government's authority, local decrees, policies and plans. Likewise, the organization and persistence of ARB recyclers have made good use of the political space that they earned and have pressured their inclusion in the current policies and programs of the District's Recycling Program. I will analyze these policies in the following chapter.

4.8 Fighting Royal Competition: a New Chapter in Recyclers' Struggle

"I feel pity for the poor, but I also think, who asked them to do that: who sends them to stick their hands in the guts of a trash bag, and to get exposed to razors, used diapers and all of the disgusting things that one finds in them, instead of mounting a solid and millionaire company in the Free Trade Zone...

But they are all like that: they don't know how to do business. They don't know how to get approval from the ministers, or to be nice to mayors that turn their recently bought lands into Free Trade Zones. They don't even know how to buy lands. All they know how to do is to scavenge waste with their hands...

My dear friends, if waste generates money, the poor can no longer manage it, but the good rich people"

Daniel Samper Ospina, *Semana*, April 25, 2009

By June 2009 the struggle between recyclers and government authorities was not only persistent but that it had gained strong controversy in the past six months. In December 2008, the new Law 1259, better known as the Environmental Pact, was approved and signed by the President of Colombia, Dr. Alvaro Uribe and the Minister of the Ministry of Environment, Mr. Juan Lozano. The content of this law enraged recyclers and civil society alike. The Environmental Pact, which, according to the author, Mr. Juan Carlos Valencia from the Chamber of Commerce, was originated to promote good civil education of sanitation, ecology and hygiene, included an article that criminalized informal recycling. In

a very clear and explicit way this law threatened to penalize people who executed the following actions: “uncover and extract partially or completely and without authorization the content of trash bags and waste recipients once they have been placed in the public space for their collection” (Art. 6.6) ; “the manipulation of waste and rubble through unofficial or inappropriate mediums” (Art. 6.15). The punishments were set to charge fines between two and ten minimum salaries for each infraction to the individuals who break the environmental pact (Art.7).

Coincidentally, informal recyclers extract waste from trash bags placed in public spaces and transport them in non-motorized carts or on their backs, which according to the law would be identified as “inappropriate mediums”. Therefore, this law would directly penalize the work of all kinds of recyclers across the country. One of the lawyers of NGO Civisol, Dr. Arbeláez, explained that recyclers operate in the informal sector and not in the illegal sector and “when you move them from the informal realm to the illegal realm, you are turning them into criminals and you are inducing them to generate violence” (in Pirry, 2009). After a long and contentious struggle between Bogotá recyclers and the local government, where recyclers had finally gained voice and rights, the national government annulled those efforts through this environmental regulation. Despite the potential positive objectives of this law, the general opinion questioned the president’s ‘hidden agenda’. One of the most popular television programs, *Los Especiales de Pirry*, expressed that “the law would be great if this was Norway or Switzerland, but some of us think that here we should first solve issues of hunger... a law that penalizes a recycler with two to ten minimum salaries is not only abusive but is a poverty generator” (Pirry, 2009).

The environmental pact generated greater discomfort among recyclers, NGOs, professors, officials of the UAESP, the press and normal civilians because of the cruelty of the law and, more importantly, because of its association with political power. The timing of the pact was approved just a year before Bogotá's new bidding competition for 2010. This competition round was expected to have a new competitive member: the newly created recycling multinational company Ecoeficiencia, whose Colombian branch was recently bought by the sons of President Uribe, was being expected to be considered at the competition. Ecoeficiencia had also become the most threatening competitor for recyclers in the last year. Their multi-million company entered the market in 2007 and immediately got contracts with the industries of the Free Trade Zone in Bogotá³⁸ – these industries used to deliver their recycling material to ARB and other recycling cooperatives. As explained by Ecoeficiencia's manager, Tomas Uribe, “we provide a comprehensive solution; we don't focus only on recycling but we manage hazardous, water treatments... meaning we have a complete environmental package to meet the needs of each client” and this is why industries chose them to take care of their recyclable waste. He insists that the Law 1259 does not affect or benefit Ecoeficiencia because they do not deal with the public space; they are a private entity and recycle in the private space. For recyclers (and civil society), however, being the sons of the president, and having influence over important industrial areas such as the Free Trade Zone gives Ecoeficiencia an unfair advantage over the private management of recycling. What concerns the most is that waste management is a public responsibility, and recycling is a part of waste management that has to be regulated by the State. The latter scenarios show that while informal recyclers may be harshly penalized for

³⁸ It is important to mention that the sons of the President, Tomás and Jerónimo Uribe had previously invested in the construction of the Free Trade Zone.

collecting recyclable waste in the public space, Ecoeficiencia and other private recycling companies can privately arrange contracts with industries, take over the market without following any kind of regulation on behalf of the State. Lawyer Ruiz questions the role and political will of the State:

“If the State regulates it (waste and recycling) and if waste is property of the State, why is there not political will to create a public policy that generates returns from recycling and helps reduce the poverty levels of recyclers. It is a bad image that the lack of state regulation allows for the private sector to take over recycling; and even a worse image if the actors involved in this sector are the sons of the person who creates the rules of the game” (Pirry, 2009)

Recyclers in Bogotá and the rest of the country have rejected this law and have united to ask the constitutional court to suspend its validity. During the summer of 2009, recyclers received wide media attention and citizens seemed to respond in solidarity to this population. Around the same time, Cali recyclers took their local government to court and managed to suspend the bidding competition so that they would be included in the process. For the time being, it seemed that the general public had been finally exposed to the issues of recycling and the struggle of this population. Law 1259 continues to be suspended until proper revision. The most disappointing aspect of this last event is that, despite the efforts and relative successes that recyclers had attained in the past decade, the state maintains a weak stand. Rather than setting policies that take advantage of the recycling sector and reduces the city's waste, that state could promote sustainable practices and employ one the most vulnerable group of Colombians. This would not only contribute to resolving the issues of waste and landfill management, but would establish an environment of justice, a progressive vision of development and a model in which policy decisions favor the common good at the stake of smaller privileged companies instead of the opposite.

5 Designing Inclusive Policies: Contributions and Challenges

A long and continuing process of over ten years that led to a closer relationship between local government entities and organized waste pickers of Bogotá. This battle consequently resulted in the creation of a number of inclusive policies that focus on recycling and respond to some of the petitions of waste pickers. By 2007, the local government of Bogotá had integrated recycling into their waste management system, and had delivered the management of the first and only recycling center to waste pickers. Additionally, the local government complied with the protection writ T-279 and developed minor policies of affirmative action to ensure that waste pickers have access to waste and to keep supporting their technical training and entrepreneurial initiatives. Both the local government and waste pickers joined together in producing these dispersed policies,. However, there is still a structural void that allows for informal waste picking to be widely practiced while a reduced number of recyclers have upgraded their work and lives. On the contrary, their work conditions and access to waste has been greatly affected by the booming entrance of formal enterprises working on the collection and transformation of recyclables.

Nonetheless, the creation of these policies shows that in Colombia, the struggle led by organized informal recyclers of Bogotá, guided the state into understanding and visualizing that the management of solid waste is made up of three components: the social, the economic and the environmental. Informal recyclers became visible only after the state acknowledged these approaches of waste management were adopted by the state. The conventional economic approach bypassed their existence and their contributions to reducing waste for almost four decades. Therefore, government authorities reached the

conceptual agreement that “the idea is not to fight for waste but to produce a win-win model that includes all of the recyclers and the environment. “The state needs to have incentives that support the sustainability tripod, for the economic, the social and the environmental” (Cecilia Rodriguez, former Minister of the Environment at the First World Congress of Recyclers, 2008). Following these lines, the local government attempted to include recyclers in the negotiation tables for the design of the Solid Waste Management Plan (2004).

Despite stumbling on disagreements and critics on the exclusion of recyclers from this process, the local government came up with four main programs that address recycling and recyclers in 2004. Some of these policies were initiated under the System of Organized Recycling (SOR) and supervised by the Administrative Unit of Public Services (UAESP). With the change of political administration in 2004, under the leadership of Mayor Eduardo Garzón, the SOR turned into the District’s Program of Recycling (DPR) and continued to develop and implement recycling policies in accordance to the Protection Writs of 2004. The four main programs that the DPR has chosen to focus on for the past four years are:

1. Education Program: This program was designed to educate citizens on the value and the processes of recycling. Citizens must contribute to the recycling system by separating waste at the source and facilitating the collection and recovery process to the District (UAESP, 2009). The program is mainly launched through the city’s recycling webpage, *www.Bogotárecicla.org*.

2. The Selective Collection Route: This parallel system to the conventional waste trucks was designed to follow a separate route twice a week and collect recycling materials that would be later deposited in the recycling centers instead of the landfill.
3. Recycling Parks: The SOR proposed the construction of four recycling parks. These areas would be used to store, classify and commercialize the recycling material collected through the Selective Route. These parks would employ organized and non-organized recyclers. This proposal, however, was brought down by the communities surrounding the prospective parks, who feared that recyclers and recycling activities would deteriorate the real estate value of their properties and would attract crime and illegal activities to their neighborhoods (UAESP, 2009; ARB, 2009)
4. Training Programs: The District created a set of training programs to improve recyclers' organizational and entrepreneurial skills and advance their knowledge on the proper and sanitary treatment of recyclable waste.

In theory, these areas of work complement one another and create a system that successfully includes informal recyclers into the formal system of waste management and recycling. While the education program teaches and promotes citizens to classify waste in recyclable and non-recyclables, the selective route collects the former material and delivers it to the city's recycling parks. Once the material is delivered to these parks, recyclers manage and commercialize it in order to pay for the maintenance of their facilities and the salaries of their workers. Lastly, the training programs were designed to provide recyclers

with further knowledge and managerial and organizational skills that would prepare them for better employment opportunities – be it by helping them strengthen their own cooperatives and business initiatives or by inducing them to work with private waste consortiums.

Unfortunately, neither of these areas has been successfully accomplished thus far. The UAESP has made little advances in translating the policies that came out of the struggle into practical actions and has stumbled across policy contradictions that slow down the processes. Several university professors who have been involved in organizing and empowering recyclers in the past decade – at the Javeriana University and the University of Environmental and Applied Sciences in Bogotá – and the recycling leaders of ARB are critical at the District’s inability and/or disinterest to push the DPR forward, to include recyclers in the official system and engage citizens in an official recycling culture. UAESP and DPR workers, on the other hand, claim to be pushing the DPR agenda forward and to be open to working closer with recyclers. In a letter directed to Nohra Padilla, the DPR asserts their collaborative position:

“As a response to the social policy and the order established in the Protection Writ T-724 of 2003, and in agreement with the characteristics of the recycling population, the District Administration and the UAESP, within the DPR, move forward the strategy of social inclusion of the recycling population...The UAESP has responded to the concerns exposed by the recycling organizations in written and verbal forms in several opportunities. The organizations have been part of the processes implemented by the Unit from the very beginning and the ARB, in particular, has been assisted with important public resources.” (April 3, 2009, UAESP).

In my interviews with DPR officials, they showed enthusiasm for the programs they were developing. They agreed in that their knowledge on the ‘culture’ of waste pickers was limited and that they needed to acquire a more profound understanding of the way they operate, the way they move in the city and the way they identify with their work. In July of 2009, the DPR was planning to hire twenty psychologists to work closely with organized

and non-organized waste pickers in a greater effort to formalize their working situations (Interviews UAESP, July 2009). Authorities were willing to work further with recyclers and to reinforce the policies of social inclusion by investing more public resources on studying and training recyclers; however, I noticed that while the local government focused on training and understanding informal recycling, they do not tackle the core structural issues that interfere with the successful implementation of current policies. When analyzing the ineffectiveness of current policies and programs implemented by the local government, a constant structural problem inherent to the system arises: recycling has not been officially incorporated as a mandatory service within the waste management system, but rather as a voluntary and complementary activity that operates in the free market and is not properly regulated as a public service.

5.1 Citizen Education Programs and Campaigns

In 2006 the UAESP designed a “creative and strategic campaign to educate citizens on the responsible and environmental management of solid waste and its separation at the source” (First Permanent Commission of the Development Plan, UAESP, 2008). The unit contracted the publicity firm Young and Rubicam to undertake this mission. Between November of 2007 and February of 2008, the firm and the local government launched a series of campaigns that promoted recycling through slogans such as “Algo bueno está pasando en Bogotá” (Something good is happening in Bogotá) and “Reciclar es una gran idea” (Recycling is a good idea). They advertised the campaign through the media (radio, TV and press), publications (flyers, stickers and note pads) and in public spaces (Transmilenio stations, commercial centers, parks and main avenues). One of the main strategies, and the

only one that remains sustainable, was the launching of an interactive webpage Bogotá Recicla (Bogotá Recycles). Despite the campaign's efforts to disseminate information about recycling, the local government has not been successful in attaining support and awareness by citizens. This is partly because the UAESP has neither given continuity to the recycling campaigns nor to more effective forms of education. Additionally, while these campaigns were launched through the media, the local government had an unclear vision of how a 'recycling system' would operate. The UAESP had yet not established the recycling infrastructure that was needed to complement the recycling information that was being spread through these campaigns. By February of 2008, the Selective Route, covered a little over 3% of the total users of waste management services. Consequently, citizens found that their efforts to recycle were often in vain, as they noticed that the "white bags" (bags for recyclable waste) were not being picked up periodically and were instead polluting their streets and becoming targets for the "informal and improper collection of street recyclers" (interview with residents of the Cedritos neighborhood in Usaquén, June 2009)³⁹.

The efforts to educate citizens about recycling in the city were mainly concentrated in the Bogotá Recycle webpage, which may not have been enough to make a city of eight million inhabitants aware of its value. More importantly, however, the effort that the city has made

³⁹ During my 7-week stay in Bogotá, I constantly asked citizens of their awareness of the DPR and the Bogotá Recicla campaign, but the answer was often negative. Professors from several universities, who worked and were interested in the recycling, were also unaware of this program/website, and those who knew about it confirmed that the UAESP had done little to disseminate this information.

on the promotion of recycling is only a symptom of a much larger void: a policy that adopts recycling as a structural element of Bogotá's management of waste.

5.2 The Route of Selective Collection

The Selective Route (exclusively for recycling) is an additional service of the waste management services executed by the private concessionaires. Unfortunately, as effective as the idea of a Selective Route may be, the local government and private concessionaires still treat it as a secondary – and less important – route. This program, which was implemented in 2006, is carried out by Bogotá's four private contractors and it collects recyclable waste from houses and industries – after citizens separate waste materials from non-recoverable waste and deposit the former in white bags. Selective Route trucks only collect white bags.

The local government, in alignment with Resolution 114 of 2003⁴⁰, included this program in the contracts of private concessionaires. Each one of the private companies of waste management had to allocate a number of trucks and routes to perform this service in their respective areas of operation – and in addition to the standard waste collection service. These routes are expected to run six days a week to collect the white bags (instead of the black ones) and deliver them to the Recycling Center La Alquería. The UAESP claims that

⁴⁰ According to this decree, cleaning companies were obliged to design, develop and execute plans to encourage citizens to separate waste at the source; to collect the recyclable waste, through a selective route that would replace a weekly ordinary route, and deliver it to the assigned recycling center or warehouse. By the time I was in Bogotá, companies were already operating the selective route.

this does not represent an additional cost to the local government nor to citizens. The performance of this operation is part of the concessionaires' contracts, but does not signify an additional fee. Moreover, private concessionaires were expected to promote the Selective Route service through education and information campaigns as well as proper training of their staff.

By the summer of 2009, the Selective Route was operating sub-optimally. According to UAESP officials and La Alquería recyclers, the Selective Route, since 2008⁴¹, operated for only 33% of its users and was collecting only 12 tons of recyclable waste per day two or three times a week (out of the 7200 tons of waste/day that Bogotá generates). The UAESP was aware of the underperformance of this program and was hoping to extend this service to 50% of the city in 2010, by investing further on media advertisements and by adding music to the selective route trucks⁴². The 2008 evaluation of the DPR stated that there were 73 routes per week; 6 of those routes operated once or twice a day – for larger neighborhoods – between Monday and Saturday (Informe Final Contrato 216, DPR, 2008). The Selective Route diverted 330 tons of recyclable waste monthly from the Doña Juana Sanitary landfill to the Center La Alquería in 2008 (Ibid) and supported the work of the recyclers employed in this center.

Despite the great potential of the Selective Route in improving the sustainable management of waste and providing decent working positions for informal recyclers, there are many

⁴¹ Phase II of the Selective Route project started in February 2008 and operates 6 days a week.

⁴² These were measures that DPR officials at the UAESP were planning to incorporate into the program at the time of my visits in June/July of 2009.

factors that have hindered its successful performance. The first and most visible aspect is that there are currently two parallel recycling systems: the formal and the informal system. The former one is run by the District, the private contractors, and in collaboration with the recyclers of the Center La Alquería; the latter continues to be executed by informal recyclers who work on the streets and now take advantage of the Selective Route. Street recyclers know the SR's schedule and start their collection routine a couple of hours prior to the SR truck; they collect the white bags and reduce the amount of recyclable waste that arrives to La Alquería. Observational research in an upper class neighborhood called Cedritos, show that street recyclers and SR employees know each other, tolerate each other's presence and even negotiate and exchange recycling materials. Additionally, private waste companies put little attention to this program. According to the SR evaluations for 2006 and 2008, the Selective Route in most of the companies (all three except Aseo Capital) ran at an unreliable schedule, were unnoticeable to citizens, did not collect all of the recycling material, did not make a proper use of trucks and, in on occasions, sold this waste for personal benefit. These faults generated perceptions of distrust towards the SR, lack of seriousness and inefficiency as well as small participation in the program on behalf of citizens who claim to not know enough about this service (Informe Final Contrato 216, UAESP, 2008). Furthermore, the 2008 evaluation of the Selective Route notes that there is little follow-up of the Selective Route and no political control on whether the private concessionaires are fulfilling their commitments to recycling.

ARB recyclers, academics and NGOS argued that the lack of seriousness of the SR trucks represents the little commitment that private companies have to the recycling cause. "No

authority really controls or questions their performance” said Professor Opazo from the Javeriana University while others claim that there is no political will to implement the SR successfully because its success could harm the profitability of the private contractors who run the Doña Juana Landfill. The landfill’s fees are based on the quantity of waste that they receive and treat in the landfill. Waste collection companies, on their side, did not promote the SR or train their staff adequately; their efforts in this area are lower given that they are not financially compensated for this portion of the cleaning services that they provide. Furthermore, the Selective Route has not turned into an employment opportunity for informal recyclers, as private companies often require minimal education levels that streets recyclers do not meet. Private companies undermine street recyclers’ expertise and knowledge in sorting recyclable waste, and are more inclined to hire inexperienced bachelors who often fear and are disgusted by waste (Interview Cáceres Aguirre, Julio 2009).

Several experts on the topic, both from the academic and the NGO sector, claim that while the landfill private contractors and the waste companies are closely linked, local authorities protect the private sectors’ interests and do not wish to control or reinforce the development of the Selective Route and other recycling efforts. There are no empirical proofs to support these claims other than local authorities’ soft position regarding the control of the performance of the Selective Route and their unwillingness to create a recycling system with the labor force of informal recyclers. The unsuccessful development of the SR – which

has failed to promote itself city-wide and collect a justifiable amount of recycling waste⁴³ – has also hindered the possibility of implementing larger recycling parks. The potential of an innovative idea like the Selective Route could substantially increase the levels of the city’s recovery of reusable waste, reduce the amount of ordinary waste that arrives to the landfill and employ a large number of informal recyclers. This potential has been hindered by a lack of political will on behalf of authorities and the absence of commitment on behalf of private concessionaires. More importantly, both of these voids come from the absence of a comprehensive policy that puts recycling at the crux of waste management and recyclers as the most relevant labor force to practice such activities.

5.3 Recycling Parks

According to the UAESP, the recycling centers were the core infrastructure of the recycling system of the city. These large infrastructures were expected to serve as a deposit for the city’s recyclable material. They were planned to be built gradually as citizens became better acquainted with the recycling practice and the levels of recyclable waste increased. Inside these centers, recyclable waste would be stored, classified and prepared for commercialization. As described by the UAESP in 2006, this project wanted recycling parks to “be recreational and pedagogic spaces, clearly embedded in the city, that could connect to the urban projects of modernization...and change the way citizens perceive waste. In fact, these Recycling parks will have environmental classrooms and exhibition

⁴³ The Selective Route covers only 33% of the city according to official information at the District ; however, professors of the Javeriana and the Applied and Environmental Sciences University, the members of the NGO ENDA and my own assessment point at the fact that the Selective Route does not collect regularly, people are often unaware of this system and/or of what and where to recycle.

salons that attract schools and universities, among others, so that they can learn about the treatment and management of recyclable materials...” (Informe Final 2006-07, UAESP, 2008). Additionally, they were properly designed to isolate their internal processes of waste management by a dense population of trees and botanical gardens. Most importantly, these recycling parks have an essential role in the inclusion of informal recyclers.

“...as a response to the Protection Writ T-724 of 2003...the Recycling parks are a tool of support for the recycling population, as the entire recycling chain has been organized around them, and it allows for their economic participation in the system and favors alternatives for generating income through productive projects. In this context, the Recycling parks make the affirmative actions for Bogotá recyclers viable and concrete.” (Informe 2006-07, UAESP, 2008)

The recycling parks would be managed and operated by recyclers, which would have made an important impact in the employment levels of this population – although number of employment placements inside these centers was unknown.

Local government authorities pushed this initiative forward and prepared the design, approval and relevant permits for the construction of the first two centers: El Tintal and El Salitre. Unfortunately, they were opposed by the respective communities and forced to cease any further advances of both projects. El Tintal⁴⁴, which was ready for construction, was stopped under the communities’ claims that it would “damage the health of their environments” (UAESP, 2009). Such opposition responded to the traditional association of

⁴⁴ The local government allocated \$ 8.570.147.578 Colombian pesos (approximately 4,761,193 USD) for the construction of the center El Tintal. It had all of its property and construction permits in order and was ready to begin construction.

recycling, street recyclers and crime, illegality and filthiness⁴⁵. The local government pursued an important policy of inclusion through the proposal and design of these centers, but failed to adequately educate citizens on the value of recycling and recyclers, and to quickly respond and defend these projects in face of communities' opposition. The obstruction of these projects made a defining impact in the lack of a positive progress of the DPR and a large-scale inclusion of informal recyclers in the waste management system.

5.3.1 A Co-Management Model: Center La Alquería

In face of the unsuccessful development of the Recycling Parks, the DPR, in conjunction with the University or the District, came up with the idea of creating a small scale pilot project of what a recycling park would look like. Government authorities built a small recycling center, La Alquería, in Southern Bogotá as the first deposit for the reusable waste collected through the selective route. Also, this project became the first practical experience of a partnership between organized recyclers and the local government. Up until July of 2009, this facility was co-managed by the UAESP and a Temporary Union between the heads of three recycling associations, ARB, ARUB and Arambiental⁴⁶. This center was the

⁴⁵ In my several interviews, Professors from the Javeriana University and the University of Environmental and Applied Sciences explained that communities' opposition may also be connected to the influence of private concessionaires of waste management who also opposed the recycling parks project. They assert that these private companies were powerful actors behind the communities' protests.

⁴⁶ ARUB and Arambiental were newer associations than ARB. ARUB, in fact, was created in 2007 by the District. It was the product of the workshops on association that was designed to help non-organized recyclers create cooperatives and associations and run a sustainable business. According to UAESP officials and recyclers that I interviewed, it was one of the very few examples of an association that managed to stay and work together after the workshop ended. This had to do with the fact that ARUB received support from local authorities and was involved in the management of La Alquería.

only one that the District was able to build after citizens' opposition to recycling parks. Its scale was small but it was useful to achieve three main objectives: 1) to show how the District, recyclers and private companies can work together and improve the recycling system while benefiting the different stakeholders (formal and informal) of the recycling chain; 2) to show the city that waste pickers can indeed manage a clean, safe and a self-sufficient recycling facility without damaging the surrounding environment⁴⁷; and, 3) to test and evaluate the performance of the Selective Route and make suggestions on how to improve the sorting and collection of recyclable materials.

Like the recycling parks described above, the La Alquería's role was to receive, separate, classify and commercialize the recyclable waste that arrived through the Selective Route. The UAESP and the University led a bidding competition to select the recycling associations that would take over the management and operation of this facility. According to Nohra Padilla and her colleagues at this center, the ARB was given priority for all their efforts and political involvement in defending recyclers' right to work in the past decade. The other two associations had been organized more recently through the assistance of the UAESP and the University.

⁴⁷ The need to prove this derives from prior protests against the District when it was announced that they would open larger recycling parks in residential areas. The social stigma over recyclers and their relationship with crime and filth drove communities to fear that these centers would bring crime and other negative externalities to their neighborhoods (interviews with District Officials, recyclers and ENDA).

La Alquería is a small scale project that has provided the local government and organized recyclers with experience in handling public recycling facilities, but it has neither helped to improve the city's recycling program nor to enhance the working conditions of most street recyclers. Moreover, the ineffectiveness of this pilot project, which is linked to the ineffectiveness of the Selective Route, may potentially harm the image of recyclers, the public understanding of recycling and compromise future large-scale possibilities of including recyclers within the official system of waste management. The La Alqueria employs 45 recyclers (members of the participating associations) and each one of the three associations holds a percentage share of the job placements and recycling waste within the facility⁴⁸.

Inside the recycling center, waste undergoes a process of separation, classification and accumulation for its later commercialization. The revenues that derive from selling this material are expected to pay for the maintenance and salaries of the center. Currently, however, La Alquería does not operate at its full capacity, and continues to depend on the District's subsidy for several reasons: even though the center has the potential capacity to store 60 tons of waste per day, it only receives 12 tons per day; and, the commercialization of materials varies greatly as their prices are determined by the market, which makes it an irregular process for collecting income⁴⁹. The UAESP provides no assistance in the

⁴⁸ ARB has a 60% share of the La Alquería; Ambiental has a 25% and ARUB has a 15% share. Shares were distributed according to size. ARB, however, negotiated its larger share and leadership of the Center based on its leading role in fighting, confronting and negotiating with the District for over a decade.

⁴⁹ Additionally, recyclers claim that prices fluctuate pending on the supply. When supply is vast, industries prefer to purchase plastics coming directly from its manufacturing industry while in other occasions they

commercialization of materials. During the summer of my visit, for example, La Alquería had a pile of almost a month's worth of cans and paper. During this time, industries were demanding much less raw materials (a behavior that responded to the global economic crisis) and were more inclined to purchase their materials from the metal and paper industries directly (interviews with ARB, June 2009).

La Alquería is a clear product of a collaborative partnership between recyclers and local authorities. This initiative has generated 45 direct employment opportunities and sets a model to be reproduced by larger recycling centers. Additionally, the infrastructure, the technology and the internal organization of this center has served as a training space on entrepreneurial activities and technical formation for 387 organized recyclers. Another 680 recyclers have undergone evaluation and certification of their recycling competencies in this center. La Alquería's potential, however, seems to be limited by weak complementary policies on citizens' education and collaboration, selective collection of recyclable waste and, ultimately, of a strong comprehensive policy that institutionalizes recycling as a crucial pillar of the waste management system. Perhaps, if this were the case, as it is in cities of developed countries, the local government would have the political power to move forward the construction of recycling parks as well as a full implementation of the Selective Route.

purchase it from China. Recyclers do not have the knowledge or access to price information and are generally not up to date.

5.4 Inclusive policies of affirmative action

Explicit policies for the social inclusion of the informal recycling population were designed by the UAESP after the mandate of the Protection Writ T-724 of 2003. The District formulated five programs of inclusion on the following fields⁵⁰: 1) the creation of associations among non-organized recyclers, 2) sessions on entrepreneurial and organizational strengthening, 3) technical, entrepreneurial and social assistance for the formulation of business plans, 4) the eradication of child labor and 5) certification on recycling competencies.

Since 2007, the District has been implementing these programs and helping associations create their own networks while guiding their internal organization. I will refer to the programs that have advanced at a larger pace and for which I was able to collect information easily. The training sessions on organization, entrepreneurial and technical skills, as well as the certification procedures were the most widely implemented programs. Before 2009, the District put greater effort in improving recycling associations' internal organization and in creating business plans that would allow them to move forward in the recycling chain by adding value to their products and increasing their income potential. Additionally, between 2007 and 2008, over 950 recyclers received a working certificate that was expected to facilitate their entrance to the labor market.

⁵⁰ Only second grade organizations of informal recyclers can currently access the District's programs of inclusion.

5.4.1 Training Programs

The training programs, although useful and with good levels of attendance (UAESP, 2009), have been relatively ineffective. On the one hand, the head of the Evaluations Department at the UAESP explains that training informal recyclers that have participated in the recycling activities for decades is a vain procedure. Most of the time instructors learn from recyclers rather than the other way around (interview with Mr. Martinez, Head of the Evaluations Department, UAESP and ARB, 2009). In fact, recyclers from the ARB refused to attend these sessions because they “lost working time and potential income for sessions that taught us very little” claimed the administrative secretary of the ARB. “It is hard to find the time to come to these sessions when your survival depends on the daily work and the daily income that you get” said a member of ARUB. On the other hand, while the purpose of these training sessions is to better prepare informal recyclers for the job market, certified recyclers cannot find employment opportunities. Given that formal recycling activities are executed by the private concessionaires of waste management services, they become informal recyclers’ main and only employer. Unfortunately, however, these companies are inclined to hire employees that fulfill certain educational standards that street recyclers lack or they choose to contract their own staff for longer hours instead of making new contracts (Director of La Alquería on behalf of the District, 2009).

Furthermore, the biggest failure that the local government is the inability to develop is a formal mechanism to give equal treatment/opportunities to recyclers as they do to private concessionaires. As long as recycling is not officially conceived as waste management service, recyclers cannot sell their services, and are restricted to informal (street) work.

5.4.2 Decree 400

Finally, the District established an affirmative action policy – Decree 400 – to protect recyclers’ rights to generate income from recyclable waste. This decree mandates that all public offices deliver their recyclable solid waste (specifically paper and plastics) directly to recycling cooperatives. Government offices are encouraged to practice separation of waste and then ordered to deliver their piles of recycling material to the newly born associations that come out of the associative training sessions mentioned above. This way, the District s makes sure that some of the associations who are trained and certified find better working conditions and more recycling material. The Decree asks that every local government office or agency selects a promoter who can help set clear goals on how much to recycle, can create a schedule of delivery to recyclers and monitor that all of the office members abide to these goals and schedules.

The UAESP Final Report of 2008 found that, by December 2008, 32 local government offices had accumulated and delivered 226 tons of recyclable waste. They gave 138 tons to 28 recycling organizations and 90 tons to 19 independent recyclers and foundations. For the remaining offices, the document mentioned that they were still doing research on the destination of their recyclable waste. One of the UAESP employees mentioned that “it is difficult to control that all of the offices comply with this regulation and to make sure that they are delivering the material to street recyclers without selling it to them, as this used to be the common practice. These are things that we cannot always control. Nonetheless, we have found that many offices do deliver their materials to cooperatives” (July 2009). The Decree 400 was an affirmative action that promised direct and regular access from

recyclers to the recyclable waste coming out of public offices. Government entities are indeed a large generator of recyclable waste. However, the little capacity to monitor that offices comply with regulations and the little awareness of the decree and its objectives undermined its potential contribution.

6 Conclusions

Informal recyclers have collected recyclables in Bogotá for over four decades. For the most part, they have worked informally and their activities have been marginal to the official management of solid waste. During their years of experience they organized themselves in cooperatives and gained knowledge and expertise on how to handle waste and the importance of their work. After the environmental emergencies of 1989 and 1997, the local government reformed its waste management operations and created a new city Plan for this particular task. This turned into a strategic opportunity for informal recyclers to capture the attention of local authorities, and have them learn about recyclers' social and environmental roles and about their interests of formally participating in the solid waste management of the city. Recyclers requested the local government to recognize their work and to consider them as one of the city's contractors, specializing on the collection of recyclables. The local government, on the contrary, was initially careless about recyclers' role in the city. Recyclers have confronted and battled the local government for the past ten years, before they united with the local government in collaborative efforts. Collaboration was accomplished primarily by the persistence of these interest groups – waste pickers.

The Association of Recyclers of Bogotá have and continue to be at the forefront of this battle. They claim both for recognition of their urban-environmental agency, as well as for right to have employment in the area where they have long specialized in. Their vast experience in the collection and commercialization of recyclables and their close rapport with the waste management system provided them with vast legal and policy knowledge. ARB leaders and members embarked in a legal process to defend their rights to work and,

consequently, to secure their access to the recycling business. ARB's understanding of public policy and public services, their alliance with expert constitutional lawyer A. Ruiz and their persistence in leading a long and tumultuous battle with government authorities has gained them a space in the District Program of Recycling in Bogotá. They were successful in attaining official recognition of their work from the State; moreover, the Constitutional Courts of Colombia currently oblige local governments to find ways to include recyclers in the formal waste management system, to safeguard their jobs and implement a set of affirmative action policies to ensure the success of the previous two measures.

An analysis of the background and events shows that these policies derive from a long struggle of push and pull between both parties. The displacement of recyclers promoted by the local government (and supported by National measures) encouraged recyclers to organize themselves and support each other as a protective mechanism. As recycling gained importance and became the central topic of discussion in the design of the new waste management plan, recyclers mobilized to claim their inclusion in the new plan. The unresponsiveness on behalf of the local government led recyclers to strengthen their organization and mobilization. They went further and sought for legal support in Civisol and Dr. Ruiz. Recyclers were able to find legal flaws and voids that unfairly positioned them in vulnerable conditions; they were forced to remain in the informal realm and consequently reproduce a poverty cycle. For the most part, recyclers and their families were denied participation in other socio-economic opportunities; they were explicitly displaced from the possibility of participating in the formal side of the recycling business, and were

later penalized for executing recycling services in the informal realm. The local government was oblivious to the benefits that recyclers had brought to Bogotá during four decades; likewise, it was unaware of the socio-economic potential of recycling, as an employment sector for the poor, and as an opportunity for human development. The struggle between recyclers and the local government brought them to closely interact, communicate and learn from one another. After almost a decade of battling and negotiating, the District has applied several policies and programs to acknowledge the work of recycling cooperatives and include them in the city's recycling system. The ARB has been able to contribute with creative ideas and work with DPR. Although these programs and policies have been recently put into place, and suffer several shortcomings, they have also become a space of agency for recyclers.

The existence of a program geared to the inclusion of recyclers is a major achievement and success in the struggle of Bogotá recyclers. Nonetheless, greater efforts are still needed to employ the larger waste picking population and unify the informal with the formal systems. More importantly, they need to compensate recyclers' labor work fairly. So far, the District has made slight efforts to change the imagery that people have over recyclers and recycling; they do not enforce the successful execution of the selective route and have done little to win the community's support regarding the construction of the recycling parks. The DPR's actions have focused more on assisting recyclers through capacity building sessions⁵¹ but

⁵¹ In many of my interviews with NGOs and academics who have worked with recyclers over the years, I learned that capacity building is what recyclers need the least, given that the years of experience in recycling has turned them into experts. Additionally, although helpful in terms of providing training in organization and entrepreneurship, recyclers face a greater problem: inaccessibility to formal jobs.

continue to ignore the possibility of hiring recyclers to take over the recycling system. In fact, the recycling part of the Plan – the Selective Route, which will be extended to 100% of the city in the next couple of years – is expected to be overtaken by private companies in the new bidding contest of 2010. At the moment, the District has no clear prospects of re-addressing the construction of recycling parks; therefore, only a small portion of the recycling material will go to *La Alquería*, while the rest will be managed by private operators. What is most concerning at the moment is what will happen with recyclers outside the *La Alquería*. Those who continue to work informally and with precarious technology will be greatly affected by the entrance of large companies into this business sector, if it is not regulated by the State as it should be. The ineffectiveness of the PRD comes at a favorable time, when private companies have become increasingly interested in the recycling business for the past couple of years. This situation calls for a stronger state regulation on the proper operation and contracts of public services. Recycling continues to be a component of the waste management service, and should therefore be regulated by the state rather than allowing it to operate and regulate itself in the market. Regulation and more attention on behalf of local and national authorities can also ensure that the recycling sector takes advantage of the human infrastructure in place and provides job placements to recycling cooperatives.

Partnering with these informal groups can prove to be beneficial for local governments in developing cities, as they need affordable solutions that create income opportunities for unskilled workers, migrants, women and other disadvantaged populations; they need mechanisms that can serve the different areas of large metropolitan cities (including

narrow, hilly and unpaved streets where conventional refuse collection vehicles cannot reach); and require different (diverse) waste management approaches. Informal waste pickers are more familiar with their environment and the opportunities it offers to them and can therefore find more creative ways of using local waste. Recycling associations argue that partnering and learning from local recyclable collection associations can turn into an advantage for local governments when designing their SWM systems. The Bogotá government has initiatives and a program to develop and promote recycling in the city; it has plans and projects for recycling centers and has a strong human infrastructure composed by well organized and trained recycling cooperatives. It would be a great advantage for Bogotá to bring these elements together and implement a true collaboration between recyclers and the District. It is perhaps necessary for the local government to strengthen its supporting position towards recycling, inform citizens about recycling and embrace this practice a public service rather than a private business.

The case of Bogotá addresses several interconnected issues that have to do with improving the environmental quality of the city and employing poor populations. The recycling sector presents itself as an opportunity to address both issues simultaneously. Similar situations arise in many of the Latin American cities where recycling has yet not been officially embraced as part of the waste management system. This task, however, requires the local government to reach agreements and collaboration with the informal sector of recyclers, who have been executing this duty for decades. Although the urban planning field is prone to promoting ideas of collaboration, partnership and alliances, it is also important to understand that creating such a collaborative environment is a long and contending process,

in which actors in power (government authorities) learn from interest groups and vice versa. Beyond satisfying each actor's interests, it is important that they understand recycling and waste management holistically and interconnect its social, economic and environmental dimensions.

The history of Bogota's design of recycling policies and partnership with cooperatives shows that this is a primordial sector for cities to develop. In times of climate change and growing consumption patterns, local governments must manage and decrease urban waste adequately. It is now harder for cities to find public lands to store and treat waste through the traditional methods; additionally, the large amounts of waste that are not properly treated threaten the public health and the environment. Therefore, recycling cooperatives and associations that operate informally are a valuable human capital that can help authorities in the enforcement of recycling practices at the individual, neighborhood and city levels. Likewise, through the development of this sector, the local government could provide socio-economic security (jobs) to one of the poorest and most vulnerable sectors of society. Addressing the environment and improving waste management services is not only about protecting the surrounding environment, but about making urban settlements livable for all citizens.

The struggle between Bogotá authorities and recyclers exemplifies a case in which local authorities learn from civil society (especially marginal groups). By working together with them, local authorities come up with innovative policies to include informal recyclers in the

waste management system. Collaboration and change comes from the persistence and mobilization of civil society and marginal groups. Recyclers have been the main and most active defendants of this cause. Their persistence and clarity of interests (inclusion in policies and the opportunity to formally work on recycling) allowed them to continue fighting despite obstacles. Through time and experience, they found the right mechanism to capture the local government's attention and encourage change (legal and constitutional tools). By confronting the local government and questioning its decisions, recyclers were able to expose local authorities to their needs and to their living conditions. Likewise, recyclers' national and local associations put pressure on the local government to comply with their petitions. This process of opposition, learning and communication set the stage for the creation of policies and models of partnership (such as La Alquería).

Bogotá has undergone important policy changes regarding recycling and the inclusion of recyclers, but there remains challenges regarding the inclusion of informal recyclers at a larger scale and the regulation of recycling as a public good. Recyclers continue to face strong obstacles and powerful opponents (private companies) that jeopardize their participation in the recycling business. There is a lack of authority and political will on behalf of government authorities to step into this sector, regulate it and enforce the inclusion of recyclers at all levels, as stipulated by the law, in the Plan of Waste Management and the PDR's policies. Steps towards the development of the recycling sector and the inclusion of recyclers have been taken; however, the speed, efficiency and profitability of the private sector might surpass that of the public sector, provoking a massive displacement and unemployment of recyclers. The local government has yet to

closely reevaluate the benefits of regulating the recycling sector and take a defining stand in order to achieve partnerships and alliances with recyclers, private companies and civil society.

7 ANNEXES

Annex 1 : Recyclable waste

In 2002 and 2003 the Bogotá Administration found that 30% of the waste that arrived to the landfill was recyclable material (PGIRS, 2003). The following data shows the number of tons of inorganic solid waste (ISW) by material and its corresponding percentage that is produced, collected and deposited in the landfill of Bogotá.

Table 1: Recyclable materials collected in Bogotá

Materials	Quantity
ISW LEATHER	574.4 tons/month
ISW CERAMICS AND GLASS	1.283 tons/month
ISW CARDBOARD AND PAPER	9.229 tons/month
ISW WOOD	737.2 tons/month
ISW METALS	1.120 tons/month
ISW MINERALS	95.7 tons/month
ISW PLASTICS AND RUBBER	19.750 tons/month
ISW TEXTILES	2.393 tons/month

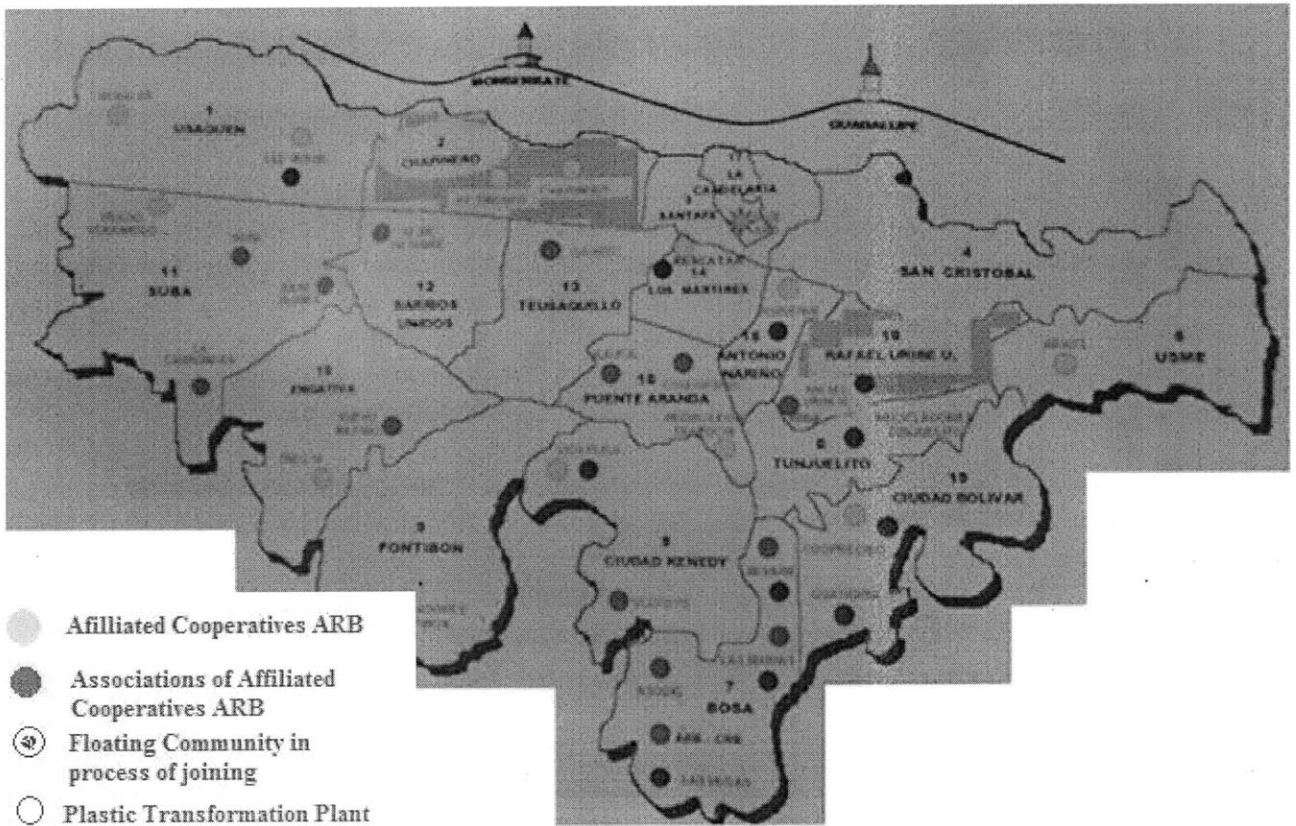
Source: Proactiva S.A. E.S.P. Monthly report for April 2003, p. 5-2 and Proactiva S.A. E.S.P. Semester Report May-December 2003. p. 5-3. Bogotá.

Table 2: Physical categories of recyclable waste in the Landfill Doña Juana, 2002-2003

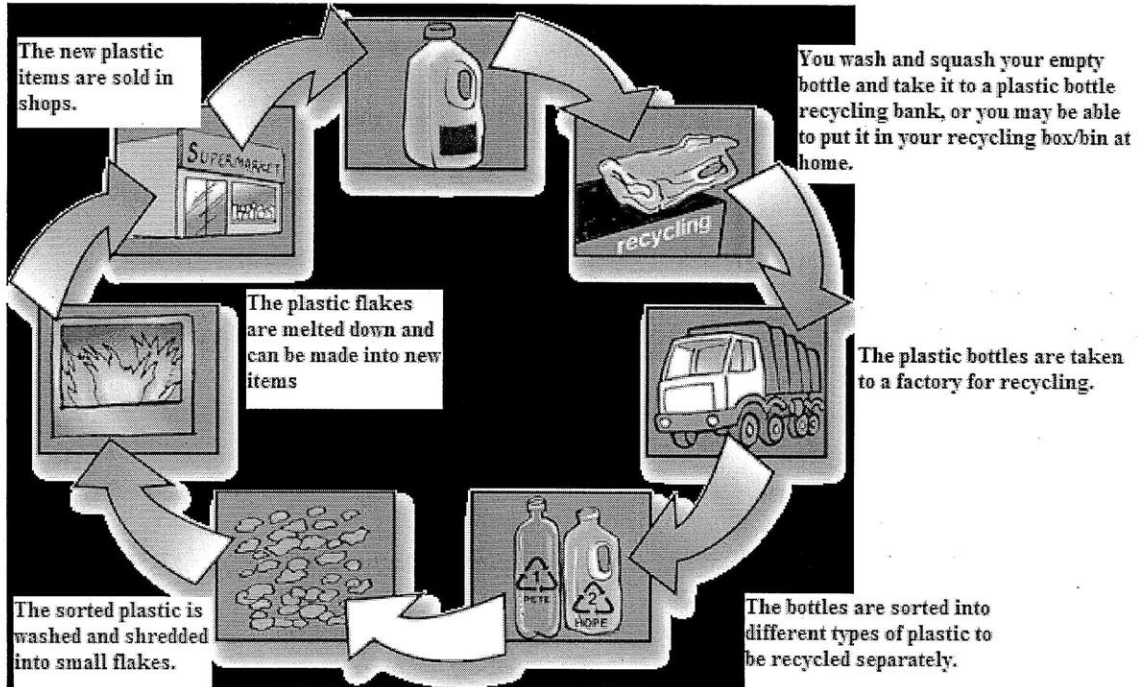
Type of Waste	Average 2002	Average 2003
	Material in percentage (%)	
Leather	0.28	0.5
Ceramic and glass	1	1.12
Cardboard and paper	12.3	8.03
Wood	0.81	0.64
Metals	0.91	0.98
Minerals	0.15	0.08
Plastics and rubber	20.87	17.19
Textiles	4.43	2.08

Source: Proactiva S.A. E.S.P. Monthly report for April 2003, p. 5-2 and Proactiva S.A. E.S.P. Semester Report May-December 2003. p. 5-3. Bogotá.

Annex 2: Map of Distribution, Association Cooperatives of the ARB



Annex 3: Recycling Cycle of Plastics



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