Dedication

I want to thank God for his mercies and blessings throughout the PhD process.

I want to thank my parents Senator and Chief (Mrs) Adefuye for their unyielding support and belief in me.

I want to thank my darling husband Peter Ekundayo for his patience and understanding.

I want to thank my family, for their love and encouragement, you guys are the best!!!

I want to thank my supervisors Alison Brown and Andrew Flynn for their guidance throughout the PhD process.
Waste Collection Management in Developing countries: A Case Study of the Lagos PSP Waste Collection Programme
APPENDIX 1:
Specimen layout for Thesis Summary and Declaration/Statements page to be included in a Thesis

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This work has not previously been accepted in substance for any degree and is not concurrently submitted in candidature for any degree.

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STATEMENT 1

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Thesis summary:
This thesis was an exploration into the implementation process in developing country cities. Western debates on implementation are usually not applicable in developing country cities and the question asked was why. The main reason has been found is that the characteristics of governments and people in developing country cities are different and therefore different approaches are required to make implementation successful. Of particular interest is waste management. Different approaches are employed in the management of waste in some developing country cities and the results have been mediocre with no real impact on the urban environment.

To this end, this thesis set out to understand implementation within these cities. In the course of this research, some very interesting factors were discovered about policy implementation in developing country cites. It is hoped that this thesis has been able to add to the body of knowledge in understanding implementation in developing country cities.
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"Blocked drains, heaps of garbage in the streets, remnants of food and disused household items: these things have become a common sight in the Nigerian commercial capital of Lagos over the past few years, prompting some to label it the "dirtiest city in the world". The unsanitary conditions have reportedly led to cholera outbreaks, and in a suburb like Iwaya disease spreads quickly.

As with many other areas of the city, it is densely populated. Residents live in what are called 'face-me-I-face-you' single rooms with shared kitchen, bathroom and toilet facilities. In some buildings, these rooms can house as many as eight people. 'Some residents are very dirty and they are not worried about their...environments. I have often quarrelled with the residents of the house near ours over their dirty habits which cause blockage of the drains,' says Caroline Oluwadare, who lives in Iwaya.

Starting this month, however, Lagos might just find itself turning over a new leaf. A programme called "Kick Against Indiscipline" (KAI) has been launched to clean up the city – and the state in which it is situated, Lagos State. A similar initiative was tried in 1999, but it fell flat after residents complained that it was bad for business. On the days when clean up operations were scheduled, no company was allowed to operate during the three hours set aside for garbage collection. President Olusegun Obasanjo later cancelled the exercise, saying people should get into the habit of cleaning their own environments – and not be forced to do so."

Lagos awards Ikoyi and Obalande waste management to PSP

“History was made in Lagos at the launch of a franchise deal on Ikoyi waste management and zero tolerance of waste last Thursday. The launch was by the Managing Director of Lagos State Waste Management Authority (LAWMA), Mr. Ola Oresanya, at the Ikoyi-Obalende Local Government Development Council to Multi-purpose Oil Service & Supplies Ltd.

Welcoming guests to the event, the Executive Secretary of the council, Mrs. Adeyemi Hamzat, said with over 17 million people and a daily waste output of between 6,000 to 10,000 metric tonnes, the need for effective waste and environmental management in Lagos could not be over emphasised.

She praised Multi-purpose Oil Service and Supplies Ltd for its effort at making the axis clean and environmentally friendly; warning that, henceforth, cart-pushers will be arrested in and around the council area as their activities are illegal. Mrs. Hamzat urged residents not to patronise the cart-pushers so as to discourage their activities which have become a nuisance.

The Chairman, House Committee on Environment in the State House of Assembly, Mr Shina Ogunkoya, spoke on the need for a healthy and aesthetically improved environment to reduce medical bills. He said the Assembly would work assiduously to come up with laws that will regulate waste”.

Source: The Nation, 14 October, 2008
1. Introduction

From 2008 it is estimated that over half the world’s population will live in cities. In the continuing context of rapid urbanization, the provision of environmentally sound basic urban services becomes of crucial importance. In many large cities the focus is on the provision of water and sanitation, but adequate solid waste management is equally important to the health and welfare of city populations. As urban populations grow, the volume of waste increases, but the nature of the waste also changes as the wealth of its citizen’s increases. There is a fall in the proportion of organic and solid wastes, and increase in manufactured garbage such as plastics and paper.

In 2007, Nigeria had an estimated population of 148 million, with 70 million people living in urban areas, and had an urban growth rate of 3.8% per annum (World Bank, 2009). Only 65% of the city dwellers were estimated to have access to clean water, and 35% to sanitation (World Bank, 2009). Lagos, with a population of 12 million as of 2003, is amongst the world’s 20 largest mega-cities, and with an annual average growth rate from 1975-2000 of over 6% which is the second highest in the world, only exceeded by Dhaka (Table 1.1, UN 2003). Although declining, the growth rate in Lagos is predicted to remain high for the next 15 years.
Table 1.1: World Mega City Populations

Source: UN, 2003

<table>
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<th>Urban agglomeration</th>
<th>Populations (Millions)</th>
<th>Average annual rate of change (%)</th>
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<tr>
<td>Tokyo, Japan</td>
<td>26.6</td>
<td>34.4</td>
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<tr>
<td>Mexico City, Mexico</td>
<td>10.7</td>
<td>18.1</td>
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<td>New York, USA</td>
<td>15.9</td>
<td>17.8</td>
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<td>Mumbai, India</td>
<td>7.3</td>
<td>16.1</td>
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<td>Delhi, India</td>
<td>4.4</td>
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<td>Los Angeles, USA</td>
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Within the city of Lagos, and nationally in Nigeria, there have been decades of debates over the effective management of waste collection. Following the collapse of colonial rule in 1960, the City entered a phase of rapid expansion growing from a population of 1.9 million in 1975 to its current 17.2 million people 2006 (Muse, 2007). Privatisation of the waste collection service in the 1980s largely failed due to corrupt government and mismanagement of finances, and it was replaced by a myriad of small-scale operators known locally as cart-pushers who became the main service provider to the City. At the instigation
of the Ministry of Environment, a second major experiment in privatisation was initiated in 1996, and the trials and tribulations of the Private Sector Participation (PSP) Programme form the focus of this research.

Although reported after most of the fieldwork for this research was undertaken, the boxes in the introduction to this Chapter reflect many of the debates explored in depth in this thesis, indicating that they are still hotly debated today. Concern remains over the poor quality of the Lagos environment and the provision of basic urban services in Lagos city. Various government initiatives including early attempts at privatisation, and more aggressive control, have until recently failed to meet policy expectation.

Yet, poorly managed solid waste has significant adverse environmental consequences, which can be broadly divided into three categories:

1) *Environment and health:*

Unmanaged waste can have a direct negative effect on urban environments with long-term harmful consequences; for example pollution of water supplies, creation of health hazards, and greenhouse gas, emissions from landfill sites.

2) *Resources:*

In developing country cities, waste can absorb up to 25% of municipal budgets, although if properly managed waste can also be a valuable source of energy and secondary raw materials.
3) *Aesthetics:*

Rubbish dumping often takes place by roadsides, watercourses or drainage systems, destroying the area’s natural or built aesthetics.

### 1.1. Introduction to implementation

The premise of policy implementation debates is simply, if all factors required for successful implementation are provided from the formulation of policy, then implementation will meet policy objectives. Implementation debates started in the 1970’s with the breakthrough book by Pressman and Wildavsky (1973) on policy implementation in Washington. This book sought to challenge how Policy Makers at the top made their decisions and suggested methods of making implementation more effective from the top. Two opposing schools of thought developed on implementation, top-down schools and bottom-up schools thought. Scholars such as Pressman and Wildavsky (1973), Sabatier (1993) and Van Meter and Van Horn (1975) in favour of the top-down approach to implementation propose that implementation be formulated by the Policy Makers. The main reason this school of thought puts forward for policy maker control of implementation is because they create the public policy being implemented. They are able to maintain a complete over view of the policy being implemented, control resources, appoint the implementing tool (public agency or private firm) and reduce hindrances for implementation.
The bottom-up school of thought proposed by authors like Lipsky (1980), Winter, (2002), Hudson (1989) suggest that because the street-level bureaucrats (street-level bureaucrats are defined as the agents of Policy Makers, either public servants or private contractors, who implement the policy and engage directly with the End Users) deal directly with the targeted End Users of policy implementations they constantly have to modify the parameters for the process of implementation to meet local circumstances (Taylor and Kelly, 2006). The bottom-up school of thought proposes that street-level bureaucrats should both influence how policy is implemented and should be involved in the actual creation of policy (Winter, 2002). Street-level bureaucrats often argue that the managerial approach of the top-down school of thought precludes managers from understanding the needs of the individual targeted End Users (Barrett and Fudge, 1980).

There is a third school of thought which is not examined in the literature, which is the school of synthesizers (Hill and Hupe, 2002). This school of thought attempts to unify both the top-down school of thought and the bottom-up. It attempts to do this by taking the advantages of both schools and using their best characteristics to improve the outcome of implementation. This school of thought is not examined within this thesis as it proposes a 30 year study of the implementation process.

1.2. Implementation challenges in developing country cities

Since the 1970s’ implementation has been widely debated in the context of developed countries (mainly the United States and Europe) discussed above. The debates addressed
conditions in the developed world, and were elaborated with developed-country studies. The literature on implementation takes certain factors for granted, for example governments committed to the sustained welfare of the End Users. However, certain factors found in the policy formulation and implementation process in developing country cities are not found within developed country cities. These factors limit or negate applying the two main schools of thoughts discussed in this thesis to implementation in developing country cities. These factors are discussed in more detail in Chapters 4-9, and include: corruption; a significant role for informal service providers; lack of adequate resources (man power, and materials); inadequate governance process.

The research is situated within the literature on waste management in developing countries, governance, public-private partnerships and implementation theory with a focus on ‘top-down’ and ‘bottom-up’ approaches to implementation. The thesis provides a new perspective on the implementation debates, which in general has been applied only to developed countries where they were developed. These countries do not generally have the characteristics of some developing countries for instance, a high incidence of corruption in the delivery of urban services.

1.3. Waste collection management in developing country cities

Waste collection management in developing countries cities has been evolving over a period of time. Developing country cities have gone from low levels of urbanization to high levels of urbanization. This has meant rapid increases in urban populations due to rural-urban
migration. This increase in population has meant a corresponding increase in the types of settlements available and the amount of waste generated within urban environments. The amount of waste generated within these cities have gone from quantities easily managed through subsistence, to quantities which Policy Makers have fallen short in meeting supply to demand for waste services. Many developing country cities like Lagos, Jakarta and Mumbai have struggled to meet the waste management demands of a continuously growing urban population.

In many developing country cities, waste collection management and other waste services are provided predominantly by the informal sector. Policy Makers in developing country cities have struggled to provide adequate waste collection services within their urban areas, although some cities such as Jakarta may spend up to a quarter of the municipal budget on waste collection (Klundert and Lardinios, 1995). The types and quantities of waste generated within the urban environment in developing country cities have affected how efficiently their Policy Makers have been able to supply waste collection services. The high quantities of organic waste that is found within generated waste as discussed in Chapter 4 has limited the type of equipment that can be used within these areas.

The empirical part of this thesis will focus on Lagos, a State in Nigeria. The State in 1996 launched the Private Sector Participation (PSP) Programme to deal with its growing waste problem. Lagos state has a history of struggling with the implementation of waste policies which have often meant that the waste collected within the urban areas has ended up being disposed off within the urban landscape. The aim of this policy is to reverse this trend and for collected waste to be disposed of at designated landfill sites. This programme has
been carried out in two phases and it is the aim of this thesis to use both Phases to evaluate the useful of western style implementation models in the context of developing country cities.

1.4. Structure of the dissertation

The following paragraphs summarise the order and contents of each Chapter of the thesis. Following a discussion of methodological approaches, with a background Chapter on the character of Lagos State, the literature has been divided into four Sections, looking first at issues in waste management in developing countries, then at governance and service delivery in low-income cities, next at public-private partnerships and approaches to implementation, and finally considering the role of the informal sector in service delivery. The final two substantive Chapters report on the evolution of the PSP Programme in Lagos State, drawing on fieldwork.

1.4.1 Methodology

Chapter 2 sets out the methodology used for this thesis. The research design can be broken up into four stages which are what questions to study, what data is relevant, what data to collect, and how to analyze the results. A methodology was needed that would enable a detailed analysis of implementation and the factors that affect policy implementation in Lagos. The methodology chosen had to be flexible to be adaptable to local conditions without losing its academic value. The case study methodology gave the research the flexibility that was needed to adapt to the data gathering environment in Lagos. Data gathering especially
when interviewing the End User required flexibility in approaching the households, as safety was an important issue for the fieldwork.

1.4.2 Lagos State mega city: Politics and waste

Chapter 3 gives a brief introduction for the reader to Lagos State, exploring the politics, the people, the culture, traditions and the prevalent attitudes that can be expected in terms of waste collection management within the state. This Chapter also covers the federal system and state administrative system in Nigeria, to help introduce the legislative and decision-making process within Lagos State. The Chapter gives an overview of Lagos State and introduce some of the challenges in waste collection management and its policy implementation in a developing country city.

Chapter 3 introduces some of the characteristics of urban services such as waste management found in developing country cities that are not necessarily found in developed countries. For instance, urban population attitudes to services providers, inadequate resources for implementation and a high incidence of corruption at all levels. These characteristics affect implementation directly or indirectly in cities like Lagos but are not mentioned within the implementation literature.

1.4.3 Managing waste collection management in developing countries

Chapter 4 considers the particular problems and challenges of waste collection management in developing country cities, for instance the difficulties of maintaining service equipment. The Chapter introduces the role of governance in waste collection management
which is more fully discussed in Chapter five. This is a general waste Chapter that explores waste management and its characteristics in developed and developing countries.

The differences in between the characteristics of waste, and waste management collection methods in developed and developing country cities are profound as answers to the waste problems of both types of cities must match their problems. This Chapter introduces us to the limitations of the implementation theory debates and their applicability to developing country cities.

1.5.4 Governance and service delivery: challenges in Sub-Saharan Africa and Lagos

Chapter 5 considers the relationship between governance and service delivery in Lagos State. The form of government in the State has gone in the recent past from authoritarian rule to democratic rule, a transition that has had a dramatic effect on relations between government and people. Hybrid forms of governance develop within this type of systems that can incorporate both democratic and authoritarian characteristics of government. Chapter five seeks to understand these different types of governance and understand how it affects implementation of policy in Lagos State. Understanding the interaction between the Policy Makers and the people will aid in understanding policy creation and implementation, which are subsequently explored through the fieldwork in Chapters 8 and 9. Characteristics of governance in Sub-Saharan Africa are used to explore implementation arguments.

Implementation arguments are developed in countries with stable and usually transparent governments. This makes it difficult to apply them to countries where the
governments are not stable and good governance is an idea as opposed to a practised form of governance.

1.5.5 Private-Public Partnership: Mixed benefits in local service provision

Chapter 6 discusses the implementation literature, focussing first on the characteristics of different forms of Public Private Partnership. Although Public-Private Partnerships (PPP) in developing country cities are an increasingly popular method of service delivery especially for those with limited resources, the literature draws heavily on developed country approaches. Chapter 6 explores the implications of this literature for developing countries cities, as a basis for evaluating the research findings on the PPP method adopted in Lagos State. This Chapter also explores partnerships with small and medium sized enterprises in developing countries and how the implementation debates apply to partnerships of this size.

The impact of PPPs can have varying impacts on implementation in different countries. The literature on PPPs rarely take into consideration SMEs’ like those found in developing countries with limited resources and access to credit. They also do not consider partnerships with the informal sector that are sometimes responsible for the large scale provision of urban services in some developing country cities. This therefore limits the applicability of implementation literature in developing country cities as some PPPs may need as seen in the Lagos context to be formed with SMEs and the informal sector.

1.5.6 The informal sector: the underdogs of waste collection management
The informal private sector is an important waste collection management service provider in many developing country cities. The PPP in Lagos State impacts significantly on the large informal waste collection sector, which has developed in urban areas of the State to accommodate the need left by inadequate government services. Chapter 7 explores the rather limited literature on the role of the informal sector waste collectors in developing country cities. Implementation debates do not take the informal sector into account as providers of urban services.

The informal sector in many developed country cities is viewed as illegal. In developing country cities, they can be a vital source of urban services. Implementation literature, however, does not acknowledge this sector within their theories, thereby reducing their applicability in the area of urban services in some developing country cities.

1.5.7 Lagos State waste collection management: Introducing the Lagos PSP Programme: Phase I PSP program

Chapter 8 deals with Phase I of the Lagos State Private Sector Participation (PSP) program. This Chapter looks at the policy as it was initially designed and implemented covering the period from 1996-2004. This Chapter will help to understand the implementation process in waste collection management in Lagos State. It also serves as background analysis for Phase II of the Lagos State PSP Programme which is discussed in Chapter 9. This phase of the implementation of the PSP waste collection policy allows us to apply the implementation theories and observe where they fall short in the case of Lagos state waste collection.
1.5.8 PSP redesigned: Phase II

Chapter 9 looks at how the implementation process of the PSP Programme evolved from Phase I. The implementation process in phase two of the PSP Programme changed in Phase II. Chapter nine looks at the conditions which mitigated the change and the effect it had on the Lagos State PSP programme. The PSP waste policy has been reviewed and more factors have been introduced to make the policy more efficient. However the thesis argues there are still elements within the implementation process not catered for within implementation theories for instance, corruption. This limits the applicability of the theories to the Lagos context.

1.5.9 Conclusion

Chapter 10 is the conclusion of the thesis. It looks at the findings from the data analyzed and draws conclusions from it, then returning to the research questions and hypothesis. This Chapter has three major findings and proposes further areas of research related to developing country cities.

1.6 Academic Value

The academic value of this thesis is threefold.
1) This thesis looks at service delivery and implementation in a developing country city. Very few implementation studies are set in developing country cities, as in the past most have been carried out in the past have covered in western Europe or North America - for instance see Sabatier (1993); Pressman and Wildavsky (1983); Hill and Hupe, (2002); Barrett and Fudge (1981); Winter (2002). This thesis thus presents an academic opportunity to study implementation within a city with different characteristics to most existing research. It is important to understand implementation in developing country cities where the governance, power relations and financing mechanism are different to those of the developed world. Based on western parameters, it is easy to say that implementation is not working or has not been properly constructed. In examining the literature and carrying out the case study, a fundamental factor that emerges is that in developing country cities such as Lagos, policy and implementation processes are created differently due to the characteristics of the State/End User relationship. And for this reason, it is important for there to be an academic insight into implementation in developing country cities like Nigeria to add to the general body of knowledge.

2) This thesis looks at implementation from the perspective of different urban actors. It first considers the view of Policy Makers who form the top-down aspect of implementation debates. It also examines the middle men who interact with and are directly affected by decisions made at the top and by the behaviour at the bottom of the implementation sphere. An important contribution of this thesis is that it also covers the End Users including households in upper and middle class areas, and lower income households in Lagos’ many slums. For example, the end use End Users
refusal to cooperate during Phase I of the PSP Programme made implementation highly unsuccessful as discussed in Chapter eight.

3) In carrying out the field work for this research, circumstances were encountered which were not necessarily unique to Lagos, but not commonly found in western societies, so the methodology that has been devised provides opportunities for other researchers to circumvent data gathering difficulties and still acquire the required data for research. In particular, interviewing the household members (End Users) proved to be a challenge, due to the defensive layout and walls around many properties in richer areas, and lack of security in slum areas. The methodological approach is discussed in Chapter 2.
2. Theoretical Field and Methodology

In order to understand public policy implementation within a developing country city like Lagos, it is important that an investigation be carried out. This investigation should begin from a history of the problem being investigated, the policies which have been created in the State in the past to tackle the problem and the results of past implementation attempts. It is also important not to view the city or its problem in isolation but to compare it to other cities with similar characteristics and problems to enhance the thesis understanding of the problem.

This broader understanding of how implementation works within these countries will then aid in testing the hypothesis within this thesis that western style implementation models are not applicable or directly transferable to developing country cities. In order to achieve this, a deeper understanding will need to be developed in implementation in developing country cities and the unique factors which affect it.

Methodology is a vital component of research in organizing the study and gathering information. It is also necessary to ascertain factors and actors within the policy being investigated and determine how they directly or indirectly affect the achievement of policy objectives. This will enable us to further test the hypothesis being examined within this thesis. This Chapter is structured into three parts. The first Section covers the theoretical background of the thesis hypothesis. The second Section covers the actors and their role with the PSP Programme. The third part of the Chapter covers the research strategy, data gathering methods, and how they were applied in the field.
2. Topic

The policy chosen for evaluation in this thesis is the Private Sector Participation (PSP) Programme of Lagos state, Nigeria. This policy is designed to improve waste collection management and fill the gap of the shortfall in formal waste collection service provision within Lagos State Nigeria. This policy was chosen for two reasons:

1) The Lagos State PSP Programme presented a unique opportunity to observe and examine the two schools of thought in implementation in a developing country setting. Most studies on implementation done previously in the past have centred in European and North American settings which have similar characteristics in how policies are created and implemented and the actors which surround them, based on an assumption of reasonably transparent and comprehensive provision of government services, and reliable data of the outcome of policy. The Lagos setting has characteristics not found in the European and North Americans settings, in particular less well-established systems of governance, which makes it an ideal location to test the relevance of the arguments on implementation in a developing country setting.

2) While the PSP Programme in Lagos is a relatively new policy, it had been implemented for fourteen years and had undergone two phases by the time the fieldwork was undertaken. This period of time allowed for an effective overview of the impacts to be observed by the researcher, as suggested as important by Spillane, Reiser and Reimer (2002).
The data collection covered a period of eleven weeks (eight weeks in 2007 and three weeks in 2008). The data collection process encompassed six different urban actors, an important approach as indicated by Testa and Coleman, (2006). These included State Policy Makers; local governments; monitoring agents; PSP Contractors; informal sector operators; and households (referred to in this thesis as ‘End Users’). These groups have been selected to give the researcher a comprehensive view of the way that implementation of waste collection policies function within the state.

1. **State Policy Makers**

The respondents of this group were identified by enquiring from the Ministry of Environments (MoE) and Lagos State Waste Management Authority (LAWMA) about the main participants in the creation of the PSP Programme. This group represent the Policy Makers, a key top-down group.

2. **Local Government Ministry of Environment (MoE)**

This group were chosen because they represent a mid-way point between the Policy Makers and the End Users. At the time of the interviews, the Victoria Island Local Government’s Ministry of Environment had acquired the backing of LAWMA to deal directly with the PSPs working in their local government area. This department has no direct influence on the creation of policy within the state, but did however serve as an extra monitoring agency separate from the MoE. The Local Government Authority (LGA) MoE were chosen on the basis of the LGA visited had the PSP service and an active MoE.
department. Their role aids the street-level bureaucrats in carrying out their tasks as they aid enforcement.

3. Monitoring agency

The monitoring agency respondent was selected by the MoE officials as the individual who had the greatest experience and had just been promoted to the head of the monitoring department. He was able to give information from both the administrative and field perspectives. Monitoring is put forward by both the top-down (Sabatier, 1993) and the bottom-up perspectives (Hogwood and Gunn, 1993) as an essential aspect of successful implementation.

4. Private Sector Participants

The respondents interviewed in this group were identified with the help of LAWMA officials who identified respondents who have been contracting for the MoE since the PSP Programme began in 1996, because they would possess a broader experience of implementation in the State than Contractors who had recently joined the programme. The bottom-up school of thought views those who interact directly with the End Users as the most important actors in successful implementation (Winter, 2004).
5. Informal sector

These respondents were chosen because they used to be the main waste service providers for waste collection services in the state prior to introduction of the PSP Programme, which made them illegal. They represent an ousted implementing service and are viewed as key participants in terms of the bottom-up approach (Fahmi, 2005), although many cart pushers still operate in parts of Lagos. Three group interviews were carried out with cart-pushers, and the aim was to attempt to meet cart-pushers who had been in the informal waste collection sector since 1996, to investigate the claim that the Policy Makers had tried to form partnerships with cart-pushers to deliver waste collection services.

6. End Users

The End Users are a key part of the PSP Programme as they are expected to both use and largely pay for the service. The way in which they respond to the policy will go a long way towards the MoE and LAWMA Policy Makers realizing their policy objectives.

2.1. Theoretical field being investigated

The theoretical field being investigated as introduced in Section 1.1 and 1.2 is the school of thought on policy implementation. The term ‘policy implementation’ relates to how policy is created and implemented. The analysis investigates who the main actors are in
the policy process and how to ensure that implementation has at least a semblance to policy objectives.

2.2. What is implementation?

Mazmannian and Sabatier (1989), define implementation as;

"The carrying out of a basic policy decision, usually incorporated within a statute but which can also take the form of an important executive order or court decision. Ideally that decision identifies the problem(s) to be addressed, stipulates the objective(s) to be pursued, and, in a variety of ways, 'structures' the implementation process. The process normally runs through a number of stages beginning with passage of the basic statute, followed by the policy output of the implementation agency, the compliance of target groups with those decisions, the actual impacts – both intended and unintended – of those out puts, the perceived impacts of agency decisions and finally important revisions (or attempted revisions) in the basic statue."

Implementation simply means to put something or a process into effect according to, or by means of, a definite plan or procedure. In this regard, 'policy implementation' can be interpreted to mean 'putting into effect public policy through an agreed method'. Some scholars of policy implementation have attempted to separate the policy formulation process from the implementation process, dividing them into two distinct processes (Rein and Rabinovitz, 1977; Matland, 1995). They generally regarded policy creation as guidelines from Policy Makers for the implementing agencies to use for administrative purposes (Rein
and Rabinovitz, 1977). This view has been greatly discounted by both proponents of the top-down and bottom-up schools of thought as not being a holistic view of policy creation and its implementation (O'Toole, 2000).

Implementation and policy creation is viewed as intrinsic to a successful outcome of intended goals. The general consensus between most scholars of implementation is that policy creation and implementation are inherently linked and the policy process does not end when the implementation process commences (Bardach, 1977; McLaughlin, 1975). Bardach (1977) argues that the policy and implementation process is a continuously interacting process. Majone and Wildavsky (1978) advocate that implementing bodies should not have the power of ability to change the content of policy during implementation. They also advocate that policy and implementation are intrinsically linked, with lessons learnt during implementation used to strengthen the scope and content of policy. Policy creation leads to implementation, however, implementation leads to policy evolution as aims and objectives may change to better accommodate changing needs (Mazmanian and Sabatier, 1989; Pressman and Wildavsky, 1984).

The main actors contributing to policy implementation can be divided into three central groups: (Policy Makers), implementing agencies (public or private) and the End Users. The policy-maker perspective involves how efficiently they are controlling the implementing agencies, the result of which is judged by the reaction of the End Users to the policy (Mazmanian and Sabatier, 1989). The yard stick used by the Policy Makers is carried out by how well the policy objectives are met and the reasons for success or shortfall in the implementation process.
The main focus of implementation studies is to evaluate how programmes have achieved or not, their policy objectives. The criteria employed can either be focused on the outputs or outcomes of policy. This would usually begin by examining the goals and objectives of the Policy Makers (Van Horn and Van Meter, 1975). These goals and objectives could be defined either by Policy Makers or by the courts ordering action from the Policy Makers. This will set the yard stick for the re-evaluation of goals during the implementation process and at the end of the policy life span (Sabatier, 1986). A cost benefit analysis tool could also be employed where the cost of the programme (and who pays for it) is weighed against benefit to the End Users and achievement of policy objectives. The cost benefit could also be weighed against public sector provision and provision for the same services from the private sector (Hill and Hupe, 2006; Ingram and Mann, 1980).

A secondary focus of implementation analysis could be the output or outcome of policy (Mazmanian and Sabatier, 1989). Some implementation authors are concerned mainly with how implementation agencies meet the policy objectives of the Policy Makers. This is a highly limited view as some Policy Makers may simply aim to deliver a service with other mitigating factors affecting the service being ignored by the authors. However, most scholars of implementation like Sabatier (1993), Pressman and Wildavsky (1973, 1984), and Bardach (1977) advocate that implementation analysis should encompass both policy objectives, intended and unexpected outcomes and negative consequences of policies implemented.

The public or private agencies on the other hand being used to implement policy will judge the result of the implementation by how well they managed the disruptions from outside Policy Makers to their normal work routines. For example, how the insertion of policy from the Policy Makers aided or disrupted their ability to provide their mandated
services have been studied by Mazmanian and Sabatier, (1989); Browning, Marshall and Tab, (1981), and the coping mechanisms developed by street-level bureaucrats (Street level bureaucrats are the agents of government public servants or private contractors tasked with implementing policy and usually interact directly with the End Users) in order to carry out their mandated tasks have been analyzed by Lipsky, (1980) and Winter, (2002).

Finally, the effects on End Users can be considered as the yardstick against which implementation is gauged. The effect felt of the policy implementation on End Users can give a fair idea of the impact of the policy (Hill and Hupe, 2006). The first criteria for this group would be if the service was actually delivered to them. The second criteria for evaluating the benefits or disbenefits for this group are to understand what conditions necessitate their need for the policy. For instance, with education policies targeted at the most vulnerable students, what puts the child in this category and is it possible for the child to join the main student body or will the child remain in this group? A positive effect for this group will increase their participation in education, while a negative effect however will achieve reduced or non-participation (Matland, 1995). The two main focuses for most implementation studies however, have been the Policy Makers and the implementing agencies for the policies, with little or no attention paid to policy recipients (Mazmanian and Sabatier, 1989).

2.3. Top-down school of Implementation

Top-down implementation can be described as the ability of Policy Makers to control the implementation of policy. This perspective is usually strong in giving prescriptive advice
to Policy Makers (Matland, 1995). It is also viewed as the influence of central government policy on implementation or as a pyramid with the Policy Makers at the top of the pyramid and the street-level bureaucrats at the bottom (Mazmanian and Sabatier, 1989; Cairney, 2009). The relationships could be as simple as a waste agency telling its collection staff how to collect waste and it could be as complex as state legislators trying to implement a waste policy which requires the input of the environmental ministry, the waste agency, the ministry for commerce and the ministry for roads and transport (for an example). In countries like America, some policies have been sent to institutions for implementation from the Federal appellate courts (Mazmanian and Sabatier, 1989).

Top-down implementation sets out preconditions which are applied in Chapters 8 and 9 of empirical study for this thesis. While no process is given on how to accomplish implementation, these preconditions from Mazmanian and Sabatier, (1986) are suggested as necessary for implementation to meet policy aims and objectives. Cairney, (2004) and Marsh and Rhodes (1992) list these as skilled and committed official, clear and consistent objectives, support form sovereigns and key actors, adequate causal theory, strong legal backing, stable economy which are further discussed below;

2.3.1. Skilful and committed officials:

The policy to be implemented usually has an implementing arm selected by the Policy Makers. The selected implementing agency needs to be committed to the policy objectives (Hill and Hupe, 2002; Pressman and Wildavsky, 1973). They must have the skills required to implement the policy and a desire, personal or otherwise to see that implementation of the policy gets the required resources within their level of authorization (Sabatier, 1986). These
consist of two parts, first, the importance of the policy to the implementer and second the ability of the street-level bureaucrat to go beyond his/her mandate to realize the objectives of the policy (Sabatier and Mazmanian, 1983). The level of discretion afforded to the street-level bureaucrats from the policy also affects how the policy is implemented. The attitude of the street-level bureaucrats to the policy can also be affected by personal values, religious beliefs, normal working parameters, and external support from politicians and interest groups (Lipsky, 1971; Mazmanian and Sabatier, 1989). The continued support for the policy will depend on how inclusive the Policy Makers are able to make the street-level bureaucrats, and interest groups feel in the attainment of policy objectives.

2.3.2. Clear and Consistent objectives

The stipulation of objectives and its clarity is viewed as an important aspect of policy implementation. This is because policy states what is expected of the implementers and provides the implementers with the tools to achieve policy goals (Van Meter and Van Horn, 1975). These objectives are usually stipulated within statute or law. The stipulation of objectives within law or statute gives the policy the legal backing required by implementers to carry out their work (Sabatier, 1986). Thus allowing Policy Makers have the tools required to monitor and evaluate implementation. This also gives the implementers the basic standards for which their work will be judged.
2.3.3. Support from sovereigns and key actors

The sovereigns here are the creators of the policy to be implemented and the politicians. They include the executive arm of government, legislative arm and heads of institution (Sabatier, 1986). They control the resources and legislation which are allocated to policy after they have been created. They are also usually the instigators of policy. Sovereigns support policy objectives through four avenues; The first is the amount of micro managing provided to the street-level bureaucrats, the second being provision of adequate resources, the third being ability to handle dissent within the ranks and lastly, the amount of conflict which arises between new policy and ongoing policy (Mazmanian and Sabatier, 1986; Cairney, 2009). The sovereigns also need to be politically astute in order to generate political support from other sovereigns who could have an interest (positive or negative). They must also be able to convince the targeted End Users of the policy that it is in their best interest and acquire their support (Sabatier and Mazmanian, 1979; Kendal, 2006).

Some agencies can sometimes find themselves in a situation where they have more than one sovereign to whom they are answerable too and who are pursuing different policies. The street-level bureaucrats in these instances will usually engage with the Policy Maker with the most resources (Cairney, 2009). Sovereigns can however, affect the change they require through legal and financial oversight as well as inserting themselves into the implementation process.

Desire for the implementation of policy isn’t sufficient for policy implementation to meet policy objectives. The sovereigns must also be willing to provide the necessary resources for the policy to be implemented and if it is necessary, take a personal role in the
implementation of the policy and monitor the policy closely (Mazmanian and Sabatier, 1989; Bardach, 1977; Sabatier, 1975).

The implementers and Policy Makers must also make the effort to continuously generate public support for the policy from both sovereigns and the major actors involved or affected by the policy (Sabatier, 1986). This will go some way in ensuring that the policy gets the resources it needs to achieve its objectives.

2.3.4. Adequate causal theory

In the creation of policy, the causal linkages and principal factors which will affect the policy must be identified (Pressman and Wildavsky, 1973; 1984; Sabatier and Mazmanian, 1983). During the creation of the policy, an adequate assessment of target groups should be made in order to judge how they will respond to the policy. This gives the Policy Makers a fair idea of the type of legislation that will be required for the implementation of the policy. The Policy Makers need to incorporate a theory of how they intend to achieve the social change that the policy is aimed at introducing or correcting within the target groups. Sabatier and Mazmanian (1989) believe that if the implementers are given adequate authority and instruments to carry out their mandate, they could be able to establish or disprove the causal theory (Sabatier, 1986). Gunn (1978) specifies that the policy to be implemented must be structured around sufficiently centred action and consequence in order to try to achieve policy goals (Kendal, 2006). Technical competence and support from the target End Users are essential for causal theory to have a practical effect on implemented policy (Sabatier and Mazmanian, 1979; Bardach, 1977).
2.3.5. Changes in socioeconomic conditions

The socioeconomic conditions of any society can have a direct or indirect impact on the implementation of policy. Stability of the society’s socioeconomic condition will usually mean that the policy can be implemented without much trouble. For instance, resources will not be diverted from the policy to meet other more pressing societal needs (Sabatier, 2002; Hill and Hupe, 2002). However, a change for the worse in the socioeconomic fabric can mean that some policies will lose or not attain the resources which they require for implementation. It could also mean that the policy could find itself shelved or discontinued completely especially where a loss of political support has resulted from the socioeconomic problem (Sabatier, 1986).

Over time, conflicting policies could be created, which could undermine implementation. The social need which required the creation of the policy could change or not exist anymore, which would undermine the need the need for the policy. The political rhetoric which led to the creation of the policy could have shifted to another policy or political bias could arise against the policy (Kendal, 2006).

2.3.6. Implementation process legally structured to enhance compliance

The legal structure which backs the policy can enhance or retard the implementation of the policy. The legislation can include veto powers, sanctions and incentives to remove implementation obstacles. It can also assign a policy to its choice of implementing agency and give the policy priority over other policies (Sabatier, 2002; Pressman and Wildavsky,
1973; Sabatier and Mazmanian, 1986 and 1993). The strength of the legal backing of the policy grounds the policy into the state or federal statute (depending on the society) making the policy stronger and more effective. This is mainly because the implementers are given more legal powers and it is easier to prosecute offenders making implementation more efficient. The statue or policy must be unambiguous in its directives, and the policy must be formed in such a manner as to maximize compliance within the target groups (Bardach, 1977; Kendal, 2006). The importance of statue within policy implementation cannot be overestimated especially within the top-down models of implementation as the Policy Makers have the greatest control over this aspect of implementation (Mazmanian and Sabatier, 1989).

2.4. Top-down implementation policy conceptual framework

Efficient implementation analysis must a) be fully aware of the societal characteristics within which the implementation is occurring, b) understand the areas within which policy formulators and their implementers can effect change within implementation, and c) accept that cross over social and institutional issues cannot be effortlessly influenced through current practices (Van Horn and Van Meter, 1975).

A critical objective of implementation analysis is identifying factors as they affect the accomplishing of policy objectives during the implementation process. These factors as listed by Sabatier and Mazmanian, (1989) can be classified as;
1) Tractability of the problem: Social problems have varying degrees of difficulty in proffering solutions to deal with them. For instance, the reduction of noise pollution could be easier for Policy Makers to deal with than the safe generation of electricity from nuclear energy (Mazmanian and Sabatier, 1989). This has to do with the level of technical knowledge and resources required dealing with both problems. In the former, the solution is clearer and more straightforward in its requirements while the other is more cumbersome (Sabatier, 1991). In terms of cooperation form target groups, it would be easier to get compliance as minimal change in behaviour could be required from them. Communication of what is expected of the target groups on the latter problem and the resources required for its implementation could make it more difficult to implement. This could be further complicated by the need for multi-agency implementation (Cairney, 2009).

2) The ability of the Policy Makers to create an implementation process which is difficult to alter. Policy Makers can structure the policy in such a manner as to leave the street level bureaucrats with little room to deviate from main policy objectives. The policy structure can be used to choose which agency or public body will be utilized within the implementation process and who can be legally included within implementation (Sabatier, 1991). This can be done by prejudicing the policy direction of agency officials through strict regulation on external participants introduced into the implementation process. In short, the Policy Makers can use policy, creation of legislation and financial resources to direct policy implementation (Cairney, 2009).
3) Political variables being in line with the statutory objectives. The commitment of the implementing agency is required in order for policy implementation to meet policy objectives. The Policy Makers can control to an extent the level of commitment of the implementing agency. For instance, an agency that has the same objectives as the policy created can be assigned by Policy Makers to implement the policy. An agency could be created specifically to implement a particular policy, making the policy the agency’s only or main priority (Mazmanian and Sabatier, 1989).

Top-down implementation proposes that the central government or the Policy Makers are the most powerful tools for the implementation of policy. The Policy Makers are able to put into motion policy that will have a lasting durability on the social problem to be tackled (Pressman and Wildavsky, 1984; Bardach, 1977).

2.5. Top-down critiques

The top-down school of thought has come under strong criticism from the proponents’ of the bottom-up school of thought. These criticisms have included the misplacement of power for the decision makers. It has also included a purposely diminished role for other actors within the implementation process. And finally the evaluation of policy in favour of Policy Makers at the expense of the street-level bureaucrats (Hjern and Hull, 1982; Barrett and Fudge, 1981; and Elmore, 1978, 1979). The following are some of the major criticism of the top-down school of thought:
1) Assumption that Policy Makers are the principal actors in the implementation process. This assumption constricts the view of the evaluator of an implementation policy and allows them to overlook contributions to implementation from the street-level bureaucrats and the private sector (Hjern and Hull, 1982; Barrett and Fudge, 1981; and Elmore, 1978, 1979).

2) In the case of policies which are created through multi agency collaboration with no dominant policy, the top-down model becomes difficult or cumbersome to apply. The ability of the top-down school of thought is very limited in its ability to predict the outcome of complex multi agency policy implementation even with the use of inadequate causal theory and poor hierarchical integration (Sabatier, 1986).

3) The street-level bureaucrats' role and function are most likely to be underestimated by the top-down school of thought. The coping mechanisms used by this group for policy implementation has a significant impact on the outcome of implementation. The target groups are also likely to be ignored even though this group can be quite ingenious in circumventing the legislation which backs policy (Weatherly and Lipsky, 1977; Elmore, 1978; Berman, 1978).

4) Some top-down models of implementation distinguish between the policy formulation process and policy implementation. This distinction can often neglect those policies which are created with the input of the street-level bureaucrats and target groups. The critics say it is preferable to concentrate on the actions and reactions that stem from
the policy and implementation process than to try to distinguish the policy process from the implementation process. This is because in the case of some policies, as implementation is occurring, the policy is being modified to achieve the policy objectives (Barrett and Fudge, 1981; Hjern and Hull, 1982; Hjern, 1982).

5) The importance of legal structuring can sometimes be over emphasized by the top-downers. It is argued by the bottom-uppers that while legal structuring is important in the introduction of policy, some legal institutions have varying powers which affect their ability to enforce statute. The manner in which the institution to which implementation is tasked will also make it more difficult for Policy Makers outside of the organization to control street-level bureaucrat behaviour (Hjern, 1982).

2.6. Bottom-up school of thought

The bottom-up school of thought in contrast to the top-down school of thought starts its implementation methodology from the street-level bureaucrats and the actors which are involved in the actual delivery of service (Hjern and Hull, 1982; Hjern, 1982; Hjern and Porter, 1985, 1993). Some bottom-up approaches start from local networks who deliver the policy services. This network is then used as a platform to identify the local regional and national networks that participate in the delivery of policy implementation through planning and execution (Lipsky, 1980). This gives the researcher the different levels of policy implementation, starting from the bottom-up (street-level bureaucrats) to the top, the Policy
Makers. This essentially turns the top-down hierarchy upside down (Hjern et al., 1978; Hjern and Porter, 1981; Hjern and Hull, 1985).

The bottom-up school of thought views policy implementation as a decentralized process. This school of thought believes the input from the street-level bureaucrats and their agency(ies) have a greater input in the implementation of policy due to the amount of discretion they are afforded in carrying out their assigned roles (Hjern and Porter, 1981; Lipsky, 1980; Long and Franklin, 2004). Lipsky argues that the street-level bureaucrats have to show a measure of discretion within their roles in order to implement public policies. The street-level bureaucrats have to administer the policy on case by case bases as End User needs varies within their interpretation of the policy being administered. They need to be able to administer the policies in some cases with insufficient resources and guidance from Policy Makers or even with the existence of a conflicting policy (Lipsky, 1980; Taylor and Kelly, 2006).

Policy implementation is argued by proponents of the bottom-up school of thought occurs at the macro implementation with the Policy Makers and the micro implementation level with the street-level bureaucrats (Matland, 1995). Due to this factor, there is little opportunity for policy implementation to be standardized across the board (Matland, 1995; Winter, 2006). The environmental factors can have a dominant effect on the policy, allowing for Policy Makers to have very little control over the implementation of the policy. It is hypothesized by the bottom-uppers that if the street-level bureaucrats are not given enough discretion to adapt the policy to prevailing conditions on the ground, the policy is likely to fall short of policy expectations (Matland, 1995; Palumbo, Maynard-Moody and Wright, 1984). It is further argued that what drives the actors which include goals, strategies and
actors must be understood for implementation to have a chance of succeeding (Matland, 1995). The mitigating factors in the actions of street-level bureaucrats must be understood to predict the policies outcome (Weatherly and Lipsky, 1977). Hjern (1982) argues that the policies created by the Policy Makers rarely meet local demands. He argues that for implementation to have even a semblance of policy objectives, it must be adapted by the street-level to meet local needs (Hjern, 1982).

The bottom-up perspective, then moves on to evaluate the coping methods developed by the street-level bureaucrats in the execution of the roles. The bottom-up school of thought argues that the street-level bureaucrats have to develop means of coping with their work in order to deliver their service and achieve stated policy objectives (Taylor and Kelly, 2006; Lipsky, 1980). This perspective allows for the evaluation of the difficulties encountered by the street-level bureaucrats. It also expands on the importance of the street-level bureaucrats within the environment which they are being implemented (Hanf, 1982). Winter (2002), regards the street-level bureaucrats as the most important actors within the policy process, going as far as to say that policies are just paper without the street-level bureaucrats to implement them (Winter, 2002). The discretion afforded to the street-level bureaucrats dictates how they perform their role. The End Users targeted by policy seldom read or (in some instances) have access to the policies implemented and usually learn all they know about the policy from the street-level bureaucrats (Winter, 2002; Lipsky, 1980).

Three crucial elements of discretion have been identified by the bottom-uppers;

1) Rule discretion: This discretion has boundaries within statute, resource or institutional constraints. These rules give the street-level bureaucrat a clear focus on what is
required from the Policy Makers either in statute or rules and regulations. The amount of rules available within the policy being implemented will dictate the amount of discretion available to the street-level bureaucrats. The method of testing and interpreting of the rules however by the street-level bureaucrats will also influence the amount of discretion available to them (Taylor and Kelly, 2006).

2) Value discretion: This is usually determined by the individual street-level bureaucrats’ idea of equity, fairness and justice. These notions can be constrained by with professional or organisational code of ethics such as those affected by doctors (Hippocratic Oath). Discretion is left to the professional as they are generally expected to make value judgements based on their training knowledge and experience within their professions (Lipsky, 1980).

3) Task discretion: This is usually prescribed by the organization in regards to individual client cases. This type of discretion has a higher level of managerial monitoring especially when there are strict targets to be met by the street-level bureaucrats. However, the street-level bureaucrats can still operate with some level of discretion in order to accomplish their tasks (Lipsky, 1980).

Lipsky (1980) identifies three key issues which allow the street-level bureaucrats discretion within their roles.

1) Understanding client needs and using their discretion within available policy to meet those needs.
2) Increase in managerial approach due to service decentralization.

3) Self monitoring professionals who may work in isolation from others. The motivation of the professionals which could be self serving i.e. professional advancement. This encourages the street-level bureaucrats to use their discretion to interpret the policy to suit their needs.

There is a need however, to mitigate the amount of discretion afforded to street-level bureaucrats and make them more accountable for their actions (Taylor and Kelly, 2006; Winter, 2006).

2.7. Bottom-up critiques

A major criticism of the bottom-up school of thought is that there is little accountability. Especially within democratic systems where sovereigns are accountable to the voters. It is argued that allowing control over implementation to reside with the street-level bureaucrats, then control is taken away from the voting electorate who would hold (all things being equal) the elected representative to account over implementation decisions. This control is severely limited if implementation resides with the street-level bureaucrats (Matland, 1995; Sabatier, 1986). As most street-level bureaucrats are public servants and not elected officials, and some have the option of discretion when interacting with clients, a measure of control is required to keep the street-level bureaucrats within the boundaries of their mandate (Linder and Peters, 1987).
The street-level bureaucrats should be allowed greater discretion in situations where their goals and objectives are the same as or in-line with those put forward by the Policy Makers. When the goals and objectives of the Policy Makers are not in sync, reduced flexibility should be given to the street-level bureaucrats as the differences in goals and objectives could lead to a poorer performance of the policy than intended by the Policy Makers (March and Simon, 1958; Matland, 1995). This is because the street-level bureaucrats if given too much discretion could address their own goals and agendas at the expense of policy goals and objectives (Matland, 1995; Kendal, 2006).

The second critique of the bottom-up school of thought is the amount of weight given to the amount of local independence the street-level bureaucrats have. A heavy reliance in some studies is given to the perceptions of the street-level bureaucrats; with little emphasis on external factors not registered by the street-level bureaucrats as these are not factored into their arguments (Sabatier, 1986; Matland, 1995). Policy Makers rarely intervene in specific cases; they can structure the goals and objectives of the policy to cover the general needs of the target population (Matland, 1995; Sabatier, 1996). Sabatier, (1986) argues that the structure given to the policy allows gives the End Users the ability to challenge (or not) policies which affect them.

A third critique of the bottom-up perspective is that some authors exclude policy goals and objectives as a valid evaluation measure (Winter, 2003). The analysis of these authors such as Elmore (1982) departs from the overall problem that policy was created to intervene such as youth unemployment and focuses more on the tasks of the street-level bureaucrat such as getting specific youths into work (Winter, 2003; 2006). The methodology employed by the bottom-up school of thought can be quite cumbersome and confusing as
some authors attempt to map all the actors which may have cause to interact with the street-level bureaucrats involved in the implementation of a specific policy. For instance, in the study of youth unemployment, examining schools and training facilities, business which offer internships, social organizations in charge of children, ethnic minority organizations (Hjern and Hull, 1982). The analysis can become quite cumbersome as the author attempts to cross organizational borders in an attempt to create a more holistic view of the study (Winter 2003).

Fourthly, bottom-uppers assume that the street-level bureaucrats have the ability to always frustrate the Policy Makers (Sabatier, 1986). They are quick to judge only the centres direct influence over the street-level bureaucrats with little regard for the centres indirect influence over the institutions of the street-level bureaucrats (Kiser and Ostrom, 1982). For instance, Policy Makers or the centre usually control resource allocations to the bottom (street-level bureaucrats and their institutions) and this can be used to frustrate the bottom into towing centre lines (Sabatier, 1986; Bardach, 1977).

Top-down proponents, generally criticize the ability of the street-level bureaucrats to influence the decisions made by Policy Makers. The bottom-up arguments limits the centres ability to influence institutional operations (Kiser and Ostrom, 1982). The bottom-up school of thought neglect how implementing agencies are selected and how resources which are used in the implementation process are allocated (Sabatier, 1986). This it is argued, gives the Policy Makers more control over the street-level bureaucrats than the bottom-up school of thought allow within their arguments (Sabatier, 1986; 1993).
The bottom-up school of thought reduces the importance of adequate legislation in the implementation of policy (Sabatier, 1986). While the bottom-up school of thought put forward that legislation can be used by the street-level bureaucrats to implement policy, they do not query how or why the legislation was created (Sabatier, 1993; Bardach, 1977).

The bottom-up school of thought usually fail to give a holistic view of the entire policy process as they mainly focus on the results of certain street-level bureaucrats and their networks. This limits it application with policies which are instigated at the centre and cover more than one area of jurisdiction or local area (Cairney, 2009).

Finally, some bottom-up theories commences from the actions and the insights of the street-level bureaucrats, there is a very strong possibility that the factors which affect the conduct will be missed by the bottom-up school of thought. The ability to identify participant networks within the policy needs to be linked to the causal theory surrounding the policy and the actions of the street-level bureaucrats (Glaser and Strauss, 1967; Sabatier, 1986).

2.8. Comparing the top-down and bottom-up schools of thought

The literature on implementation gives the two of the main schools of thought developed so far. The top-down from its policy or statutory stand point and the bottom-up from its street-level and bureaucratic stand point. Both schools of thought have very valid points in regards to policy implementation. However, when the type of policy, the area of implementation and external factors to the policy is considered, one school of thought might
have greater applicability than the other. It would therefore be pertinent for the purposes of this thesis to compare the strengths of both schools of thought being examined to determine the most appropriate for the thesis.

1) The top-down school of thought begins its analysis from the creation of the policy. It asks questions like; what are the policy aims and objectives? Who is the targeted recipient of the policy? And what resources are available for the policy to be implemented? These questions are important in order to access the possible impact the policy is going to have as it is being implemented (Sabatier, 1986; Pressman and Wildavsky, 1984; Sabatier and Mazmanian, 1983). This school of thought also looks at who has the ability to introduce policy into the society and the rights of the target recipients in regards to those policies (Sabatier, 1986). The bottom-up school of thought in contrast, starts from the interaction of the street-level bureaucrats' interaction with the target recipients, and how this affects how implementation is carried out (Winter, 2003). The bottom-uppers observe the amount of discretion available to the street-level bureaucrats and the effect this has on the implementation of policy (Sabatier, 1986). The bottom-uppers also try to focus on the networks around the street-level bureaucrats as they affect positively or negatively the work being carried out by the street-level bureaucrats (Lipsky, 1980). In developing country cities like Lagos, The above questions are very important as they impact the implementation of public policy. Mainly because the policy and implementation networks found in places like Lagos are usually not as developed as their Western counterparts as will be observed in Chapter 8.
2) The top-down school of thought usually takes a holistic view to the end result of policy implementation. For instance, the top-down school of thought looks at the overall result of an education policy designed to encourage more children from disadvantaged backgrounds to go to school. The evaluation would start from how many children from disadvantaged backgrounds of school age were unable to go to school. It would then choose an evaluation point and observe how many children since the inception of the policy have been able to go to school (Pressman and Wildavsky, 1984; Sabatier, 1986). The bottom-up school of thought on the other hand would not evaluate the same policy from the stand point of how many have gone to school but on the individuals who have been able to go to school and the reasons why the individuals left behind have been unable to go to school. The top-down school of thought are also able to have a holistic view of the entire area(s) where the policy has been implemented but the bottom-up school of thought is usually restricted to the areas under the influence of the particular street-level bureaucrats being studied (Hill and Hupe, 2006; Matland, 1996).

3) The top-down school of thought focuses on the origin of a policy i.e. is the policy handed down from the courts, state or federal executive or head of institution? What legal backing does the policy have? Have policy reviews been carried out and included within policy? Are the evaluation criteria worked into to the statute for the implementation of the policy? What if any, are the consequences for non-participation with the policy by the target End Users? These are critical questions asked by the top-down school of thought in analysing policy. Legal structure is important in Sabatier’s’ frame work for analyzing public policy (Hill and Hupe, 2006; Sabatier, 1986;
Mazmanian and Sabatier, 1983). The bottom-up school of thought is not as particular about the legislative backing of policy and more interested in the discretion afforded to the street-level bureaucrats. How this affects their ability to meet the needs of target End Users (Winter, 2002; Lipsky, 1980). As will be observed in Chapter 8 and 9, in developing cities like Lagos, legal backing is essential in the implementation of policy because gaining End User co-operation with policy could be cumbersome. Strong legislation is likely to increase participation than harm implementation.

4) The bottom-uppers lay emphasis on the coping methods of street-levels bureaucrats and the reasons for which they are developed (Lipsky, 1980; Winter, 2002). The top-downers lay more emphasis on the resources provided for the implementation of policy (Mazmanian and Sabatier, 1981).

5) The top-downers are prescriptive in their approach to policy implementation. For instance, using policy to limit the number of agencies that can be involved in the implementation of policy. Using the policy to create veto points as it were for other agencies and/or policies which may be prejudicial to the implementation of the policy (Bardach, 1977; Mazmanian and Sabatier, 1981; Sabatier, 1986). The bottom-uppers are more descriptive in nature. They map out the networks and possible networks that affect the policy (Barrett and Fudge, 1980).

6) Both the top-down and the bottom-up schools of thought have been unable to develop universally applicable theories which can be applied to all policy implementation
processes in all societies (O'Toole, 2000). The top-downers have had the most success in constructing a generalizable theory (O'Toole, 2000; Matland, 1995). Mazmanian and Sabatier, (1989), have created the most comprehensive top-down model of implementation (Matland, 1995). The bottom-uppers have not been as successful as the top-downers in creating a theory that could be generalizable. This is possibly because an element of the researcher could be easily inserted into the research when viewing it from the point of view of the street-level bureaucrats and the policy effect on the targeted End Users (Matland, 1995).

2.9. Lagos PSP Programme

In reviewing the literature on the top-down and bottom-up schools of thought, this thesis mainly uses the top-down school of thought for its analysis. The reasons for this choice are:

1) The top-down school of thought takes a holistic view of the entire area in which a policy is implemented and is not restricted to the area in which the street-level bureaucrats are operating.

2) The policy being studied needs to be understood from the need for the creation of the policy, the reasoning behind policy maker decisions to implement policy as they have and using them implementation instruments that they have.
3) It is important to analyse the legal backing of the policy and how much effect it has had on the implementation of the policy.

4) The Policy Makers/state government in the area being studied have the largest influence in attempting to change the attitudes of the End Users. This is because of a history of failure on the part of the local governments and agencies tasked with delivering public services in the past.

5) In the case study area, an urban service is being studied and it is usually the Policy Makers who introduce innovation into urban/social services.

6) From initial interviews, the decisions made by the Policy Makers have had the most impact on the implementation of the policy in regards to the behaviour of the street-level bureaucrats and the End Users.

**2.10. Research Design**

The aim of the research design is to act as a form of guidance for the researcher in the collection, analysis, and the interpretation of data collected (Yin 1984, 1998). The research design should help the researcher in minimizing ambiguity in correlating the results and guide the researcher in analyzing findings directly relating to the hypothesis (Yin 1993).

The research design should also ensure that the research has a bearing on the causal
hypothesis (Section 1.2) of the study (Yin, 1993; Collin, 2002). The case study method has been chosen as the research method for this thesis. An important characteristic of the case study method is it does not have a specific approach which must be adhered to in carrying out the research, which allows for flexibility in the application of the method (Yin 1984).

Past records of waste policy implementation in the state have had varying or extremely limited success. Despite the public policy significance of the new PSP Programme (Private Sector Participation policy) introduced in 1976, there is surprisingly little documentary evidence available on either the policy or its effectiveness. Most of the data collected has had to be through interviews. The thesis thus tests the delivery of the new waste collection policy in the light of the top-down / bottom-up implementation debates discussed in chapter 5, to explore which concepts are applicable to Lagos.

2.11. Research Questions

Research questions form the basis of the research. They define the aim of the thesis and aid in the structure of data collection. Eisenhardt (1999) argues that research questions can be used to begin the formulation of theory on topics. Research questions also help in the selection of empirical data, and on the data acquisition process (Bassey 1999), for example, identifying the key actors, the type of questions that might be asked of participants (Punch 1998). Research questions can also be used to identify related issues which even though not the focus of the research can be used to increase and enhance understanding of the research being under taken (Collins, 2002).
2.12. Hypothesis and research questions

In recent years, the privatization of municipal service delivery has been a common policy response to the challenges of providing adequate basic services in very large cities facing rapid rates of urbanization. Services are often privatised through different forms of Public-Private Partnerships.

This thesis aims to study current schools of implementation theories and assess them using the criteria found in developing country cities, specifically Lagos, the case study area. The hypothesis of this research is that current debates on implementation take insufficient account of the complexity of policy implementation in developing country cities and the complex interactions between state, society and the private sector, particularly in contexts where large informal sector service delivery is common and effective.

The focus of this research is on solid waste collection management, based on a case study of Lagos State. The administrative area of Lagos State covers the whole urbanised area of the City of Lagos. Lagos State Policy Makers are the administrative arm (Governors office), ministry and department heads at the Ministry of Environment and LAWMA are the agencies responsible for waste collection and disposal. The research questions are as follows:

1. What are the implementation challenges in developing country cities? In other words, what characteristics are found in developing countries which are not found in developed nations which have a direct impact on implementation methods? This question is explored in Chapters 4, 8 and 9.
2. What are the critical challenges in solid waste management in contexts of low income cities and rapid urban growth rates? More specifically this means, what is the role of the informal sector in urban services delivery, and what is experience of integrated service delivery systems which integrate both public, private and informal sector delivery? These questions are explored in Chapters 4, 7, 8 and 9.

3. How do the findings of this thesis inform academic knowledge on the current implementation debates? Is implementation a top-down or bottom-up process? Are any of the debates directly applicable to developing country public policy implementation? This question is explored in Chapter 10.

2.13. Case study Research

In undergoing any research, the question of why research is being undertaken is of the utmost importance, and defines whether the research will be led in an empirical or a conceptual direction (Collins, 2002). The direction in which the researcher decides to take will then determine the most appropriate research method (Yin, 1994). The key theme for this research is the implementation of waste collection policies in Lagos State, Nigeria. This thesis is an empirically based study centred on the current Private Sector Participation Programme (PSP Programme) that started in 1996 in Lagos State. While it is important for the research strategy to be precise, it is also important, since it relies heavily upon the input from individuals, for the strategy to be flexible and take into consideration people’s temperament and the varied attitudes towards the policy that were encountered.
2.13.1. Research Strategy

Yin (1984) identifies three main issues important in selecting a research strategy. They are:

1) The research question(s) which is the purpose of the thesis investigation. The question(s) to be answered by the thesis is critical to defining the research method used. For example a question with multiple social variables might require a case study investigation.

2) The amount of influence that the researcher is able to wield over events. The ability of the researcher to influence the events being studied has the potential to introduce bias into the study. This potential for bias would need to be mitigated by the type of research strategy used. The inability of the researcher to influence the data collected limits some of the bias that can be introduced into the study.

3) Whether or not the research topic is contemporary or historical. If the study is happening in real time or if it is a study of past events. Real time studies require a different research strategy to historical studies. For contemporary research topics, for example, it is relevant whether the research question requires interviews be conducted and if so, how far back does the participant have to remember to answer the question. What type of information can be expected from the participants?
In this research the questions being studied calls for the observation of a particular phenomenon (in this case 'policy implementation' and the wide range actors in implementation). The topic is contemporary as it is happening in real time and the study is centred on the phenomena occurring now, and the researcher has no influence whatsoever over unfolding events (Yin, 1994). The case study method was therefore deemed the most appropriate method for the study. The case study research method is considered the most appropriate when 'how' and 'why' questions need to be answered (Yin, 1994).

2.14. Case Study as a Research Method

A case is an observable phenomenon that takes place within a specific circumstance (Punch, 2005; Stake 1995, Bassey, 2000). A case is an entity of some kind which could be an organization (public or private), an individual, policy, policy action, processes, incidents, settings, communities, etc. (Yin, 1993; Stake, 1995; Punch, 2005; Bassey, 1999). The case study is an approach to research or a research method (Stake 1995) or strategy (Yin, 1984; Punch, 2005). The case study is a multi-dimensional empirical inquiry whose unique characteristics distinguish it from other types of research strategies (Yin, 1984; 1998). The main aim of the case study is to increase the perception and understanding of specific cases. This is achieved by three means:

1) It produces a holistic view of each case
2) It enables the researcher to employ different methods of data collection
3) And finally, the case under study retains its individuality (Punch, 2005).
This method of research gives the added advantage of being able to include characteristics of research that might otherwise be overlooked or excluded with other methods of research (Theodorson & Theodorson, 1969). It aids in increasing our understanding of the different facets of the study and the end results and conclusions of the study (Stake, 1995).

The case study is a versatile form of enquiry which is demonstrated by its use in different disciplines which include social sciences, management and organizational studies, psychology, implementation, and business (Yin, 1984; Robson, 1993). Case studies are usually both active and inventive and consist of the researcher imagination of the case and the invention of the study (Collins, 2002). This means that research methods do not predetermine the case but the case predetermines the research method to be used for specific cases (Collins, 2002).

The research questions identified above require the participation of different urban actors. The case study method provided a platform to view these varied participants as the contributed to the study (Punch, 2005). The case study offered a comprehensive strategy in understanding the PSP Programme, how it is implemented and the resulting effect of the implementation of the policy in a real life situation (Punch, 2005; Yin, 1993). The case study was therefore selected for this thesis as it was the most dynamic research method that could accommodate any changes that might occur during the course of the research.
2.14.1. Criticisms

The advantages of the case study are varied, but there are four main criticisms of this method of research. First, the case study method is disadvantaged because of the possibility of it being a time consuming and lengthy process, possible resource requirements, and the amount of data required for a case study (Collins, 2002). This thesis was carried out within a limited time frame. The resource problem necessitates the strategizing of the data collection process as it is a real concern in the use of the case study method. Data requirements for the study were thus selected and prioritized prior to the researcher leaving for the field to place boundaries on the information collected.

Second the case study is considered to be rather ambiguous from an academic standpoint in the collection, construction and analysis of empirical material (Bassey, 1999; Yin, 1984; Collins 2002). The ambiguity allows the bias of the researcher and participants to influence the findings and conclusions (Yin, 1984). Yin (1984), however, further argues however that bias can also influence other research strategies. As much as possible, the bias within the study was kept to a minimum by continually reflecting on the nature of the data that was being collected who was providing the data, as the research was explanatory in nature.

Third, Yin (1984) argues that the probability of the research subject changing over time is more likely in the case study method, and the research design is subject to change to better accommodate research questions being answered. The possibility of research changing over time affects other types of research depending on the amount of time used to conduct the
research. The time available for this research mitigates drastic changes to the research
methods.

Fourth, possibly the most important criticism is the inability of the case study method
to provide adequate basis for the generalization of the phenomena being studied (Yin, 1984;
that not all case studies are aimed at generalization but some are aimed more to increase our
understanding of a particular phenomena. The study was conducted to understand the
phenomena as it occurred in real time. While generalizations would be desirable from any
research, adding to the existing body of knowledge is essential.

The case study remains a highly popular method of research in social science
research, and practice-oriented disciplines for instance urban planning (Yin, 1984). Punch
(1998) argues the case study method further in that it fills the gap in knowledge where
knowledge is limited or does not exist in three ways. First, it allows for a deeper study in to
the research topic allowing it to gain new levels of understanding and detailing of important
issues (Yin, 1998). The knowledge gained from this thesis will further the understanding of
how implementation is shaped and evolved in Lagos State. Secondly, in amalgamation with
other research methods, the case study can contribute by investigating more in-depth into a
particular topic which could make understanding more robust. Thirdly, it can aid in
developing an in-depth understanding of a particular case by understanding the case and why
its specific characteristics exist as they are.
2.15. Survey research method

This research method is aimed at obtaining data for mapping populations, geographies and programme results. Geographical principles are used to map out the social world (Denscombe, 2007). Surveys are usually wide and inclusive in their applicability. It is an observant method of research that tries to include all facets of the phenomenon being studied. It aims to update any information available on the phenomenon being observed. The survey method is mainly an observation research strategy which could be both qualitative and quantitative in nature. It can be used to test a hypothesis or a combination of hypothesis (Neuman, 2006).

The survey method is adaptable to a variety of different scenarios and is used for the collection of diverse forms of information. It can be used in the evaluation of a programme with a wide range of projects affiliated with it. The survey method can be used to gauge the outcome of a programme on the intended End Users in specific area. The survey method of research can be used to gather more detail for qualitative research (Denscombe, 2007).

2.15.1. Advantages of the survey method

1) Used to gather information using a cross Section of the intended population at a specific period.

2) Can be applied to a wide variety of scenarios
3) Can be used for both qualitative and quantitative research using a wide variety of tools such as structured interviews and sampling methods

2.15.2. Disadvantages of the survey method

1) Surveys are usually based on the value system which the researcher applies to the research and therefore, results might not really be indicative of the true phenomena being studied (Rea and Parker, 2005).

2) The sample size required for an accurate survey method research to be carried out needs to be proportionate to the target population. Where the target population is quite large, the sample size will be large. This can make the survey method quite cumbersome and expensive to administer.

3) Respondents to a survey might not necessarily give honest or accurate answers to questions asked. The response given in some instances could be conflicting or confusing (Neuman, 2006).

4) Potential of not getting enough respondents required for the survey.

2.15.3 Survey methodology vs case study methodology

The case study offers a more holistic research method than the survey method as it allows the research to draw up the respondents needed for the study. While they both require particular type of respondents, the case study method allows the research to generate data
from multiple respondents. Unlike the survey method, where a control group is needed to test a hypothesis, a case study only requires that the information collected from selected respondents be accurate. The types of research instruments available to the case study researcher are also more, while the survey researcher is limited to open and closed questionnaires. The case study researcher also has the option of adding real time observation to his study while the survey researcher must focus on the response from respondents.

The case study research method is the best method to use for the thesis because of its flexibility in methods of data collection. It also accommodates the use of quantitative and qualitative data in its analysis.

2.16. Research Focus

The flexibility of the case study in accomplishing research within a real life context makes it a valuable evaluative tool, as it allows the researcher to overcome real life issues. Yin (1993) and Collins (2002) both highlight that case study evaluations may come across some challenges, which must be noted in order to overcome them. They are:

1. A change in the intervention, which could require the need to redesign some or all of the cases study or evaluation design.

2. A change in participation which has a direct effect on the research design.
3. Poor retention and high attrition rates that may compromise statistical data, its analyses and evaluation.

4. Possible relationship problems that may occur between the researcher and the respondents of the study.

This thesis started gathering information in 2004 and with the main body of fieldwork taking place in 2007. 2004 marked the end of Phase I of the PSP Programme and the beginning Phase II of the policy. In 2004, a series of informal interviews were carried out at the MoE. This helped the researcher to gain an understanding of the PSP Programme and active participants in the policy, and refine the research design accordingly. It helped reinforce the focus of the thesis on the lines of implementation debates. These preliminary interviews help in shaping the data requirement, key actors and the type of information that may be obtained from them and how the data could be obtained in the field.

Starting the research in 2004 proved to be beneficial to the research since it had the advantage of occurring in the wake of the end of Phase I and the beginning of the Phase I. Participants’ memories of phase one were thus fresh and ideas of phase two were relatively readily accessible. Importantly it also, allowed for the researcher to observe any physical changes between phase one and two.

The research design for this reason has needed little or no alterations since the research began as the proponents and the factors affecting the PSP Programme have remained constant almost throughout the period of the research (2004-2008). The only minor change to the policy was in the payment to PSP Contractors, but this did not affect the structure of the
research, and so was not a problem in the light of Yin (1984) third’s criticism, because the change did not drastically alter the main research subject – the PSP Programme.

2.17. Data Collection methods

The analysis of data collected is the most complicated aspect of the case study method (Yin, 1984, 1998; Eisenhardt, 1999). It is also essential in establishing study boundaries by eliminating unnecessary data and focusing on the essential information. This study is of the Lagos State PSP Programme which basically covers the collection of waste from the municipal households and their transfer to the central landfill. The focus was on six groups of urban actors as outlined in Section 2.5. Yin (1994) views the study of implementation processes as being a bit cumbersome because the boundaries are harder to set and the units of analysis are less clear. While he does argue that it is a harder case study to undertake compared to, say, the study of a laboratory experiment, it is possible to carry out a case study on the implementation process (Yin, 1994).

Yin (1998) puts forward two factors must be factored into an implementation study. The first is a possible programme variation from its original design and the second is the programme components that existed before it became a formal procedure (Yin, 1998). By explicitly recognizing program delivery dynamics it is possible to accommodate any changes (not too drastic) that may be required during the research process. In deed from an implementation perspective, these are the important elements of the study.
A characteristic of Phase I of the PSP waste collection programme was the stability of the programme during the research period. No significant changes to the policy were made by any of the actors in the implementation of the PSP Programme. This stability meant that the research did not have to depart from the original research design. This research was also able to gather information on the recently completed Phase I of the PSP Programme which is used in a comparative analysis in Chapters eight and nine.

2.17.1. Interviews

The interview method has been selected as the most efficient method of collecting data from the groups of participants because it allows the researcher to not just be able to collect empirical information from the respondents but also to observe how the interviewees respond (Gubrium and Holstein, 2001). Interviews are important tools used by researchers to understand not just the issue that they are interviewing the respondents for but the respondents themselves from the way they give information and their body language, adding an extra dimension and depth to the empirical information collected from them (Yin, 1998).

Below is a table of the interviews to be carried and the types of interview methods to be used with the different participants.

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Number interviewed</th>
<th>Interview Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>169</td>
<td>Structured interviews</td>
</tr>
<tr>
<td>Policy Makers</td>
<td>4</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>Monitoring officials</td>
<td>1</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>PSP</td>
<td>16</td>
<td>Focus Group</td>
</tr>
<tr>
<td>Cart-pushers</td>
<td>18</td>
<td>Semi-structured interviews/Focus group</td>
</tr>
</tbody>
</table>
2.17.2. Households (End Users)

The structured interviews were utilized undertaken with the aid of a questionnaire in order to take advantage of the economies of scale that it allows for. This method allows for the stratified sampling of the population. The data required needs to establish the public's willingness, or lack of it, to participate wholly or partially within the PSP process. Originally, the data from this group was intended to be collected from three sample areas to cover the three main income groups - upper income groups, middle income groups and low income groups. In practice, though this method of sampling the population proved to be too dangerous, because of political unrest during the fieldwork period, and time-consuming and had to be discontinued. The questionnaire used for this group is included in Appendix A.

High and middle income households and to a lesser extent, the low income households were inaccessible for the research process. This is because the high and middle income households usually have guards at the gate and attend to people they know mainly because of crime. Moreover, it was unsafe to enter the compounds as a lone researcher. There is also a lack of security in low income areas that prohibited collecting responses from a door-to-door survey. As an alternative strategy, the researcher decided to interview End Users at their place of work and social gatherings. These two areas allowed for access to household members from the three sample groups that make up the general population.

The places of work which were chosen included banks, oil companies and communication companies. The places of social gathering I chose were two shopping malls, a bar and two beer parlours. The sample criteria were levels of income and type of area of residence. The sample sizes were chosen based on their income groups and area of residence.
At the places of work, the sample was based on the position of the individuals. The different positions of staff were an indication of their income group for instance, the manager would be of a higher income group compared to the security guard. Generally, most people answered my questions in the neutral environments.

The data collected from this group however was still not truly representative of the geographical areas of the state. This meant that the researcher still had a limited view of implementation from the point of view of the End Users. For this reason, there is a hesitation to generalize for this group and the data collected from them is used sparingly within the thesis.

2.17.2. Policy Makers

The semi-structured interview method was used for the Policy Makers mainly because there was a need for qualitative information to the data collected. The Policy Makers were able to discuss both the current policy and its historical development. The semi-structured interview also allowed the researcher to not just understand the policy but also to understand the policy maker’s role in the policy implementation. In a city like Lagos, especially when dealing with the public services, understanding the person aids in understanding the outcome of the person’s work as their personalities are usually reflected in the way they carry out their work.
2.17.3. Monitoring Officials

A semi-structured interview process is used because it was pertinent that assumptions were not made about the monitoring of the PSP Programme. This group was interviewed in order to better understand the factors which assist or hinder effective monitoring of the PSP Programme.

2.17.4. PSP Service Providers

A focus group was used for the PSP Contractors for two reasons. The first was for convenience as the PSP Contractors are located all over the State with some having their offices in low rent premises on the outskirts of the city. The traffic in Lagos is very bad, and it would have been very difficult meeting them. The second reason is that, the PSP Contractors were reported as having similar issues in fulfilling their contractual obligations, and this proved to be the case in the focus group. It proved to be beneficial to the operation of the focus group that people who would not necessarily open up when interviewed alone were able to contribute to the group discussion with people where circumstances are shared. This group serve as the street level bureaucrats for this thesis.

2.17.5. Cart-pushers

The focus group and semi-structured method was used for this group to give more insight into the group. It was essential not to ask questions that gave one word answers and to try and encourage the interviewees to speak freely. The illegality of their services had made it difficult during the first round of interviews to meet a large number of respondents, and the
researcher was only able to interview five individuals with the semi structured interviews. During the second round of interviews, the researcher was able to have focus group interview with cart-pushers as mentioned in Section 2. The first focus group interview was unplanned as in the process of trying to interview one practitioner, other practitioners joined in and it turned into a focus group interview with seven people. The researcher then arranged with them to meet a different group the next day and was able to another focus group interview with six.

The main reason for the combination of different methods is to be able to a) understand the topic being studied from different perspectives, and b) use the appropriate interview methods to the actors to get the most information out of the interviews.

2.18. Field Study

Data for the field study was gathered in Lagos State from the respondents listed in Section 2.5. The field conditions which expanded below required the researcher to reframe the distribution of questionnaires. As discussed in Section 2.5.2 above, members of the household had to be in other areas other than their households. Other field conditions are discussed below.

2.18.1 Field problems

Different field conditions were experienced by the researcher in the process of data collection in Lagos, some were favourable and some of the conditions were adverse to data collection. Below are details of the field conditions experienced.
1) *General Attitudes*:

The general attitudes of people towards answering questions for the research varied depending on who was being interviewed. Some of the respondents were very forthcoming and co-operative, answering questions without bias or prejudice. However, in some interviews, the researcher had to adjust the approach to interviews or withdraw from interviewing some of the respondents. This is explained further below.

i) *Policy Makers*:

During the collection of data, the Lagos State government was in talks with the World Bank about grants for waste management in Lagos State (P1, P3, 2007). It is hypothesized by this researcher that one of the Policy Makers interviewed felt the research might be prejudicial to the grant in question and therefore gave misleading information during the interview, which was contrary to all other interviews the researcher had conducted prior to this specific interview.

ii) *End Users*:

End User attitudes ranged from the very co-operative to the very distrustful. The very distrustful householders felt the research was a guise to help the government increase their taxes. They had to be convinced that the research was for academic purposes only. Some of the End Users
approached refused outright and an interview had to be stopped because
the lady in question looked increasingly distressed at the questions.

iii)  *Informal sector operators:*

Informal sector operators were very difficult to interview. The first
problem was that, with the introduction of the PSP Programme, they were
constantly being moved along by the local authorities and it was difficult
to find them, as they often work very early in the morning. The second
problem was, when the researcher was able to contact some of them, it was
very difficult convincing them that the research was academic and not
involved with local government moves to limit their operations. There was
the prevalent fear that the research would prejudice to their livelihoods.
The researcher had to convince them that the research would neither have
a positive or a negative impact on their work. In all cases, the researcher
had to have her NUS identification to show that it was academic researcher
and leave un-cooperative respondents.

iv)  *Traffic:*

Traffic in Lagos is very heavy. Lagos has millions of cars on its roads
daily, which makes moving around the city to interview in different
locations difficult and time-consuming. This was a particular problem in
interviewing the cart-pushers, as they work very early in the mornings.
2) *Accessibility to End Users:*

A predominant feature in the urban and planning fabric of Lagos State is fenced housing. Income level usually determines how high the fences are built. The safety issue for the researcher was paramount and other means had to be devised to meet the householders to administer the questionnaires. The fences also contributed to a need to change the original sampling method which was based on meeting people in their areas of residence. The change meant that other areas where people congregate had to be targeted to meet people of all incomes types. The targeted areas where new sample populations were found, which covered all three income groups, were places of work and social places. Places of work were an easier place to meet respondents to answer survey questions. The difficulty in accessing this group means for the research that the information collected will not be as widely used as first anticipated.

3) *Time (Policy Makers):*

The Policy Makers who created the PSP Programme are very small number. This is indicative of the way policies are created in developing country cities like Lagos State. This also meant that the Policy Makers were always very busy and often in meetings for long periods of time. One of the Policy Makers kept postponing the meeting and when the interview was finally conducted, it was fraught with interruptions.
2.19. Proposed research

The proposed research which is to be carried out in Lagos state is to investigate to what extent, western models of implementation are applicable in developing country cities like Lagos state, Nigeria.

The research will be carried out using the case study method to investigate the Public Private Partnership in domestic waste collection which has recently been re-evaluated and reimplemented within Lagos state.

This will enable this thesis to observe firsthand how public policies are implemented and to be able to investigate the factors which have the most effect on the implementation of public policy. This will be able to generate within the field of waste collection management an idea of which implementation school of thought will be the most beneficial in terms of result in Lagos state.

To carry out this research some contextual fields will need to be investigated in order to improve the overall understanding of the implementation process in Lagos. They include waste management in developing countries, governance in developing countries, PPP, informal waste collection in developing countries and a back ground on Lagos.
3. Lagos State mega city: Politics and waste

The role of this Chapter in the thesis is to paint a picture of the history and the geographic area whose policy this thesis used as a case study. It is designed to paint a picture of the potential advantages and difficulties of implementation using western models in a developing country city like Lagos.

Rapid urbanisation in Lagos State has led to critical problems in the collection and disposal of waste. Lagos State is estimated to be the 11th largest urban population in the world by 2015 (United Nations, 2007). The population of Lagos State was estimated to be growing at the estimated rate of 8% per annum (LAWMA, 2006, Lagos State, 2007). Lagos State has a faster growth rate than the nation as a whole with Nigeria growing at 4-5% per annum and the world population growing at 2% per annum (Lagos State, 2007). The population estimate for the year 2015 is 27.9 million people generating approximately 60,000 tonnes of waste daily (LAWMA, 2007; Lagos State, 2007).

The role of this Chapter within the thesis is to paint a picture of the history and the geographic area whose policy this thesis used as a case study. It designed to begin to paint a picture of the potential advantages and difficulties of implementation using western models in a developing country city like Lagos.
3.1. Finding Lagos

Lagos State is located in the south west of Nigeria on the coastal flood plain of the Bight of Benin. Lagos State is boarded by the North and East by Ogun State of Nigeria, in the West by the Republic of Benin, and in the South by the Atlantic Ocean. Territorially, Lagos State encompasses an area of 358,862 hectares or 3,577sq.km. Lagos State is a coastal city consisting of a net work of islands connected to a mainland (Lagos State, 2007). The total developed urban area which houses 85% of the population is only 37% of the land area. The urban area is known as Lagos city or Lagos metropolis (Lagos State, 2006) and is the focus of the thesis. The total population of Lagos State was estimated at approximately 17million people in Lagos (Lagos State, 2006). Table 3.1 below shows the distribution of the population and the gender ratio. The local governments highlighted in yellow are the urban areas.

The location of the State gives it multiple port functions. Its location as a coastal city bordering the Atlantic Ocean, the marinas, lagoons and rivers allows it to function effectively as a seaport. Lagos State is referred to as an ‘environment of aquatic splendour’. It is so referred because of the water bodies that are abound within and around the state and the presence of fresh water and mangrove swamp forests. These forests were dominant before but due to city expansion and land reclamation, these forests are greatly diminished (Lagos State, 2008). Nigeria’s main international airport is also located in Lagos State (National Geographic, 2008).
Table 3.1: Population by Sex and Local Government Area.

Source: Lagos State, 2006

<table>
<thead>
<tr>
<th>Local Government</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agege</td>
<td>564,239</td>
<td>468,825</td>
<td>1,033,064</td>
</tr>
<tr>
<td>Ajeromi-Ifelodun</td>
<td>723,644</td>
<td>711,651</td>
<td>1,435,295</td>
</tr>
<tr>
<td>Alimosho</td>
<td>1,099,656</td>
<td>947,370</td>
<td>2,047,026</td>
</tr>
<tr>
<td>Amuwo Odofin</td>
<td>301,012</td>
<td>223,959</td>
<td>524,971</td>
</tr>
<tr>
<td>Apapa</td>
<td>264,728</td>
<td>257,656</td>
<td>522,384</td>
</tr>
<tr>
<td>Badagry</td>
<td>187,427</td>
<td>192,993</td>
<td>380,420</td>
</tr>
<tr>
<td>Epe</td>
<td>153,360</td>
<td>170,274</td>
<td>323,634</td>
</tr>
<tr>
<td>Eti-Osa</td>
<td>460,124</td>
<td>523,391</td>
<td>983,515</td>
</tr>
<tr>
<td>Ibeju-Lekki</td>
<td>543,654</td>
<td>630,527</td>
<td>1,174,181</td>
</tr>
<tr>
<td>Ifako-Ijaiye</td>
<td>380,112</td>
<td>364,211</td>
<td>744,323</td>
</tr>
<tr>
<td>Ikeja</td>
<td>328,778</td>
<td>319,942</td>
<td>648,720</td>
</tr>
<tr>
<td>Ikorodu</td>
<td>364,207</td>
<td>324,838</td>
<td>689,045</td>
</tr>
<tr>
<td>Kosofe</td>
<td>527,539</td>
<td>407,075</td>
<td>934,614</td>
</tr>
<tr>
<td>Lagos-Island</td>
<td>461,830</td>
<td>398,019</td>
<td>859,849</td>
</tr>
<tr>
<td>Lagos-Mainland</td>
<td>326,433</td>
<td>303,036</td>
<td>629,469</td>
</tr>
<tr>
<td>Mushin</td>
<td>684,176</td>
<td>637,341</td>
<td>1,321,517</td>
</tr>
<tr>
<td>Ojo</td>
<td>507,693</td>
<td>433,830</td>
<td>941,523</td>
</tr>
<tr>
<td>Oshodi-Isolo</td>
<td>514,857</td>
<td>619,691</td>
<td>1,134,548</td>
</tr>
<tr>
<td>Somolu</td>
<td>517,210</td>
<td>507,913</td>
<td>1,025,123</td>
</tr>
<tr>
<td>Surulere</td>
<td>698,403</td>
<td>575,959</td>
<td>1,274,362</td>
</tr>
<tr>
<td><strong>STATE TOTAL</strong></td>
<td><strong>9,115,041</strong></td>
<td><strong>8,437,901</strong></td>
<td><strong>17,552,942</strong></td>
</tr>
</tbody>
</table>

In 1968 under Edict number three Lagos State is divided into five Administrative divisions which were Bagadary, Epe, Ikeja, Ikorudu and Lagos (Lagos State, 2006). These administrative divisions are further subdivided 20 Local Government Areas (LGA). In 2002, the state executive body using the same edict, further subdivided the LGAs adding 37 more bringing the total number of local government areas to 57 (Lagos State, 2002).
The drainage system of the state is consists of lagoons, a marina and gateways which constitute about 22% or 787sq, km or a fifth of the States’ total mass. The major water bodies are the Apapa Marina, Yewa River, and Ogun River, Ologe Lagoon, Kuramo Waters and in Badagry (rural Lagos) there are, Five Cowries Creek and Omu Creeks (Lagos State, 2008).

The state experiences two main climate conditions which are the rainy season which cover the periods between April and October and the dry season of little or no rain which covers the periods of November to march (Lagos State, 2008).

2.1 Map of Nigeria
(Source: Common Wealth, 2004)

2.2 Lagos with water ways
(Source: Encarta, 2008)
3.2. Lagos, a History

Lagos State began its development in the 15th century as a trading post between the Yoruba's, Benin and Awori people and the Portuguese traders, trading in ivories peppers and slaves (Lagos State, 2007, UN, 2007). The state was colonized with the rest of the country in the 18th Century by Great Britain. In 1902, to add to its functions as a port, it became the administrative capital for the rest of the country.

Nigeria gained independence in 1960 with Lagos as its capital and was administered through the Federal Ministry of Lagos Affairs (Dibie, 1999 and 2003). The capital of both the State and the Federation was Lagos Island. Lagos officially became a state in 1967 under decree No. 14 of 1967 by the military dictator General Yakubu Gowon (Lagos State, 2007). In 1976, the Federal capital territory was created and the federal capital was moved to Ikeja in Lagos. In 1991, all federal offices were moved to Abuja making it the new political capital of Nigeria (Lagos State, 2007).

Since independence, Nigeria has had 7 military head of states; Lagos State has had 13 governors 10 of the Lagos State governors being military administrators (Ogungbamila, 2007, Lagos State, 2008). The military governors always tried to control the State hence, the continuous change in the military governors of the state. The military regimes were characterized by fraud and oppression (Joseph, 1996).
3.3. Democracy, a History in Nigeria

Nigeria as a nation has been through different types of governments since its independence in 1960. The country inherited a parliamentary system of government from its colonial masters which was changed to the three tier Federal system of Government in 1963 (Edeh, 1999). The landscape of its government would continue to change with the first military coup in 1966 by General Augyi Ironsi.

General Yakubu Gowon officially made Lagos a State in 1967 as discussed in Section 3.2 above. The first governor of Lagos State, Brigadier Mobolaji Johnson, was appointed by General Yakubu (Lagos State, 2006). He was followed by three other military administrators. The first civilian governor, Mr Jakande was elected in 1979. This coup was followed by two other bloody coups in the Federation of Nigeria before a civilian government was restored in 1979 led by Mr Shagari. The civilian government would only last for five years before being overthrown in another military coup in 1984 (Lagos State, 2006).

The civilian president was then replaced by General Babangida for nine years. State gubernatorial elections were held in 1991 as part of the transition to democratic rule and Sir Otedola was elected the governor of Lagos State (Lagos State, 2006). In 1993, another attempt was made to return the country to democracy; the presidential election was won by Mr Abiola (Edeh, 1999). However the presidential elections were voided, the Senate, The House of Representatives and House of Assemblies were suspended and an interim government was put in place by the military government of General Babangida in 1993. The cancellation of the elections led to violence in the south west region of the country (Lagos State, 2006).
A military coup led by General Abacha in 1993 dissolved the interim government, the Senate, House of Representatives and the Houses of Assembly and dismissed the state and local governors (BBC, 1999). Lagos State had two military administrators during General Abachas' dictatorship, Colonel Oyinlola and Colonel Maruwa. With pressure from within the country in the form of strikes by the labour union and the oil industry and pressure from the international community through dialogue, suspension from the commonwealth and economic sanctions, an attempt was made by General Abachas administration to transform him into a civilian president (Common Wealth, 1996). This transition was attempted by the systematic disqualification and arrest of all other presidential candidates and their sympathizers. This however ended with his death.

A military dictator General Abdusalam came into power in 1998 who organized elections within the country and finally returning Nigeria to fully democratic rule in 1999 with the election of General Obasanjo (BBC, 1999). Lagos State had its third elected Governor Mr Tinubu in 1999.

3.4. Relationships between state and citizens

The changing nature of government has resulted in a situation of mistrust between government agencies and citizens. Citizens often feel that the administration is not trustworthy, and is ineffectual in the delivery of public services. While the citizens will pay income tax, they are generally unwilling to pay any other kind of tax and will only pay other taxes to stay out of trouble than because they feel it is their duty to pay extra taxes or levies (CSI, 2002). The collection of domestic waste is generally seen as the responsibility of the government.
Past national and state Leaders of Nigeria and Lagos State (Source BBC, 1999)

Table 3.2

<table>
<thead>
<tr>
<th>National Political Events</th>
<th>Year</th>
<th>Lagos Political Events</th>
<th>Year</th>
<th>Lagos State Waste Policy</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Elections</td>
<td>1964</td>
<td>Municipality elections</td>
<td>1964</td>
<td>Lagos state refuse disposal board is constituted (LRWDB)</td>
<td>1977</td>
</tr>
<tr>
<td>2nd Coup Lt Col Yakubu Gowon</td>
<td>1966</td>
<td></td>
<td></td>
<td>Lagos state waste disposal board (LSWDB)</td>
<td>1981</td>
</tr>
<tr>
<td>1st Federal Republic Alhaji Sheu Shagari</td>
<td>1979</td>
<td>Mr Lateef Jakande 1979-83</td>
<td></td>
<td>LSRDB became Lagos state waste management authority LAWMA</td>
<td>1991</td>
</tr>
<tr>
<td>5th military coup Gen Sani Abacha</td>
<td>1993</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interim military government Gen Abubakar</td>
<td>1998</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd Republic Gen Obasanjo</td>
<td>1999</td>
<td>Mr Tinubu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th Republic</td>
<td>2003</td>
<td>Mr Tinubu</td>
<td></td>
<td>PSP Programme Phase two</td>
<td>2004 - to date</td>
</tr>
<tr>
<td>5th Republic Mr Yaradua</td>
<td>2007</td>
<td>Mr Fasola</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.5. Federal Administration

Nigeria is a Federation of 36 states with Abuja as its Capital Territory. The Federal Constitution of Nigeria divided the administration of the country into three tiers of different constitutional powers. The administrative tiers are the Central Government, the State Government and the local governments (Dibie, 1999, 2003).

3.5.1. Governmental structure of Nigeria

The government structure of Nigeria is divided into three distinct categories, which are the executive, the legislative and the judiciary. These three structures perform predetermined functions (Dibie, 1999, 2003), which are as follows;

The executive arm (Office of the President):

The Executive arm of government serves as the government administration. This arm of the government consists of the presidency, state governors, local governors, federal and state civil servants, ministers, commissioners. These offices are responsible for proposing policy to be passed into law and the implementation of state and national policy (Dibie, 1999, 2003). This sector of government is also responsible for national and state supervision, appointment of top ranking officials, national and state budgeting, maintenance of law and order (Dibie, 1999, 2003).
The legislative arm (Senate and House of Representative):

The Legislative arm of government is responsible for the passing of bills proposed by the administrative arm of government into law. For central government, this function is carried out by two legislative bodies, the Senate which consists of three elected members from each state of the federation, and the House of Representatives which also consist of three elected members from each state (Dibie, 1999, 2003). Legislative bills can be initiated by either legislative house and there must be consensus between both houses for a law to be passed.

The Judiciary arm (Supreme Court):

The main role of the Judiciary is the interpretation and the upholding of the rule of law. The Judiciary consists of the Supreme Court, Appeal Courts, High Courts, Magistrate Courts and Customary Courts. The functions of the judiciary include the settlement of disputes citizens and the state, between individuals and corporations and other civil cases. It also includes safe guarding citizens’ rights, protection of the constitution, and the interpretation of the constitution where there is a dispute and the power of review of the activities of the executive and legislative arms of government, to sit over criminal cases and judge accordingly (Dibie, 1999, 2003).
3.6. State Administration

The levels of government are classified by the federal constitution of Nigeria as the Federal (central) government, the State governments and the local governments (Constitution of the Federal Republic of Nigeria, 1999). The country is made up of 36 states. The states were created over time by different military administrations (Akinyele, 1996), 774 local government areas and the federal capital territory Abuja (Nigeria, 2008).

The State administration in Nigeria is also a three tier system: the central state government, local government and the wards that make up the local government areas (Dibie, 1999, 2003). The three sectors of the state are as follows;

**The governor’s office:**

The Executive consists of the state governors, local governors, ward chairmen, and commissioners. They function at the state level like the executives of the federations as mentioned in Section 3.6.1.i above (Dibie, 1999, 2003).

**The law makers:**

States have powers to pass bylaws, through the House of Assembly, an elected body. Bylaws cannot conflict or contradict Federal law. Central government legislative bills are debated on both levels and require a two thirds majority vote in both houses for any bill to be passed into law (Dibie, 1999, 2003).
Other functions of the legislative arm of government include financial control, powers of investigation, amendment of existing state constitution and the power of impeachment (Dibie, 1999, 2003).

The state courts:

The Judiciary sector is charged with the interpretation of the law and inclusive at the state level are high courts and the customary courts. They perform the same functions as described in Section 3.6.1.iii (Dibie, 1999, 2003).

3.7. Lagos, a multi-functional city

In 1976 when it was decided by the then head of state General Muritala Mohamed under decree 6 to move the capital to the centrally located and sparsely populated Abuja (Moore, 1984). The move was to serve two functions,

i) To reduce the pressure on Lagos by relieving it of one of its function and

ii) To make the seat of the country’s central administration more accessible to all its citizens (Moore, 1984).

However, Lagos remained the country’s largest city. In parallel with its functions as a trading port and formal administrative centre, it also serves as the industrial nerve centre of
centre of the country, with over two thirds of Nigeria’s industries being located within Lagos State (Abiodun, 2008). Despite the move of the seat of the Federal administration to Abuja, most commercial ventures still have their headquarters located within Lagos State (Forrest, 2004).

In recent times, under the new democratic dispensation, the federal and state governments have opened up the Nigerian markets and are actively encouraging foreign direct investment within the country (Business Conference, 2008). Lagos continues to function as the economic nerve centre of the nation. The popularity of Lagos within the country continues to grow as the top ranking state to invest in Nigeria. The functions of the state have continued to make it an attractive prospect for immigration from other states within the country, within the continent and the world at large which can be attested to by the multiethnic nature of the state and the continuous development which can be witnessed with Lagos State.

Governance within Lagos will be continually challenged to provide adequate infrastructure for the needs of a growing population. Implementation debates both prescribe that when policies are created, that the implementation be observed over a period of time then redrafted to meet changing needs (Sabatier, 1996; O’Toole, 2000). This would help governance in Lagos attempt to meet its policy objective. Chapters eight and nine further discuss policy implementation and review in Lagos.
3.8. History of Waste Management in Lagos State

The history of waste management has been a long and chequered one in Lagos State. The state has gone from a period where its waste collection management was sustainable and self-reliant without a formal public service to a stage where it struggles to meet up with the rising demand for waste collection management. These issues are discussed below.

During the pre-colonial era Lagos was an established trading port under Portuguese rule and still consisted of small settlements. Community cleaning and waste collection management were managed by women and children, who collected the waste and disposed of it in the bushes at the outskirts of the settlements (Aboyade, 2004).

Waste collection management problems started during the colonial era as the Lagos settlements began to urbanize and expand. Indigenous methods of waste management were no longer sufficient to manage waste collection. The colonial response to the problem was to provide a solution for the colonial areas without providing one for the indigenous people (Odunaiya, 2001). In 1960, when Nigeria gained independence, waste collection management was a function of the Local Government Board and it was ill-equipped to handle the task it had been given (Wunsch and Olowu, 1990). In 1977 Lagos was host to an international cultural event and the world's media proclaimed Lagos as one of the dirtiest cities in the world (Raski, 1988; LAWMA, 2007).
In the early 1980s waste collection management (see also Section 3.8.2) was contracted out by the Local Government Board to P. D. Pollution Control, paid for in full by the Lagos State government (Odunaiya, 2001). This company was in charge of waste collection management policy creation and its implementation. In 1985, the waste contract was terminated due to the increase in demand brought about by a substantial increase in population and poor administration of State funds, coupled with a change of government as a result of another military coup. The new administration found that the State budget could not fund the provision of waste services and this led to a significant deterioration in service as formal provision could not cope with demand. As a result, informal service providers took advantage of the gap in the provision of services (Aboyade, 2004).

In 1988, a World Bank loan was granted to improve the service through the acquisition of equipment, provided by the LSWDB. The LSWDB was then reorganized and re-launched as the Lagos State Waste Management Authority (World Bank, 1991; LAWMA, 2005). The services were not improved (Wunsch and Olowu, 1990) and the decision was then made for the local governments within the State to provide waste management services for the residential areas while LAWMA retained responsibility for commercial and industrial waste (Aboyode, 2004). This system was still inefficient and encountered problems such as a lack of communication between the service providers which led to duplication of services and little progress in solving the waste problems within the state. LAWMA is now currently jointly managed by the sanitation units of the State government though the Lagos State Ministry of Environment and local governments. In 1998, the Lagos State Waste Management Authority Act was passed which gives legal backing to LAWMA for the
provision of commercial and industrial waste services and the operation of transfer stations (Bamgbose et al, 2000).

By 1996 it was clear that the Lagos State’s Ministry of Environment and LAWMA were unable to adequately meet the demand for waste services. A new waste policy was established for the private provision of waste services in 1996. The Private Sector Participation (PSP) programme was designed to increase waste collection from municipal residential areas and transfer capacity. Ministry of Environment took an unprecedented decision, deciding that the population should pay for waste management and that market forces should decide the price for the services (P1, 2007).

By 1996, there was a predominance of informal sector waste service provision in the door to door collection of waste and scavenging. The sector it was noted was spread in a lot of areas which were not receiving formal provision and were adept at collecting user charges from the residents. The informal waste sector in Lagos State will be discussed further in Chapter 7.

The current PSP waste collection management programme which began implementation in 1996 and was reviewed in 2004 will be discussed in Chapter eight and Chapter nine.
3.9. The institutions that run the States' waste

State governments preside over institutions called Ministries which carry out the mandates of the state administration. These ministries are headed by commissioners who answer directly to the state governor. The ministries propose policies within their individual or combined institutions to the governor who presents it as a bill to the House of Representatives to be made into law. Lagos State currently has 29 ministries including the Ministry of Environment which is of interest to this thesis. Below are the institutions which are directly relevant to this thesis and their associated agency.

3.9.1. Lagos Ministry of Environment (MoE)

The Lagos State Ministry of Environment (MoE) used to be Section of the Ministry of Environment and Physical Planning. The department was given autonomy in 2003 due to the perceived increase in environmental degradation within Lagos State (P1, 2007; Lagos State, 2008). The MoE determines environmental policy for Lagos State, while the Lagos State Waste Management Agency (LAWMA) serves as the implementing agency.

The MoE is mandated with the care and the protection of Lagos State and its associated water bodies. The duties the MoE is required to perform include the maintenance of a clean and aesthetically pleasing environment (Lagos State, 2008). The MoE was created in 2003 as a result of the high profile given to 'the environment' during the 2003 election campaign (Lagos State, 2003). The year 2003 marked the second-term election year for the democratically elected government. The environment had been a major issue within the press and the electorate, specifically the mountains of waste seen around the city (Olori, 2005).
major parties within the State campaigning for the governor’s seat all used the environment as campaign mantra especially the growing waste problem and its negative associated effects (PDP, 2003; AC, 2003; UNPP, 2003). Action Congress won the 2003 race for Lagos State Governor; with Governor Ahmed Tinubu staying on for a second term (Lagos, 2003). True to the campaign mandate, a ten step programme to improve Lagos State was developed, with solid waste management a high priority (MoE, 2008). The MoE was created to fulfil this campaign mandate (MoE, 2008).

3.9.2. Lagos State waste management authority (LAWMA)

The rapid urbanization of Lagos State in the 1970s’ compounded by Nigeria’s oil boom of the 1970s’ brought waste management to the forefront of state leaders. The local government councils were finding it increasingly difficult to manage their waste (Raski, 1988; LAWMA, 2007).

This difficulty and the comments from the world press mentioned in Section 3.8 led to the creation of the first waste agency in West Africa in 1977, the Lagos State Refuse Disposal Board (LSRDB), which was created under Edict 9. It was a privately run organization under Powell Puffen Pollution Control Consultants from Canada as managers. This outfit was responsible for the collection and disposal of domestic waste within Lagos State (Aboyode, 2004, LAWMA, 2007).
The mandate of the Lagos State Refuse Disposal board was increased in 1981 to include industrial and commercial waste collection and disposal, drain cleaning and disposal removal and scraping of out of commission vehicles. The name of the agency was changed from the LSRDB to the Lagos State Waste Disposal Board (LSWDB). It remained with the private operator till 1985 when it was transferred to the local government council due to lack of funds (Aboyode, 2004, LAWMA, 2007).

The new agency the LSWDB found it almost impossible to deliver waste services at the level of the private operator. The agency had problems acquiring adequate funding and resources and more often than not, the LSWDB was unable to generate enough supply of waste services to meet the demand (Aboyode, 2004). The agency was reorganized and in 1991 and moved to the Ministry of Environment and Physical Planning. It was reorganized into a new agency now known as the Lagos State Waste Management Authority (LAWMA), created under Edict No. 55, making LAWMA responsible for the collection and disposal of municipal, commercial and industrial waste within the state (Aboyode, 2004; LAWMA, 2007).

In 1991, LAWMA obtained a loan from the World Bank to procure equipment for the provision of waste services within the state. By 1996, the agency was plagued with problems of inadequate resources and skilled man power, and most of the vehicles had broken down (World Bank, 1996).

In 1996, the Ministry for Environment and Physical Planning set up the PSP waste collection transfer programme. The creation of this programme saw LAWMAAs’ role reduce
from collecting all municipal solid waste, including household, commercial and industrial waste, to only collecting industrial waste. This was due to the inefficiency of the agency. However, following further negotiations with the World Bank, in 2007 the PSP Programme was transferred back to LAWMA, as part of World Bank funding conditions for new infrastructure (P2, 2007).

The characteristics of Lagos State which have been visited in this Section are aimed at understanding Lagos State and its inhabitants. And how these people and their characteristics affect waste management which is discussed in Section 3.9 below and in Chapters eight and nine.

3.10. PSP Waste Programme in brief

The PSP waste collection policy was put forward by the Policy Makers at the MoE in 1996. A meeting with the Local Government Administration sold the policy to the chairmen of Somolu and Kosofe Local Governments. A proposal was put together by the MoE and the two Local Government Councils to create the pilot scheme for the PSP Waste Programme. The pilot was started with companies that were new to the arena of domestic waste collection and transfer (MoE, 2007). The MoE set parameters for the companies which wanted to enter into the private domestic waste collection arena. These parameters were that each company should own a minimum of ten 10 tonne trucks, tell the MoE how many wards they can cater for and create a routing map and schedule. A total of 624 collectors signed up in the first year, from 1996 -2004, approximately 1500 companies signed up to the program with more than 50% of them going out of business by 2004 (MoE, 2007).
3.11. Conclusion

The governmental structure in Lagos state has a long and checked history. The tradition of dictatorship and corruption has been observed to be handed down from one administration to the next. There is also a pattern of inadequate man power, misappropriated resources and personalization of public services. These characteristics will test further the hypothesis of this thesis as these characteristics of governments and street-level bureaucrats are not normally found in the western societies where implementation models are developed. There has also been no accommodation within implementation debates of how to accommodate these characteristics or avoid them within public policy implementation.
4. Managing waste collection in developing country cities

The purpose of this Chapter is to review general waste management in developing country cities. This is in order to provide a framework for evaluating/appraising policy intervention with regards to waste management, particularly waste collection and its implementation. This Chapter focuses on types of waste management and the differences in waste management in higher and lower income countries. It discusses contributing factors to inadequate waste management in lower income countries and the consequences of poor waste management within the urban environment.

The programme being used as a case study for this thesis is a waste management policy. It is therefore pertinent to testing the hypothesis that this thesis looks at the waste management in general and also explore the differences between waste management in developed countries where implementation debates are developed and where implementation debates are often taking place at the city level and also, waste management in developing country cities which is being used to test implementation theory.

4.1. Waste Generation and Management

Waste management is the way in which waste is handled and treated after it has been generated. Waste management covers the period from when an item is classified as waste by the possessor until the point of disposal (Zurbrugg 2003; Medina, 1997). Waste management covers four main areas, which include:
• **Waste Generation:**

When a decision is reached that an object has no more use/value and must be disposed off.

• **Collection:**

This involves the collection of waste from the point of generation. There are two main methods employed which are door-to-door collection and communal collection where the waste is brought by the house holds to a central point for later collection to the point of disposal.

• **Transfer:**

This involves the transfer of waste from the point of collection to the point of disposal.

• **Disposal:**

An end for the waste collected. There are different methods of municipal waste disposal. The main methods of disposal include landfill, recycling, and incineration.

The amount of solid waste generated within a municipality depends on varying factors, which include the size of the urban population, the level of economic development, rate of consumption, seasons (areas of high precipitation which generate a lot of organic waste need
higher collection rate due to the higher rates of decomposition of the waste and the odour pollution which results) and administrative systems (how efficiently the waste services are run) (Zurbrugg 2003; Medina, 1997).

The level of economic development refers to the average Gross National Income (GNI) per head of the population. In urban areas with higher per capita income, waste generation is significantly higher and contains higher quantities of inorganic waste than urban areas with lower GNI per capita (Zurbrugg, 2003). The amount and type of waste generated also differs from high wage areas to low wage areas (Wang and Nie, 2001). A very important variable in the generation of municipal waste is population but in fast growing urban areas, it is often quite difficult to establish accurate information on the size of the urban population due to the lack of recent census data and unrecorded populations such as seasonal migrants (Hockett, Lober and Pilgrim, 1995).

The approximate determination of the population characteristics, amount and composition of municipal solid waste generated is essential in order to create intervention policies which meet municipal waste needs (Qdais, Hamonda and Newham, 1996). This will give the planning authorities the information required to provide essential waste services required within the municipality e.g. to increase the frequency and capacity of waste collected to meet projected demand (Qdais et al, 1996).

Implementation debates usually both top-down and bottom-up are usually centred around key known variables. The debates become more difficult to apply to some developing country cities due to the key variables themselves being unknown. For instance, the city determines its population to be x (legal and illegal residents), but in fact the actual figure is y.
if \( y \) is less than \( x \), there is an oversupply of the service to the detriment of other services. However, \( y \) is greater than \( x \), there is an under supply of an essential service which will lead to excessive stress on the infrastructure provided. While the bottom-up debates argue that street-level bureaucrats will develop coping mechanisms to meet demand with limited resources (Winter, 2002), it still does not make adequate provision the unknown key variables which can occur in policy implementation in some developing country cities.

4.2. Advanced waste management systems

In order to better evaluate whether a particular waste system is efficient or not, it is essential to review briefly the methods being employed in more established waste management systems.

In the last decade in some developed countries, the thinking behind waste management has changed from an emphasis on collect and burying wastes in landfill sites to seeing waste as a potential resource (Wollam, 2005). Due to an increase in awareness of the added effects of waste on the generation of greenhouse gases for example methane which adds to the depletion of the ozone layer and lack of available space for land filling in countries such as the UK (Yasuda, 2002; Wollam, 2005). The reliance on landfill sites is becoming increasingly difficult in some countries because of a shortage of potential sites. For example in the Netherlands due to its unique geography (a major part of the land mass is -6.7m below sea level while the highest point is 321m above sea level), waste managers employ methods like incineration and exporting of their waste (Statistisch Jaarboek, 2000).
The finite nature of natural resources such as crude oil has also pushed the drive to rethink the view of waste as waste.

The response to the adverse environmental effects of waste disposal and the increasing problems of finding landfill sites, throughout high-income European countries and North America has been to implement source reduction, reuse and recycling programs, and to diversify disposal options e.g. install sanitary landfills and incinerators with energy recovery (Wollam, 2005). The main emerging approaches can be summarized as follows:

- **Waste Minimization:**

  This entails the reduction of waste produced by the creators of waste for example, encouraging manufacturers to reduce the amount of packaging for their products in European Union member countries (Dantus and High, 1999).

- **Reuse:**

  Consumers and/or manufacturers are encouraged to find similar/other uses for their waste before they are finally discarded (Tsai and Chow, 2004).
• **Recycling:**

Waste materials e.g. plastic, paper, iron, aluminium are used as raw materials in the production process for items like paper, plastic cups, staplers, instead of utilizing virgin materials.

• **Other disposal options:**

  - **Sanitary Landfills:**

    These specially constructed landfills lined to stop/reduce leachates from the landfill permeating the ground water or other water bodies (Singh and Murphy, 1990).

  - **Landfills:**

    This method of disposal is a depression in the ground where waste is buried with no formal environmentally protective facilities.

  - **Incineration:**

    This involves the large scale burning of waste. This process may include energy recovery (Sakai and Hiraoka, 2000).
A waste hierarchy, as shown in figure 4.1 below, was developed to identify available options and put in order of priority the preferred options (Wollam, 2005). Figure 4.1 represents the preferred waste disposal options within the European Union. The top of the pyramid is the most preferred waste disposal option which is the minimization of waste by the producers of waste (Wollam, 2005). This option is followed by reuse, recycling, incineration with energy recovery with the least preferred options being landfill and incineration without energy recovery (Wollam, 2005).

Within the European Union, legislation and taxes were created to discourage the land filling of biodegradable or recyclable/reusable waste by governments, municipalities and waste practitioners (Stephen, 2001). The intention of which was to force the consideration of other forms of waste disposal (Stephen, 2001) by making the use of land filling as a waste disposal option more expensive than other forms of waste disposal by using legislative instruments like landfill taxes (1994 EC Directive on Packaging and Packaging Waste; BBC News, 2002; European Communities, 2000; Adefuye, 2003). The level of waste awareness amongst both governments and the civil society in Europe and North America is high including awareness of the effects of waste disposal, its effects and the available disposal options. This high level of waste awareness within some high income countries has allowed for the diversification of waste disposal options within these countries (European Communities, 2000)
4.3. Developing waste management systems

Compared to waste management in developing countries, there are a number of problems associated with waste management in urban areas in some lower income countries. These include or are related to the rapid increase in urban population, types of waste generated, lack of institutional capacity of waste management, the operation of a large informal sector and peoples' attitudes towards waste management and waste management.
practitioners involved in the sector (Thomas-Hope 1998). Other problems associated with waste management in some developing country cities include;

- The waste may contain faecal matter due to the provision of inadequate sewerage systems in low income country cities (Cointreau 1981; and Olowomeye, 1991);

- Waste may include industrial waste because small and medium sized enterprises may use the municipal waste systems to dispose of their waste which may be hazardous (Olowomeye, 1991);

- The waste often includes a high organic content, the decomposition of the organic waste can turn into chemical constituents which pollutes the ground water (Cointreau 1981; and Olowomeye, 1991), and

- Due to very low collection rates in some low-income countries, the waste generated is often discarded in open spaces in legal or illegal open dumps, vacant plots, roadsides, open drainages, water bodies’ e.t.c. (Olowomeye, 1991, Onibokun, and Kumuyi, 1999).

In contrast to high income countries where waste management is dealt with at a national (or in some case supra-national level in the EU) and where attention is moving towards waste minimization and treating waste as a resource (Wollam, 2005), low-income country cities, remain a focus of activity and emphasis has remained on the collection,
transfer and burying of waste (Cointreau, 1981). Very few waste disposal options are available in developing country cities and when waste disposal options are available, they are usually limited to recycling and small scale composting (Zurburg, 2003).

The totality of the waste generated in low income country cities is usually not collected. For example, in 1994 the waste generated in Abidjan was estimated to be 921,000 tonnes per annum but the authorities collected approximately only 509,000 tonnes per annum (approximately 55% in 1994) (Attahi, 1999). In Dar Es Salaam, the waste generated was estimated to be 1040 tonnes per day but approximately only 180 tonnes were estimated to have been collected and sent to landfill in 1991 (Yhdego, 1991). The implication of this collection deficit for some developing country cities is that a significant amount of waste is being left within the urban environment. Waste that is not disposed of in the appropriate manner or place will be disposed of at inappropriate places for instance water bodies and urban spaces (Attahi, 1999). In Dar Es Salam, as stated above, if only 55% of waste generated is collected annually, it means approximately 45%, 412,000 tonnes of waste will be disposed off inappropriately, for example in illegal dump sites. The amount of waste is significant enough to pose health and environmental risks as will be discussed later in Sections 4.7 and 4.8.

Table 4.1: Collection rates in some low income cities.


<table>
<thead>
<tr>
<th>City</th>
<th>Waste Collection %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dar Es Salam</td>
<td>40</td>
</tr>
<tr>
<td>Kinshasa</td>
<td>10</td>
</tr>
<tr>
<td>Jakarta</td>
<td>40</td>
</tr>
<tr>
<td>Karachi</td>
<td>40</td>
</tr>
<tr>
<td>Faisalabad</td>
<td>50</td>
</tr>
</tbody>
</table>
4.4. Effects of population growth on waste generated

The highest growth rates of urban populations recorded by statistical organizations are in low income countries, where high proportions of the population lived in rural areas (World Bank, 1999; UN, 2003); African regions are experiencing the highest urban growth rates of 5% per annum of all the world regions (World Resource Institute, 1998/99; Donkor, 2003). For example, the urban growth rate in Nigeria is currently estimated as 5.1% while that of the United Kingdom is 1.2% (World Resource Institute, 2006).

In low income countries cities with high levels of urbanization, rural to urban migration is an important factor fuelling urban growth. The move from rural areas to urban areas is due mainly to economic reasons. As incomes in urban areas are usually higher than rural areas and the choice of employment is more diverse (Glaeser, Scheinkman and Shleifer, 1995). The growth and expansion of urban settlements will mean that the urban infrastructure will need to be expanded over time as demand increases.

It is likely that increase in population will lead to a corresponding increase in waste. Quite quickly, given the rates of population growth, waste production can exceed the capacity that the city can successfully accommodate. For example, the population of Mumbai went from 8.2 million people in 1981 to 12.3 million in 1991. The waste generated per day showed a resultant increase going from 3200 tonnes per day to 5400 tonnes per day, a growth rate of approximately 67%. The city of Mumbai faced a capacity shortfall due to inadequate resources and manpower to deal with the increase in waste generation. The inability of some developing country cities to forecast their urban population growth rate effectively leads to a corresponding decrease in their ability to plan for urban services (Boadi, Kuitunen, 2003).

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4.5. More people, more income, more waste

Rapid urban growth rates with significant increases in population in cities have an effect on the provision of waste services (Glaeser, Scheinkman and Shleifer, 1995). This has two possible consequences:

- Expansion of unplanned and often inadequately serviced settlements, which make it difficult to plan efficient waste collection and transfer services, and,

- Rapid population growth leading to increased pressure on urban infrastructure

These two factors have an effect on the ability of the municipal governments to plan for, or provide resources for the efficient management of urban services. Partly due to general increases of wealth in urban areas but also due to the shift of rural immigrants from subsistence to a waged livelihood, the increase in relative wealth of households usually leads to higher rates of consumption and a corresponding diversification and increase in waste generated (Achankeng, 2003). For example, higher wage incomes can lead to the consumption of more goods which are inorganic in nature such as microwave dinners instead of cooking.

In general, as incomes increase, the type of waste generated diversifies from mainly organic waste to include other types of materials like paper and packaging (Boadi, Kuitunen, 2003; and World Bank, 1999). The increase in the amount of waste generated needs to be matched with an increase in collection capacity along with a diversification of disposal methods and capacity.
The type of population within an area affects how governments can plan for those areas. Cities with large amounts of squatter settlements or resource deprived areas have to make provisions for areas which are usually difficult to access and could receive limited cooperation from the people living there. Unplanned squatter settlements are the exception rather than the rule in western democracies and as such, implementation studies have so far not included them. Implementation literatures also do not consider a high illiteracy level within its Policy Makers target End Users. A high level of illiteracy can sometimes make it harder for Policy Makers and street-level bureaucrats to be able to achieve policy goals.

As the patterns of consumption changes due to changes in the general income level of a city, the Policy Makers need to be able to adapt their policies to meet this change. The implementation literature whether top-down or bottom-up doesn’t recognize that some Policy Makers and street-level bureaucrat are developing their methods of coping with a constantly changing demographics. Implementation debates do not take into account large squatter settlements which can develop sporadically and could be difficult to manage. These squatter settlements have their impacts on the amount of waste generated which affect the overall management of waste in the urban environment as a whole. As such, they need to be considered within any policy created.

4.6. Country type, country waste

There are significant differences in urban wastes generated between cities in high income countries and those in low income countries both in type and quantity. High income cities generate approximately twice the amount of waste generated per person in low income cities (EPAT 1999; Boadi, and Kuitunen, 2003). Table 4.2 illustrates the differences in the
amount and type of waste collected per person per year in developed and developing country cities. High income cities are shown to generate between 300-1000 kg (Krammer et al, 1994; Cointreau, 1982) of waste per person per year while low income cities were seen to generate between 100-220 kg of waste per person per year (Kramer et al, 1994; EPAT, 1999; Cointreau, 1982). The composition of the waste generated within low and high income economies also varies. Low income economies have a high proportion of organic waste, moisture content and sand (Cointreau, 1980; Olowomeye, 1991; Boadi, Kuitunen, 2003), while waste in high income countries contains less moisture and more paper, glass and metals (Cointreau, 1980; Olowomeye, 1991; Boadi, Kuitunen, 2003).

This difference in the type and amount of waste generated within the two types of cities implies that different approaches and equipment maybe required delivering waste services as will be discussed in Section 4.6 below.

Table 4.2: Municipal Wastes- Quantities and characteristics for Low, Middle and High income countries (Source: Cointreau, 1982)

<table>
<thead>
<tr>
<th>Waste Generation</th>
<th>Low Income Countries</th>
<th>Middle Income Countries</th>
<th>High Income Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Kg per person per year)</td>
<td>100-220</td>
<td>180-330</td>
<td>300-1,000</td>
</tr>
<tr>
<td>Moisture Content (% net weight at point of generation)</td>
<td>40-80</td>
<td>40-60</td>
<td>20-40</td>
</tr>
<tr>
<td>Composition (% by net weight)</td>
<td>Paper 1-10 15-40 15-50</td>
<td>Glass, Ceramics 1-10 1-10 4-12</td>
<td>Metals 1-5 1-5 3-13</td>
</tr>
<tr>
<td></td>
<td>Plastics 1-5 2-6 2-10</td>
<td>Leather, Rubber 1-5 - -</td>
<td>Wood, Bones, Straw 1-5 - -</td>
</tr>
<tr>
<td></td>
<td>Textiles 1-5 2-10 2-10</td>
<td>Vegetables/Pureclicable 40-85 20-65 20-50</td>
<td>Miscellaneous inert 1-40 1-30 1-20</td>
</tr>
</tbody>
</table>
4.7. Waste Institutions

In developing country cities, solid waste can absorb a significant proportion of the municipal budget, for instance in the late 1970s', Kanpur and Calcutta in India allocate approximately 22% and 26% of their annual budget respectively to waste collection (Cointreau, 1981), while waste collection rates are typically low, often only 50-70% of that generated within their municipalities (Olowomeye, 1991; Swilling and Hutt, 1999). In cities in high income countries solid waste management absorbs a smaller proportion of the municipal budgets but collect 95% of the urban waste generated (Klundert and Lardinois, 1995).

The differences in waste collection within high and low income country cities also extend to the funding of solid waste management services. In most low income country cities, the government usually funds solid waste management directly, while in a number of in high income country cities, the cost are transferred to the End User. In Chapter six, this thesis shall review how public private partnerships are used within selected countries to transfer the cost of municipal solid waste collection to the End User (Li and Akintoye, 2004)

Inadequate governance structures and limited resources restrict the ability of governments to provide adequate infrastructure (for example, water, sanitation, waste management services). This makes it difficult for some municipal governments to meet the needs of the urban population at the rate at which the population expands. This is especially true within slum areas (Medina, 2002, Olowomeye, 1991, Kuittunen, 2003, Buenrostro, Bocco, 2003). Chapter 5 on urban governance will look at the relationship between forms of governments and their urban population.
The efficiency of waste collection management services is directly dependent on other services to function effectively. The services which waste collection management depends on include; an adequate transportation network, appropriate waste disposal options and adequate service training of staff (Rabinovitch, 1992). Unplanned urban expansion accompanied by unplanned roads. This affects the mode of collection. For instance, if a city has a mechanized system of collection, the collection vehicles may not be able to access the unplanned settlements due to the conditions of the road which may be too narrow or are unmotorable.

Further problems faced by the waste institutions in developing cities include;

**Inadequate Data**

i. One of the most important factors in the effective management of waste, and perhaps most especially policy development is accurate data. This is a key feature in creating effective intervention or collection management schemes (Agunwamba, 1998). In most high income cities, the data available is fairly accurate, but in low income cities, data collection is sporadic, unreliable, or sometimes non-existent (Agunwamba, 1998).

ii. Problems of data collection are illustrated in the work of Onibokun and Kumuyi (1996) who used data from different specialists on waste generated in Ibadan, Nigeria, and it would appear that the data provided by the consultants over a period of time is not accurate e.g. McLaren International projected waste generated in 1970 as 0.53kg per
person per day, Oluwande in 1982 projected it to be 0.42kg per person per day and PAI in 1982 estimated it to be 0.33kg per person per day (Onibokun and Kumuyi, 1996). The waste generation data collected would indicate that the waste arising has decreased over the stated period, without explanations for the attested drop in the amount of waste being generated per person (Onibokun and Kumuyi, 1996). These discrepancies would instil doubt in the data collected and raise questions as to whether the data was estimated or if research was carried out to reach these conclusions.

iii. In order to effectively manage scarce resources and manpower, a range of data is required for example, daily/annual tonnage of waste generated, demographics of the people being served, composition of waste being generated and, user tariffs if any (Agunwamba, 1998; Abu Qudais, Hamoda and Newham, 1997). The analysis should also distinguish between formal and informal forms of service provision. It should be noted that there exists very little literature on the correlation between accurate data and effective waste collection management. This is an interesting point when considering urban centres which struggle to provide adequate waste removal and transfer options. For instance, where city x is experiencing a collection and transfer deficits. Could inadequate waste generation data be affecting how city x delivers its services? For instance, If city x is has estimated it only generates 5 tonnes of waste per day but actual waste generated is 10 tonnes giving it a shortfall of 5 tonnes in its collection service and
resource allocation. It is not a situation that will be quick or easy to resolve.

**Waste collection technology**

The choice of waste collection technology chosen to provide urban waste collection and transfer services could be the difference between an efficient service and inefficient service.

iv. The technological needs of high income and low income countries differ greatly because of the differences in the types of waste generated and the differences in their economic conditions as discussed in Section 4.4 above. Waste management technologies generally developed in high income countries which are fit for their purpose tends to low applicability and rarely achieve the same targets in developing country cities (Medina, 2002).

v. The technology that is sometimes adopted in developing country cities does not necessarily match their needs (Olowomeye, 1991). For example, the use of compactor trucks in high income countries usually achieves a final density of 400kg/cubic meter and a compaction ratio of 4:1, while in a developing country city the same compactors could achieve a compaction ratio of only 1.5:1 because of the greater proportion of organic waste and smaller proportion of paper and
plastics (Cointreau, 1982). There may also be problems maintaining specialist equipment, due to a lack of man power and resources (Onibokun, Kumuyi, 1996; Medina, 2002; World Bank 1990).

vi. The availability of resources (infrastructure, man power and financial resources) in developing country cities has an effect on the kind of waste technology that can be used within the city for instance; the lack of accessible vehicular roads can affect the type of collection equipment that can be utilized within some areas (Ogu, 2000).

For instance, in Abidjan, the municipal authorities acquired six crusher trucks (24 m$^3$), 3 fork-lift trucks for loading bins of 3–6 m$^3$, and 360 bins of 3 m$^3$ (Attahi, 1999). The size of this machinery limited some of the areas that the equipment was able to access. The roads of unplanned settlements were too narrow and in conditions which limited the use of heavy machinery. In some cases, the machinery further worsened the conditions of the roads (Attahi, 1999). The municipality also found it very difficult to maintain the equipment purchased (Attahi, 1999).

A further example is in Manila in 1990, the Japanese government donated 300 compactor trucks but by 1992, only 120 were working due to the city's inability to maintain and run the trucks (Medina, 2002).
vii. It is very essential that the waste management authorities in any city be able to match equipment to urban infrastructure and needs to be able to provide an optimum level of waste services within the urban environment.

**Waste financing**

The current practice of waste management in many low income cities is problematic and expensive. Expensive methods of waste management e.g. incinerators which cost a lot of foreign exchange can add to resource scarcity (Schubeler, 1996).

**External support**

i) External support from aid agencies for solid waste management projects has mixed impacts. While some projects are able to keep meeting their design objectives after external support has been removed, others are unsustainable once the foreign funding has been exhausted, as arrangements are not made to meet future funding needs (Klundert and Lardinois, 1995).

ii) Very little consideration is given to the socio-economic characteristics of the country or municipality receiving the aid and their ability to sustain the project after the financial assistance has ceased by either the agency or the municipality (Ogawa, 1995).
II. Informal Waste Sector

Failures of formal waste management processes had led to the development of informal responses to the problem of waste management. These are complex and extremely valid services and range from the door to door collection of waste to diversifying the disposal options such as recycling and composting within the urban environment (Fahmi, 2005).

The concept of an informal sector is used to describe the part of the labour force working outside the organized labour market (Hart, 1970, 1973). This sector of the economy is not regulated by the government and does not contribute formally to the GNP i.e. the economic value of services are hypothesized due to the non-regulatory nature of the sector (Gerxhani, 2004).

The impact of the informal sector in developing countries is high as it is a large source of employment within some cities. While the activities of sector are not criminal in so far as they provide valid services to the public, their legality is often in question. The sector according to the literature is viewed to fall in between legal and illegal activities (Gerxhani, 2004).

In some developing country cities, the informal waste sector is integral to the delivery of waste collection management services in the urban area. This thesis recognizes their contribution (both positive and negative) to waste management collection within developing country cities and explores their contribution in general to waste management in developing country cities in Chapter seven. This thesis also focuses on their specific contribution to the
delivery of waste collection management services in Lagos state in the analysis of the Lagos state waste collection PSP program.

Informal services provision in services like waste management can be a vital part of waste management services in some developing country cities. This variable of service provision is not found in implementation debates regardless of government stance on the role of the informal sector.

4.8. Glamour work, local attitudes and effect on waste handling

Attitudes to solid waste management differ in different contexts. In some sub-Saharan cities, in pre-colonial times, the collection and disposal of waste was seen as a communal duty carried out by women and children (Olowomeye, 1991). Over time, as cities expanded, the traditional management became inadequate to meet the city's waste management needs (Olowomeye, 1991, Onibokun, and Kumuyi, 1999). Newly emerging governments were ill equipped to fill the gap left by traditional methods of waste management and an informal sector developed to fill the gap in demand not met by government service provision (Attahi, 1999).

The conditions of work, especially for the informal practitioners working in the municipal solid waste collection sector are very hazardous and dangerous as a result of untreated waste contaminants in the waste stream and limited or no protection for waste workers (Schubeler, 1996; Cointreau, 1982). The social status of those working in waste
management in both high income and low income countries is generally low. The public perception of the workers who collect their waste creates a prejudice against the workers which in turn impacts on workers and their attitude to their work. (Olowomeye, 1991, Ogawa, 1995, Onibokun, and Kumuyi, 1999).

People's attitudes and habits have a corresponding effect on the waste generated and demand for effective services. The ability of the civil society to take responsibility for or participatory interest, in waste management as a whole has an effect on the type and level of waste management services that may be found in some country cities (Onibokun and Kumuyi, 1999). For example, the general belief that waste management services are the responsibility of the government and should be paid for by the government will result in a majority of the targeted end use End Users being unwilling to pay for the formal waste services. Even though the income generated from the waste bill could dramatically improve level of service received or area that can be covered (Olowomeye, 1991). Their level of interest and their ability to translate that interest into action for example, paying for services received, will often have a direct effect on the type and level of service received. (Schubeler, 1995).

The role of the End Users in the implementation of services will be further explored in Chapters eight and nine. Most implementation debates take for granted that if an effective service which is not cumbersome to use or understand (Pressman and Wildavsky, 1983), most if not all End Users will cooperate with the service providers. End Users are seldom mentioned except to argue that proximity to them is necessary (bottom-uppers). End Users satisfaction is usually a measure of if the policy is working as opposed to an actor that can directly or indirectly affect implementation.
4.9. Consequence of inadequate waste disposal in urban centres

The inappropriate discarding of municipal waste in unsuitable areas can cause significant urban problems. For example, discarded waste can cause flooding as the waste left on some road sides finds its way into the drainage system and obstructs the free movement of surface water, or traffic congestion as waste left on the roadside overflows on to the road slowing traffic as motorists slow down to avoid the waste to avoid damage to their vehicles from sharp objects (Olori, 2005).

In some developing country cities where waste is collected, the main methods used in the disposal of waste in low-income countries are mainly land filling and open air-burning (Medina, 2002; Cointreau, 1981; Agunwamba, 1998). Burning as a waste management tool leads to air pollution and the likely presence of methane in most dump sites could also cause a significant fire hazard. For example, in Tampico Mexico, a fire started to manage the waste at a landfill burned for six months due to the presence of methane at the landfill site (Medina, 2002).

4.10. Health

The indiscriminate disposal of waste in the environment can have an adverse effect on not just the psychological health but the physical health of the people who live in such areas (Achankeng, 2003). The two groups most at risk are the private, formal (public) and informal waste workers who deal directly with the waste, because the waste collected may include
faecal matter in the waste, medical waste and light industrial waste, which could be hazardous, within the municipal waste stream and people who live in the vicinity of legal and illegal waste dumps sites (through rodents, pests etc) especially children who might play in the waste deposited close to their homes (Schubeler, 1996, Cointreau, 1981, Olowomeye, 1991).

Indiscriminate waste dumping also provides breeding places for pests such as mosquitoes, rats, and houseflies’ which spread sickness and disease, leachtares may contaminate the ground and surface water. Waste is also ascetically unpleasing and has a negative impact on the people that live in proximity to those areas and negatively affects the associated land values within affected areas (Medina, 2002; HABITAT, 1996; Cointreau, 1981).

4.11. Conclusion

Implementation debates are centred mainly on formal provision of urban services because they are created in Northern American and Europe. In these countries, the informal sector are illegal and do not constitute major service providers as can be found within developing country cities. The informal sector service providers also constitute an unknown variable within the delivery of waste management services especially when governments are unable to regulate their activities. The control that Policy Makers have on them varies from city to city. In areas where formal provision has completely broken down, they constitute the main/only source of service delivery. Implementation debates (top-down and bottom-up) do
not recognize this sector as a source of service delivery. This makes the informal sector pertinent within this thesis as for a significant period of time, they represented the main source of waste collection services in Lagos state during Phase I of the PSP Programme and they were the inspiration for the PSP Programme.

The type and amount of waste generated within a city is determined by population growth, general income levels and patterns of consumption. Higher income cities in more developed nations have more varied methods of waste management due to the influences of the civil society and supra organizations like the European Union. The two groups are able to bring about effective change on the type of waste management services delivered in urban communities. In developing country cities, due to in effective formal provision of waste services, a strong informal sector has arisen to provide waste services. The informal service providers as will be discussed further in Chapter seven can have both a negative and a positive effect on waste services and the urban community.

Variables required for effective policy implementation within developing country cities can fluctuate due to a number of reasons, which make implementation debates more difficult to apply to these countries. Waste generated within municipal urban areas in some developing country cities are collected by two streams of waste collection service providers who are the formal (private or public sector) or the informal waste collection service providers.

The method used in governing an urban area plays an important role in the ability of the urban area to meet its needs. Governance which is discussed in depth in Chapter 5 is a key feature in the formal provision of waste collection services in urban areas. The method of
governing employed by the governing bodies or authority determines whether or not the provision of formal services will meet policy targets.

In the case of waste management demographics are an important consideration because they are the generators of waste and directly affect the pattern of waste generation that might be observed within a municipal area. The demographic aspects like consumption which affect variables like amount of waste generated, types of waste will affect collection transfer and disposal of waste.

In high income cities an awareness which can be found in both the civil society and the government brings the issues of waste into the arena of public debate and allow for proactive measures to be implemented within the society leading to an ability to put pressure and translate willingness into action to pay for services enables the government to provide an adequate service.

The literature indicates that while there is recognition of the need for at the very least basic waste management services, i.e. collection, transfer and disposal, there seems to be a disconnection between acknowledging that the service is needed and providing the service. Although developing country cities usually have a designated authority within the municipal authority which is responsible for the collection management of waste within the municipal areas and a percentage of the municipal budget is often used for the management of waste, the evidence shows that the current practices are not enough to meet the growing populations’ needs.
The literature also indicates that the general level of awareness of the civil society in developing cities is very low. This limits their ability to effectively demand for required services and input favourably in the creation of policy.

Finance is a major problem faced by low income countries in waste collection management. Inadequate and unpredictable resources make it difficult for effective waste collection management within some developing country cities. These developing country cities have few resources chasing many needs. It should be noted that the issue of resources is a multifaceted problem. The problem is not just the lack of resources, but the misappropriation of available resources.

Waste collection management is a service dependent on other services directly or indirectly to function effectively. The current state of the dependant services needs to be ascertained in order to provide services that are effective within local parameters.

Waste collection management is a sector which is still undergoing development in developing country cities. The different variables which affect it need to be understood before effective waste management policies can be created to intervene where they are needed effectively.

The biggest challenge faced according to the literature is the ability of urban governments in developing country cities to meet the requirements of waste collection management in some urban areas. The authorities charged with delivery waste collection management services in some developing country cities are unable to provide adequate
resources required to deal with the increasing amounts of waste being generated within their urban areas.

A lack of co-operation is has been observed within the literature between the municipalities and the public. In some developing country cities, there seemed to be little or no interaction between the municipal population and the governing authorities. The predominant attitude to waste that is observed from the literature was it was a government responsibility.

An interesting factor of waste collection management in developing country cities is there exists a well established informal waste sector who are not necessarily providers of an illegal service. The informal sector is important in this thesis because it has been the main provider of waste collection of waste collection services in Lagos state for a long period of time. The informal sector is visited within the literature in Chapter 7 and is reviewed within the analysis in Chapters 8 and 9.
5. Governance and service delivery: challenges in Sub-Saharan Africa and Lagos

The roles of governments in modern times are constantly being redefined. Governance is a term often used to define the concept of the changing role of government and the decision making methods that portray the changes. However, what is becoming more apparent is the limited applicability of these ideas or evolving institutions to governments in sub-Saharan Africa. The aim of this Section therefore is to look at the history of governments in sub-Saharan Africa and attempt to access the type of government in this region. This Section is divided into authoritarian rule in sub-Saharan Africa, and post authoritarian rule within this region. The objective of this Chapter is to understand the way in which sub Saharan governments operate and how their method of governing could possibly affect policy creation and implementation.

Most implementation debates have certain characteristics which are taken from granted, for instance, the stability of government and good governance practices to a large extent from the Policy Makers. The type of governance which is found within some developing country cities can tend to vary significantly from that found in some developed country cities. As governance is an important part of implementation (it demonstrates how governments and institutions are run), it is important to understand the type of governance to be found in a city and how it will affect the implementation of public policies within that city. This Chapter aims to paint a picture for the reader of the possible problems the application of implementation debates will encounter in some developing country cities.
5.1. Elements of the institutions of State in Sub Saharan Countries

The political systems practiced in most sub-Saharan African states whether under authoritarian rule or democratic rule is the federal system. The institutional system of most sub-Saharan African countries has the prevalence of a dominant centre (Olowu, 1990; Ndulu and Connell, 1999).

The predominant characteristic of authoritarian rule within some of the governments of sub-Saharan Africa has encouraged the growth of a strong centre. This strong centre is predominant in sub-Sahara African nation states which have undergone military rule or single political party systems. These countries have shown a strong executive arm and mid-strength judicial arm of government which is usually in contrast with a weak legislative Section. This is because the legislative sector is usually the first institution to be abolished by authoritarian governments (Ndulu and O'Connell, 1999; Vallings and Moreno-Torres, 2005). Military rulers grant majority legislative and judicial power to the government. For example, during the military administration of Nigeria national and state law were passed by military decrees and state edicts which were not challengeable in a court of law (Olowu 1990, Dudley 1982; Ihonvbere, 1996).

5.2. Authoritarian Rule Sub-Saharan Africa

In order to understand the current mode or forms of governance within sub-Saharan African states, it is important to understand the history of governance within sub-Saharan
African states and the possible reasons for the predominance of authoritarian rule within Sub-Saharan African states.

The history of authoritarian rule in sub-Saharan African states can be traced as far back as the colonial era where authoritarian rule was either applied directly to the locals or indirectly through established local rule systems. The colonial era enforced the tradition of forced rule and subjugation in all sub-Saharan countries (Crowder, 1987; Olowu, 1990). Deschamps (1971) a French colonial officer describes the colonial governor as a totalitarian in charge of everything from the economy, infrastructure, fellow Europeans and everything and everyone else in between. This method of ruling is what was inherited by the nationalists of the time and the idea of the consolidation of power in the central government was born (Crowder, 1987; Roth 1968). The late fifties and the early sixties symbolized for most sub-Saharan African countries the end of the colonial era and the beginning of independent nation states, for example, Ghana gained independence in 1957 and Nigeria in 1960 (Healy and Robinson, 1994).

The sub-Saharan African leaders at this time were faced with the responsibility of unifying dynamic people of diverse languages and cultures from countries like Cameroon with 8 different ethnic groups to countries like Nigeria with approximately 250 ethnic groups. The trend in these countries quickly went from one of democratic rule systems developed for them by the colonials to different forms of authoritarian governments.

Some of these independent Sub-Saharan African countries by the end of the 1960s had in one form of the other authoritarian governments or personal rule, for example President Olympio of Togo (Jackson and Rosberg, 1984a), which was accomplished either through one
party politics, military rule or both. Other examples of single party states have been are Senegal, Uganda and Ghana where there have been bans of opposing political parties and numerous coups by the military in between periods of civilian rule (Coulon, 1988; Diamond, 1988).

The effect of authoritarian rule on these countries was the diminishing or complete elimination of constitutional rights, lack of political opposition, lack of accountability, centralized power based more often than not with the presidency or reigning military head (Remmer, 1985). The single party governments were either co-opted or forcefully installed for example; President Obote of Uganda in 1966 made Uganda a one party state. Military coups were common place in sub-Saharan Africa and were either bloody or bloodless for example, President Gowon of Nigeria bloodless military coup in 1966 (Jackson and Rosberg, 1982; Healy and Robinson, 1994). Dictatorship spread to most of the sub-Saharan African states by the mid eighties with the exception of Botswana, Mauritius and the Gambia which have retained multiparty democracy since independence (Healy and Robinson, 1994).

The predominance of authoritarian in Sub-Saharan African states it is argued a form of inheritance from the colonial administrators. The colonial rule in Sub-Saharan Africa was authoritarian rule either directly as could be found in western Nigeria or indirect rule as could be found in northern Nigeria. The emphasis was control of the people to suit the colonial administrators as opposed to ruling for the benefit of the people (Olowu, 1990; BBC News, 2007). This need for control was pronounced in the merging of seemingly incompatible ethnic group into countries. The incompatibility of these ethnic groups resulted in civil wars in countries like Nigeria where some tribes have tried to separate from others (Ewaikhide and
Isumonah, 2001). The inheritance of colonial rule and ethnic tensions have encouraged authoritarian rule within Sub-Saharan Africa.

The ease in which a number of the African governments came into power is observed by Lonsdale (1986) as a possible reason for authoritarian governments. The leaders opinions it is hypothesized was that they had the right to lead because they fought for independence or had stood for certain ideals. The military leaders organized coups with the intention of righting civilian wrongs (BBC News, 2000). The history of colonial rule also helped to propagate this belief as the colonial rulers felt it was their right because they were more developed than the indigenous people to rule them (Jackson and Rosberg, 1984a). The colonial administrators believed that their way and their way only was the best way for their African ‘subjects’ and allowed no inputs from the indigenous Africans (Wunsch and Olowu, 1990).

Indeed this problem is still being felt acutely in some sub-Saharan African states more than others for example, at independence the Southern Sudan wanted autonomy from northern Sudan as an independent state but the colonials viewed it as administratively and economically ineffective for them and made both regions one country. The ‘country’ is still being ravaged by conflict with atrocities like ethnic cleansing occurring (Bleakly, 1998; BBC News 2004).

Democracy it is further argued by Roth (1968) was forced on the indigenous people, was regarded as unnatural and hence led to the development of methods of authoritarian rule (Roth, 1968). This last view is, however, challenged by Olowomeye (1991), Olowu (1990) and Bleakly (1998). While not all the indigenous cultures in sub Saharan Africa had
democratic systems before the advent of the colonials, some of the indigenous cultures for example the Yoruba’s and the Ibo cultures of Nigeria already practiced what could be described as a form of federalism which made it easier for it to be introduced as the form of government for countries like Nigeria (Olowomeye, 1991; Olowu, 1990; and Bleakly, 1998).

Diamond (1988) argue that the multi-ethnic nature of most African countries in countries like Nigeria, Uganda and Zimbabwe have dominant ethnic groups looking for control over shared resources. The economic condition of the nation states at the time of independence was seen as having very limited growth potential and the public sector was viewed as a personal asset for their leaders enrichment (Diamond, 1988).

The histories of a number of sub Saharan governments are rife with allegations of misappropriation of public funds being embezzled for private use and in some cases being transferred or invested abroad. For example, approximately $500 million was returned to Nigeria from the formal head of states, General Abachas’ frozen account by the Swiss government (BBC News, 2004). Below table 5.1 highlights the political histories of a few sub-Saharan African countries. This table shows the predominance of authoritarian rule in these countries from 1960 till 2000 when some countries like Nigeria returned it is hoped permanently to democracy.

The top-down method of implementation should theoretically work well in authoritarian countries. The policies created by the Policy Makers are easily passed into law with targeted End Users forced to comply (Sabatier, 1996). The implementation top-down school of thought prescribes the provision of adequate resources as key to successful implementation (Pressman and Wildavsky, 1983). A predominant characteristic of
authoritarian rule is corruption (Ghura, 2002). While adequate resources might be allocated from Policy Makers for implementation, there is no guarantee that the resources will not be misappropriated. Both the top-down and the bottom-up do not make contingencies for misappropriated resources.


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5.3. Democracy; what now?

The dictionary defines democracy as a government which is duly elected in a free and fair election for the people and by the people and where ultimate power rests with the electing majority as opposed to the ruling or privileged few (dictionary, 2007). Baker (1998) goes on to say that in a democracy peoples’ freedoms are unrestricted and the rule of law is paramount.

In Recent times, democracy has again become the trend in sub-Saharan African countries. From the mid to the late 1990s, authoritarian regimes have found it increasingly difficult to maintain control over the civil society. The clamour for democratically elected efficient governments from the indigenous population usually through mass demonstrations, and mounting international pressure, for example, through international economic sanctions created conditions in which democratic ideals have received a more sympathetic treatment in some of the sub-Saharan countries (Jackson and Rosberg, 1992).

Recognizing the risky democratic tide, authoritarian leaders through most of the region were quick to become multi-party states and organize countrywide elections. What was observed during these election processes however was an alarming majority of the former dictators have been able to reinvent themselves as civilian leaders and were at different points re-elected/manipulated back into office for example, Rawlings of Ghana, and Kerekou of Benin (Jackson and Rosberg, 1992). While the authoritarian constitutions have been substituted for democratic constitutions, authoritarian regimes have either survived as they were or have been substituted for new elected authoritarian regimes. These regimes are characterized by the continuous authoritarian behaviour of the elected leaders for example the
dismissal of the Nigerian vice president by the president who is a former dictator without consulting the senate in 2006 (Sanni, Uwugiaren, Chesa, and Onoja 2006), and the misappropriation of food aid by the Zimbabwean government to only the ruling party supporters and neglecting the opposition at the height of food shortage in Zimbabwe (BBC News, 2002).

The opposition parties were usually either intimidated, bribed, a method of divide and conquer was applied and outright rigging of elections was used to ensure the return of authoritarian leaders into public office (Baker, 1998). A classic example the 1990s democratic wave was the systematic disqualification of opponents by the then military head of state of Nigeria in order to run unopposed in the presidential elections in 1997 (Ikelegbe, 2001). Practices like this gave rise to a new form of regime in the 1990s which was identified by Steven Levitsky and Lucan Way as competitive authoritarian regimes pseudo-democracies. These governments had put on the garments of being democracies but still kept all the traditions of the authoritarian regimes with very little if any kind of change to promote the ideals of democracy which these sub-Saharan African countries had become.

In recent times, the trend is no longer just democracy but good governance. In the light of the kind of governments found in sub-Saharan African countries this Section aims to find out if good governance is practicable within the government regimes and how this will ultimately affect implementation which will be covered in Chapters 8 and 9.

The type of governance found in a country/city is an important factor when reviewing implementation and how to make implementation effective. Most implementation literature
as mentioned in Section 5.9 is written about/for western countries whom are mainly democratically led (Winter, 2002). These literature make a few assumptions which include and are not limited to 1) and possibly the most important which is the country has a governance system which is open and fair with a functioning democratic system and Policy Makers are open to criticism. This is evident from the pioneers of implementation studies Pressman and Wildavsky (1984), continued in the works of Sabatier (1996) credited with the development of the first framework and continued by Lipsky (1976, 1980) who started the bottom-up school of thought. Reading through their work, it assumed that Policy Makers will the Policy Makers or street-level bureaucrats are seen as either short sighted in their views, essential to the role but with limited powers. It is still always assumed that the Policy Makers and street-level bureaucrats will always do the best for the targeted End User.

These literatures do not consider the Policy Makers found within countries that have dictatorships and where there is little accountability if any from Policy Makers and street-level bureaucrats (Juma and Clark 1995). The corruption is found within the bureaucratic systems from the Policy Makers to the street-level bureaucrats (Bräutigam, and Knack, 2004). There are no safeguards within implementation literature to deter or reduce corruption within implementation within these countries. If we assume that corruption is the siphoning of limited public resources by the bureaucrats who should be administering them, how can implementation be made to work if there is no guarantee that the resources will be used as allocated within municipal budgets? This thesis shall further look at corruption within post dictatorship administrations in Section 8.7.2 and 9.7.1.
5.4. Civil Society

The combination of non-governmental organizations and institutions that puts forward the interests and will of citizens; individuals and organizations across Sections of different sectors of the public whom are supposed to be independent of the government is known as Civil Society (Mule, 2001). Civil society is the site from which citizens can lobby their governments (Bratton 1989, Kasfir 1998). The most important role of the civil society is usually as regulators of the government (Bratton 1989, Carbone 2005, Mule 2001). Civil society are usually able to generate public support on different issues which include topics like democracy and forms of economic development and take affirmative tactics through actions like lobbying, protest (peaceful and violent) and boycotts (Boadi, 1996).

In sub Saharan African countries, civil society existed from the pre-colonial era (Bratton 1989), these groups increased in numbers in an attempt to resist what was felt by them as the intrusion of the colonials. The different civil groups were particularly strong in the fight for independence from colonial rule. The different groups consisted of peasants’ movements, religious associations, labour unions, student unions, professional associations, community associations (Obadare, 2007).

With the long established history of civil society in some sub-Saharan African countries, the question that needs to be asked is why is the civil society almost non-existent or weak in some sub-Saharan African countries? Amongst the theories that have been put forward include government manipulation of prominent associations, outright ban and financial dependency on the government (Obadare, 2007).
Civil societies in some developing countries were seen as a threat to authoritarian governments (Bratton 1989). While governments who still viewed themselves as democratic were unable to dissolve or outright ban the association of civic groups, they created hostile legislation to ensure that the civil groups, for example NGOs, do not act contrary to current government policies. Examples of such legislation include the Kenyan NGO legislation act (1990) which has more government representatives on the NGO board than the NGOs and the decisions made within the board are final and unchallengeable in a court of law (Boadi 1996). Legislation and boards of this nature are very successful in curtailing the activities of organization members and forcing them to tow government lines.

If legislation is the noose around the neck of some NGOs in sub-Saharan Africa, then finance is the hangman. This is because what legislation is not able to take away from civil societies, resource needs are able to achieve. Boadi (1996) argues that the financial situation of so many organizations and institutions which make up the civil society in some Sub-Saharan African countries have a financial dependency on either the government or international organizations (Boadi, 1996). This dependency makes them vulnerable to government interference and takes away from them their independence and ability to act on the citizens behalf. The government is also able to appropriate international funds meant for civil organizations when it’s routed through them thereby further limiting their capital base (Boadi, 1996). The lack of, or irregular, finances make civil organizations more susceptible to government manipulation and result for these organizations, is an almost complete loss of autonomy (Boadi, 1996).

As mentioned earlier in this Section, a large number of the civil societies have been in existence to fight authoritarian rule from the colonial period till now. As a growing number of
Sub-Saharan African countries gain their independence and move from authoritarian rule to democratic rule, the key actors from within the groups begin to leave and join political parties (Boadi, 1996). This usually has the effect of weakening the organization especially when there is no official replacement for the departing person(s). The organizations usually find themselves losing credibility and purpose with the loss of their leaders (Boadi, 1996).

Direct government opposition to civil organisations has also been used to reduce their effectiveness. Decades of authoritarian rule and the repression of fundamental rights, for instance free speech, has given free rein to the governments to act as they please it would seem. For instance in 1989 and 1992, many students were shot and lost their lives protesting against government policies in Nigeria (Aluede, Jimoh, Agwinede and Omorogie, 2005). The threat of personal safety and the real possibility of loss of life reduce the government opposition and the size to which civil organizations grow thereby reducing opposition to the government (Aluede, Jimoh, Agwinede and Omorogie, 2005).

The ethnic diversity of some sub-Saharan African countries has added to the growing weakness of civil groups within sub-Saharan Africa. The inability of civil groups to transverse ethnic and religious divides has often had the actors lobbying for the same goals but on opposing sides. For example in Togo, the Ewes of the south were opposing the Eyadema Kabiyes of the north though both were campaigning for democracy but effectively ended up working against each other (Boadi 1996). The irony that can be observed here is the history of not just Togo but a number of sub-Saharan countries are that these were able to come together as one group to lobby the colonials for independence, but these groups have been unable to come together for common goals within their groups because of the ethnic divide since their independence (Obadare, 2007).
The freedom of the press or the fifth estate as they are called is an institution taken for granted in more developed countries is lacking in some Sub-Saharan African countries. From independence till the early 1990s, most media due to the cost of set up were owned by government with very few owned by the private sector (Olukosi, 1997). The government has been highly successful in regulating the information which is distributed to the general public through its channels and the private sector through harsh legislation. For example, President Mugabe of Zimbabwe banned all news coverage on the evacuation of his political opponents’ supporters from their homes (BBC News, 2003). Another form of intimidation of the fifth estate was the sending of letter bombs to journalist, for instance the letter bomb which killed Dele Giwa in 1986 rumoured to have been sent by the dictator, General Babangida of Nigeria (Sahara reporters, 2009). The suppression of the news within authoritarian governments significantly reduces the effects that the civil organizations have as it reduces their ability to get heard by the groups they fight for and the governments willing to ignore them (Boadi 1996).

Political coercion, financial handicaps and structural distortions are a few of the problems that face civil societies in sub-Saharan Africa. However, authoritarian governments have found it increasingly difficult to suppress all civil groups. The opening of the economy to free market forces and external ideas and scrutiny has enabled civil organizations to begin to rebuild and remodel themselves into more effective lobbying groups. The awareness by authoritarian governments that they can no longer administer their countries like inheritances leading to growing political liberalization and the growing return of civic rights.
5.6. African Governance

The development of the concept of governance in Sub-Saharan Africa has evolved with its own unique characteristics. These characteristics reflect mainly the history and the problems which have affected the region since independence. The emphasis of the concept of governance falls heavily on transparency, accountability, economic growth and development.

5.6.1. Characteristics of African governance

The role of governance within different nation states varies. While governance is a conceptual framework, the characteristics of governance are usually promoted within governmental regimes. The governance process should cover both political and economic dimensions. Mule (2001) puts forward three of the main characteristics that can be identified within the framework of African governance. These are 1) A capable and effective administration, 2) conflict prevention and 3) effective public institutions. Onibokun and Kumuyi (1999) go further to identify the following 1) legitimately elected government, 2) open and transparent administration, 3) progressive socio-economic policies and 4) a government accountable to the electorate as characteristics of African governance (Onibokun and Kumuyi, 1999).

As has been observed above, for the most part are democratic governments like Nigeria, which became a democracy again in 1999, are democracies with some of the characteristics of authoritarian rule. If a little scrutiny is paid to Nigeria, then the mixture of democracy and authoritarian rule becomes more apparent (Diamond, 2002). An example of personal rule within country would be the dismissal of the vice president as mentioned in
Section 5.3 above (BBC News, 2007). What must be stated however in countries like Nigeria is that the legislative arm of the government is developing and within the new and developing democracies, they are beginning to have the authority to promote the rule of law. This could be seen, for example, by the Supreme Court ruling that the sacked vice president be reinstated to his post (BBC News, 2007).

5.7. Governance decentralization and policy creation within transitional countries

Since the 1980s’, some central sub-Saharan African governments recognized a need for decentralized government. Decentralization reforms were implemented in Uganda and Botswana from 1985 and Nigeria in the early 1990s’ (Olowu, 2001; Wunsch, 2001). In order to achieve decentralization within these countries there has been a need to create public policy and legislation which recognized the decentralized nature of public administration (Olowu and Smoke, 1992).

On paper, central governments were seen to be decentralizing power to the lower tiers of government. However the reality was power and resources were rarely relinquished to the lower levels of government (Olowu, 1990; Smith, 1996). The legislation created was usually inadequate for the local authorities to be able to carry out the tasks mandated to them by law and the local authorities policies could be overridden by the central government and its agencies (Wunch, 2001). Olowu, (1990) and Wunch (1991) believe that the nature of the reforms has been a way of retaining power and state resources within central government (Olowu, 1990; Wunch 1991). The lower tiers of government are usual given limited fiscal
resources which are essential to carry out local services leading to a breakdown of local services and an opening for the central government to reintroduce itself within local government activities, thereby retaining power at the centre (Wunch, 1991).

As discussed in Section 5.3 above, some sub-Saharan African countries which have recently transitioned from military or single party authoritarian rule are yet to truly devolve power to local tiers of government. These governments use fiscal powers to handicap lower tiers of government to ensure compliance. For instance to recognise the growth of the city and improve administration in newly developed areas, Lagos state created additional local government areas. These areas were not contrary to national law but they were contrary to central government wishes. As a result, the state had its federal allocation withheld for two years even with the high court ruling in favour of the state to have its funds released from the federal government (Ogunleye, 2008). The funds held by the federal government ensured that the state was not able to meet its fiscal needs for that period (Lagos state, 2005), and undermined confidence within it.

It is necessary to understand decentralization in post authoritarian democracies to understand how the different levels of government function. This will help to understand why policy can sometimes been seen not to be implementable within lower tiers of government. Power concentrated at the centre reduces the effectiveness of the other tiers of government. The lower the tier of government, the less its effectiveness with the amount of autonomy given to the lower tiers of government being limited within transitional governments.
5.8. Implementation

In order to understand governance within the waste management process in Lagos state, it is important to understand the implementation process of the waste management policy as implementation is directly linked to governance. How Policy Makers create and implement the waste management policy is a practical way of studying the governance process. If governance is the study of the interaction of Policy Makers with the key participants and End Users that policies are made for, then implementation studies are one of the most effective ways of studying the effect of governance.

Implementation debates have raged on since the 1970s' between those who favour an approach which is bottom-up (street-level bureaucrats) and top-down (Policy Makers). The two opposing sides of the debate have been unable to agree on what the preconditions for successful implementation are. The top-down proponents like Sabatier (1993) claim that there are six preconditions which are required to be met for successful implementation which are discussed in Section 5.9. While the bottom-uppers like Hogwood and Gun (1993) believe there are eight preconditions which are discussed in Section 5.10.

Implementation theory is still being developed as proponents of both sides of the implementation debate are yet to agree on what constitutes the core of implementation theory (O'Toole, 2004). One reason for the ongoing debate could be because policies are created to meet different needs and no two policies or needs are identical. The variables involved within the creation of policy and its implementation are too numerous and too varied for the creation of one unifying theory (O'Toole, 1986; Gunn, 1978). For this reason it has been extremely
difficult if not near impossible for any theories to be developed within the field (O’Toole, 2004). With this in mind, this thesis does not aim to create a theory of implementation but engage the current debates to evaluate implementation in Lagos state and find which of the schools of thought is most applicable to Lagos.

5.9. Conclusions

In examining the literature, especially in regards to this thesis, two very strong elements that will need to be observed during the data collection process have emerged.

1) Democracies with elements of authoritarian rule. This element of governance will need to be observed as it will most likely affect how the policy is presented to the constituents of the state which will in turn impact of how the constituents relate to the policy. Authoritarian rule in Sub-Saharan Africa has been prevalent in since the colonial times. Subsequent indigenous governments have practiced one form of authoritarian rule or another. The civil society in Sub-Saharan African countries is also relatively weak and a financial dependence on the government limits the amount of influence they are able to exert on the government on behalf of the people.

2) Both schools of thought have are made for westernized countries. Authoritarian rule has had a significant impact, whether post or current, on governments in Sub-Saharan Africa. The issue of transparency which is an underlying element of both schools of thought in Implementation studies is not apparent western governments. The
incidence of corruption and lack of adequate man power and resources is also reduced or minimal within western governments.

The type of governance that can be found in most developing countries is still in its transitional stage. While some developing countries which have formerly practised authoritarian rule have changed to democracies, they are still transitional in nature. The concept of governance is still growing and the former dictatorships are continuously changing. Civil societies are integral to this change because they make governments accountable. Civil societies in some Sub-Saharan African states have been weakened over time by authoritarian rulers. It will be necessary to rebuild and restructure civil societies from them to achieve function within governance. The reconstruction of the civil societies will include a financial autonomy in order for them to continue to be independent of the governments they were created to make accountable.

Governance is essentially the manner in which the governments and decision makers behave or create and implement policy. If the type of governance found within a city can be understood, it goes further in explaining the end result of implementation within the city whether from the top-down or the bottom-up. Both schools of implementation require the input of the Policy Makers and understanding how they behave is pertinent to proving or disproving the applicability of western style implementation debates in cities which have different characteristics from the countries the debates were developed in.
6. Private-Public Partnership: Mixed benefits in urban services provision

Public private partnerships (PPP) are the new ‘buzz words’ for public service delivery. Private Public Partnerships (PPP) or Private Finance Investment (PFI) as they are sometimes known is becoming an increasingly common method of providing public sector services. The term is used to define the relationship between the public and private sector when resources such as capital, man-power, and knowledge are combined for the provision of public services (Gerrard, 2001).

It is widely believed in many contexts, that service delivery can be improved with the introduction of the private sector funds, business management skills and technical expertise, to public service delivery because of perceived efficiencies that could be gained from the private sector. The partnerships are usually divided, with the private sector as the principal partner and the public sector as the regulator/silent partner (Andersen, 2004).

The services provided through PPPs cover a wide range of areas which include airports, waste collection management and defence. This Chapter will look at different models of partnerships, their advantages and disadvantages, focussing on waste collection management services.

This Chapter will evaluate public private sector partnerships, how they are formed and its general application in the provision of waste collection management services in a developing country city like Lagos. PPPs have been selected by the Lagos state as its method of policy implementation. It is therefore crucial to understand how PPPs work or are
supposed to work. This will aid in assessing policy instruments, how they are applied and the best group to apply them.

6.1. Methods of Private Sector Inclusion

This Section is going to take a brief look at some PPPs types, their advantages and disadvantages. The PPPs selected have been chosen because of their relevance and popularity in PPPs. Four types of partnerships have been briefly considered for this paper and they are:

1) Service contracts
2) Joint ventures
3) Concession
4) Privatization

1) Service contract

_Service contract_ is regarded as the simplest form of partnership. (Batley, 1996). There are three main methods of delivery for this form of partnership which may be between a private company or a joint venture between several companies, and between a single government agency or consortia, often with one agency playing the lead role on behalf of the public.

a) The private sector leases facilities already owned/provided by the public sector and pays a rental lease fee and provides the required service. The
company is responsible for maintaining the facilities or equipment being leased and is not required to make any new capital investments it may however include the risk of cost recovery from the public.

b) A government agency commissions new facilities from a private enterprise, which, when completed, may either be operated by the company or another provider or returned to the state agency. In both cases the private enterprise is reimbursed over an agreed period of time. An example of this kind of agreement is school premises, which are built by the private sector which can either be operated by the public body when completed or the private sector operates it on the government’s behalf. In both cases the private sector is reimbursed over an agreed period of time. These kinds of contracts commonly last between eight and fifteen years. (Fiscal Affairs Department, 2004, Li and Akintoye, 2003).

c) The service is contracted by the public sector from a private enterprise. The private sector is expected to own its own facilities and equipment and has the option of buying government equipment if available. (Li, Akintoye, Edwards, Hardcastle, 2003). This is form of contract is possibly the most cost effective for the government because the government does not have to make capital investments in infrastructure.

The advantage of using the service contracts for the provision of services and facilities is that government expenditure on infrastructure and service costs is spread over time, while still allowing for the flexibility of goods and service delivery. This method of
service delivery and infrastructure provision is also used as a method to reduce a government’s debt portfolio (Li and Akintoye, 2003).

The service contract model enables the government agency responsible for service provision to include new actors in service delivery, and to harness local or external business capacity to support government capacity. An advantage of the service contract model is that it is flexible and avoids a monopoly, allowing different parts of the service to be contracted to different operators so that if one contractor is unable to fulfil its contractual obligations other actors have the capacity to take over the contract. The disadvantage of these forms of service contract is that it is not necessarily always the cheapest option (Bennett, Grohmann and Gentry, 2000).

2) Joint ventures

A joint venture is a company in which two or more parties have shares in a proposed or ongoing project. In this type of partnership, the parties in this joint venture are the public and private sectors. In the case of PPPs the parties in the joint venture are a public agency and private enterprise which co-own facilities or equipment used to provide services. This kind of partnership brings together capital resources and human resources from both the public and private sectors.

In a joint venture, the government agency often acts as a regulator and shareholder (Li, Akintoye, Edwards, Hardcastle, 2003). The private enterprise is primarily charged with the daily operations and management of the venture while the government agency’s
responsibility within the partnership could be the provision of equity, concession loans, asset transfer and insurance (Owen and Merna, 1997). The partnership is established when both sectors begin to work together on pre-investment (Fiscal Affairs Department, 2004). Some joint ventures end after the completion of capital projects e.g. the construction of an airport, while others continue into service delivery. This method is usually used when both private and public organization others combined manpower and capital resources for efficient service delivery (Li, and Akintoye, 2003).

The advantage of a joint venture is that the private enterprise tries to ensure the profitability of the venture, while the government protects the public interest. It partners may contribute to capital costs which can then be recovered through user charges either paid for directly by the public, or indirectly through taxation. Both sectors have a substantial stake in the partnership which helps to promote efficiency. The main disadvantage of this model is that the decision-making process may be cumbersome because of conflicting interests' between the two parties; one which is profit-motivated and the other of which focuses on public welfare (Li, and Akintoye, 2003, 2003).

3) Concession

Concessions are considered by some authors as both the most beneficial form of PPP for the private sector and as providing the best value for public services (Finnerty, 1996). Concessions essentially allow the private sector to buy the sole rights to the provision of a service over a period of time (Yarrow, 1986). In this model a private enterprise either provides a new service facility or develops an existing service facility. The private enterprise
owns the facility or equipment maintains and operates it over time, (20 to 30 years would be a
typical period) and at the end of which the facility then reverts back to the responsible
government agency. There is usually a form of cost recovery through tariffs and levies
(Tiong, 1992, Tillman, 1997, Bennett, 1998, Fiscal Affairs Department, 2004). This method is usually used to contract services on behalf of the final user (Yarrow, 1986).

The greatest advantage of this model of PPP is the operation and running of the facility and equipment by the private sector. Even though the facility will revert back to state ownership at the end of a specified period, the private sector is given opportunities make the service profitable. Again, the End User may be charged for the service directly or indirectly. The disadvantages of this model of PPP are that, as in all businesses, there is still the risk of failure and it encourages monopolies in service delivery.

4) Privatization

Privatization involves the complete sale or transfer to a private enterprise of a state owned asset e.g. a state owned utility company. This can be done either through sale directly to a private investor, through a public stock offering or as a grant to a private company that will assume full responsibility for the company. Privatization is usually used when a government agency no longer wishes to be directly involved in service delivery (Li, Akintoye, 2003).

Privatization is not a true partnership because the service is provided solely by the private sector, has been included because the legal responsibility for public service delivery usual remains with the relevant state agency (Slyke, 2003). For example, if waste collection
is considered to be an essential urban service, if privatized provision fails, a government agency would normally be legally required to provide the service, and thus remains ultimately responsible for the service provision.

Privatization is an effective form of service delivery because market forces are used to determine supply and demand, and is most cost effective when there is competition for delivery of the service e.g. utility companies in the United Kingdom which were formally supplied by the government as a monopoly but are now supplied by competing companies. Privatization also allows scarce government resources to be channelled to the provision of others urban services.

The greatest advantage of privatization is that service delivery becomes market led: competition and innovation is introduced, most of the risk is borne by the private sector, and the drive to stay in business promotes versatility and efficiency in service delivery. The disadvantage of this method is that it could result in higher charges that may disadvantage lower income Users, and still creates the potential for monopoly.

From these models, it becomes clear that a key issue for any government intent on including the private sector in service delivery is how it can provide adequate services with scarce resources. Government can also go into partnership with the private sector to reduce the inefficiencies in their own provision of services (Bel, and Miralles, 2003).

The main disadvantage of these partnership models is that of cost, government services can be at a lower cost to itself because they are not profit led. The advantages of
PPPs generally outweigh the disadvantages however, and governments are usually looking to make PPPs attractive to the private sector.

In examining the literature, PPPs have been growing in popularity over decades. In the 1980s, privatization was the favoured form of PPPs and the '80s was marked by governments trying to privatize national companies. The reason for this was to cut back on government spending and gain the advantages of market forces to increase the quality of service delivery. While privatization was great in theory, it could also be highly unpopular if for example, it led to higher tariffs.

6.2. PPPs, asset or public vice

Each form of PPP has been briefly illustrated above, the question that then needs to be asked is, and 'Are PPPs the way forward for public service delivery or are they simply a method of stretching the government budget or shelving government responsibility?' Strong arguments have been put forward for and against the use of PPPs in the delivery of public services.

In the provision of services, certain infrastructure and manpower must be available. One of the greatest attractions for PPPs to the public sector is that it can transition itself from an asset and services provider to just a services specifier (Owen and Merna, 1997). The issue for the public sector is not owning facilities but making its resources go further (Kaseva and Mbuligwe, 2005). In some developing countries, there is no maintenance culture and the
implementing agencies sometimes find themselves without adequate man power. The need to transfer responsibility of infrastructure and its maintenance is an advantage in some developing country cities and it represents for some cities a more effective method of service provision as the burden for infrastructure provision and maintenance can be shifted to the private sector (Olowomeye, 1991).

The requirement of service provision without the necessity of predetermined assets allows the private sector to be innovative in the infrastructure it provides for service delivery which could lead to lower service costs (Ball, Heafey and King, 2000). The private sector needs to stay competitive in a changing market and it is able to bring its continuous innovation to public service delivery which could lead to future savings on other projects (Cointreau-Levine and Coad, 2000).

The introduction of the private sector in public service provision is intended to make service delivery more efficient. While the intention of PPPs as a method of public service delivery is intended to make use of market forces, the structuring of some partnerships like the concessions which allows the private sector to buy the sole right to service provision can limit the advantages that can be gained from market forces for example competition through bidding. The nature of some services, even without the benefit of concessionary contracts, means competition is at a minimum or does not exist because of the nature of the service and the cost (Yarrow, 1989; Cointreau-Levine and Coad, 2000).

Proponents of PPPs such as Attahi (1996), Onibokun and Adepoju (1996) argue that the reduction of cost and the improvement of service efficiency arise from the involvement of the private sector. Governments’ inefficiency in some developing country cities in the
provision of public services forces it to look for alternative forms of delivery. This argument is particularly strong in the delivery of public services like waste collection (Attahi, 1996, Onibokun and Adepoju, 1996). Advocates of PPPs claim that cost efficiency, technological improvement and higher levels of service can be achieved through the private sector (Glaister, 1999; Bel, and Miralles, 2003).

In more developed countries like the United Kingdom, PPPs more commonly known as Private Finance Initiatives (PFIs) are being used increasingly as means of service provision and infrastructure (Weaver and Manning, 1990). The Labour government elected in 1997 continued with its conservative predecessor’s use of PFIs as a method of freeing up government finances and reducing government borrowing (Hall, 1998, Owen and Mema, 1997). Szymanski in 1996 was able to demonstrate that local governments that bid against the private sector for the provision of waste collection services were unable to achieve the same cost reduction in service delivery achieved by the private sector (Szymanski, 1996).

There are many risks involved in service provision. These include financial as the capital cost exceeds expectations due to outside influences, there could decline in demand for a particular service or even the complete failure of the venture (Batley, 1996). These risks of service provision are proposed to be shared by the partnering of the public sector with the private sector. The risk can either be completely transferred, as observed as is the case with the privatization of services or just the contracting of services, or shared which can be done with some service contracts and joint partnerships PPPs (Hall, 2003).

Risk and what constitute risk and who decides what risk is determine whose responsibility the risk. While the argument for the involvement of the private sector is the
sharing or complete transfer of risk, the private sector is very limited in its ability of the type of risk it can acquire (Owen and Merna 2003). Mainly as 1) it is in the partnership to make a profit and 2) the funding of the private sector to take on the initiative can determine what it can and cannot accept as risk e.g. in projects that the success depends on factors that cannot be controlled by the private sector like attendance in a public school or projects that nature can affect (Ball, Heafey and King, 2000).

The emphasis in service provision being highlighted with the use of PPP is customer satisfaction. The actual cost saving is no longer how much resources can be saved but the efficiency and adequacy of the service for the consumer. In this manner, it is hoped that the currency of service provision changes from monetary measurements to measurements that are customer focused (National Audit Office, 1997).

The main advantages of PPPs as have been argued above are the saving of government resources and making it available for other uses (Batley, 1996). The opponents of PPPs on the other hand argue that while PPPs could be more effective than the public sector in service delivery, they do not necessarily represent a cost advantage. The budgetary argument especially with projects which cover long periods of time with corresponding repayment periods does not necessarily reduce the cost of service provision but simply moves the cost as a future problem to another budget as a future revenue commitment (Cointreau-Levine and Coad, 2000).

It could also be argued that the government could generate a return on investment in the same way as a private contractor could and reinvest the income generated from the service provided (Hall, 1998). While Hall (1996) notes here arguments are valid, it must be
remembered that one of the main reasons that PPPs became popular as mentioned above is because of shortfalls in public services provided by government (Aworti, 2004). The inefficiencies of the public sector created a gap which the private sector is able to fill. If local services could be as efficient as Hall (1998) proposes, then PPPs would not have the popularity they currently enjoy in public service delivery.

The public sector is anxious to get the best value for its investment and the private sector is also eager to negotiate contracts which specify the project parameters at the same time allowing it the flexibility not to get tied down with a higher percentage of the possible risks that could be involved in the venture or inflexible service provision terms (Owen and Mema, 2003). These two factors can cause the bidding and contract negotiations costs to run very high and decrease the savings that could be realized from the PPP (Owen and Mema 2003). The value of private funds versus public funds, if the cost of borrowing is considered, makes private money more expensive than public money as governments are not only seen as less of a credit risk but have access to far more credit facilities (private, public and international sources) than the private sector. In terms of this higher cost of borrowing, it is more cost effective for the government to provide the service than the private sector (Ball, Heafey and King, 2000).

The role of the government usually changes within PPPs from the role of service provider to the role of regulator. In its role as regulator or guarantor of service, the government has to be able to create adequate policies to protect the public by ensuring that the level of service received is value for money and openly transparent (Cointreau-Levine, 2000). The cost of regulation could make the savings of private sector provision insignificant if not properly managed. The argument, especially for a lot of developing countries with poor
service delivery and monitoring history, then becomes one of if the governments are unable to monitor themselves, how they will achieve the skills and scope necessary to monitor the private sector service providers (Attahi, 1999)

The partnering of the public sector and the private sector has had a history of creating disadvantages in external areas related but not part of the partnership service provision. The potential for conflicts of interest arise in PPPs and the phrase ‘who watches the watchmen’ (Prachet, 2005) becomes the question that will be asked. For example, the British government in its support of UN sanctions against Rhodesia was able to use its share of the joint partnership with BP to prevent entry to Eastern African states which serviced Rhodesia with oil (Bailey, 1979). Turning the partnership into a political tool for the governments own objectives. The potential conflict of interest represents a huge disadvantage for the use of PPPs.

Working conditions in sectors like waste management to a certain extent could be better in the public sector than in the private sector. In the privatization of services like waste management in some developing country cities, the working conditions and earnings of waste workers deteriorated as opposed to improved (Cointreau, 1994). The reason for the decline is seen as one of the private sector methods of cost reduction. While governments are usually able to set a minimum bar for the public sector staff, they are unable to set the bar effectively for the private sector as it could be seen to be prejudicial or hostile especially to small companies (Cointreau, 1994).

In weighing the advantages against the disadvantages of PPPs, they still weigh more favourably for the delivery of public goods and services mainly because they are seen as
more efficient and versatile than public delivery. PPPs do not always work out cheaper than public service delivery however; a majority of PPPs are not created for their profitability but for their efficiency which is the most important aspect of public services (Domberger and Fernandez, 1999). The benefit obtained is usually used to access if the cost was worth the investment as opposed to monetary profit e.g. consumer satisfaction (Ball, Heafey and King, 2000).

6.3. SMEs, Informal Waste Sector, PPPs and the Lagos state Policy

SMEs are regarded as a highly useful tool in the reduction of unemployment in some economies. SME uses are acknowledged and usually encouraged with the introduction of support organizations locally (Bateman, 2000) and the allocations of funds from international finance agencies like the World Bank for the development of SMEs (Ayyagari, Demirguc-Kunt and Beck, 2003).

Small and medium sized enterprises (SMEs) cover a wide range of businesses and enterprises. SMEs are defined by their size as opposed to their roles even though the maximum size of SMEs vary depending on the country for example, in European Union states, the maximum number of employees for small businesses are 50 and 250 for medium sized enterprises. The United States however sees companies of 100 employees as small and less than 500 as medium scale enterprises (Beck and Demirguc-Kunt, 2004). In most developed countries, the informal sector is not included as SMEs as they are regarded as illegal enterprises and subsequently not included in most SME studies undertaken.
SMEs and informal enterprises account for approximately 60% of the GDPs and 70% of employment in low income countries (Ayyagari, Beck, Demirguc-Kunt, 2003) and 95% of all employment outside agriculture (OCED, 2004). These figures are important to show from the onset the importance of SMEs and the informal sector in developing country economies. They indicate that a large portion of goods and services are not carried out by large corporations or government but by small and medium sized companies.

The contribution of SMEs and the informal sector to some societies is potentially diverse. They contribute to income generation, employment and the empowerment of women (OCED, 2004). SMEs are argued by Heeks (2006), Beck and Demirguc-Kunt (2004) to be the most effective poverty reduction instruments as their scopes usually range from the provision of unskilled goods and services which require low amounts of investment to start up e.g. woman selling food by the road side, to the provision of skilled services and goods which need a larger capital to run e.g. some manufacturing like medium scale shoe makers. SMEs are theorized to be able to boost employment rates more than large firms possibly because of their size and scale and ease of setting up (Beck, Beck and Demirguc-Kunt, and Levine, 2003, Beck and Demirguc-Kunt, 2004, Heeks, 2006).

There are two arguments which this thesis shall consider surrounding SMEs, especially in developing countries and their role in the alleviation of poverty. First, there is the argument by the World Bank which believes it can be used to reduce poverty, (Hallberg, 2000). It is argued that the provision of the ‘right’ circumstances for the development of SMEs can aid poverty reduction in some developing country cities (Narayan, 2002). The second argument states that not only do SMEs do nothing for developing country economies; they might also be the cause of stunted economy growth in developing geographies like sub-
Saharan Africa (Naude and Krugell, 2002). The reasons put forward is because small and medium sized enterprises within the sub-Saharan African region are still at the micro level with some business being one man businesses or family orientated businesses (Naude and Krugell, 2002).

This Section however, now focuses on the issues of SMEs in PPPs in developing country cities in Sub-Saharan Africa, which is a field in which little or no literature has been found. What this Section attempts to demonstrate is the value of SMEs to PPPs for the provision of waste collection services. Most PPPs are conducted in partnership with large companies (at least the ones documented) and even though there are vague references to PPPs with small scale partners, there was no actual detailed case studies carried out. The types of partnerships that have been observed within the PPP literature require large scale companies with large capital bases.

As has been mentioned earlier, one of the reasons for the creation of PPPs is to free up government resources. It is inferred from this that a majority of PPPs are created for capital intensive projects. The projects which are carried out in partnership usually include, waste delivery, provision of roads, schools, airport e.t.c. While some of the projects are very specialist orientated and their nature might require partnerships with one or a very limited number of firms for example, airport partnerships or defence partnerships, some other services might not necessarily require the use of a limited number of firms. For example, waste collection services for a municipality. The municipality can be divided into smaller areas so that multiple firms may be used for service delivery.
In the supply of waste collection services in some developing countries, it has been observed that the informal sector is a significant contributor to the supply of waste services. For example, in Cairo Egypt, the informal sector accounts for approximately 50% of waste collected (Fahmi, 2005) and 25% Jakarta in Indonesia, (Klundert and Lardinios, 1995). The informal sector while not considered as SMEs in most developed countries because they are seen as illegal, are in developing ones in contrast perceived more favourably. This is because in countries like Egypt or Indonesia, they are viewed as a part of a growing informal economy that are often able to provide services when formal channels of service delivery are not available or extended to all who require the services. It must first be recognized that the size of the informal sector could make it hard to regulate e.g. Manila has approximately 17,000 individuals working within this sector of waste delivery (Medina, 1997).

Note that the word individual was used and not just workers. This is because most of the literature on the informal waste workers depicts them as operating individually or in small family groups in which most workers in the informal waste sector operate and to give an idea of the possible amount of workers that the government would need to regulate if it were to decide to go into partnership with the informal sector.

In Abidjan in a study carried out by Attahi (1996), found that formal sector service provision was boosted by the inclusion of smaller companies in waste collection services. The inclusion of SMEs would have the three way effect of ensuring the provision of services to the most vulnerable areas in society at the same time guaranteeing the incomes of some of the most disadvantaged groups within society and ensuring a minimum level of service by the introduction of regulatory measures to the informal sector (Attahi, 1996). The participation of SMEs in PPPs would be a positive step forward for the SMEs and the public sector of
developing country cities as mentioned earlier. For the public sector, it would be an increase in capacity and access in service delivery at the same time increasing the social security of a part of the population and for the SMEs the government contract signifies a stability of its income.

The advantages of the inclusion of SMEs in waste collections seems very appealing when considering logistics and social effects of the inclusion of the informal sector within formal service delivery and the partnering of SMEs however, the biggest problem to be faced would be the regulation of so many small service providers who are providing a government service. The regulation of a large number of service providers could be difficult and costly (Batley, 1996). Governments who find it difficult to regulate themselves and/or a single partner might find it even more difficult to regulate a multitude of partners. This could be a problem but not necessarily a disadvantage as the ease or not could depend on the structuring of the partnership and the inclusion of other Sections institutions that have a stake in the adequate provision of the service (Rosenau, 1999). The structuring of the partnership would also play an important role in achieving policy goals.

Implementation arguments are usually developed for large well funded government bodies who might implement policy through state agencies or in partnership with a private organization. The private organizations featured in implementation debates are usually large well funded organizations. The SMEs which are also featured are organizations which have an average of 300-600 employees with financial resources and access to credit facilities. In developing country cities however, an average SME is 1-50 people have limited resources and limited access to credit facilities. Some of these SMEs’ fall within the informal sector but provides valid public services. The governments in these countries have to sometimes partner
with firms of this size for example, the Lagos state PSP program. These are characteristics which are dominant in developing countries and make it more difficult to apply implementation debates.

6.4. Literature Gap

There is a knowledge gap that exists in this subject area and there should be studies carried out on SME and the informal sector involvement in PPPs because of the high level of informal sector involvement in the delivery of some services within some developing country cities.

6.5. Conclusion

PPPs are an increasing choice for governments to deliver essential public services. PPPs are not necessarily the cheaper public service delivery option, but it is argued that they are usually the more efficient option.

PPPs have been chosen by the Lagos state government as their implementation tool. This decision had a huge impact both negatively and positively in the formal delivery of waste collection services within the state. The chosen implementation method also had an impact on the informal waste sector. It was therefore important to understand PPPs and the potential relationship it would have with the informal sector service providers. The type of
relationship developed between these two groups will impact the delivery of waste collection services within Lagos state and is therefore important to how implementation debates are applied in a developing country city like Lagos.

In some developing country cities, governments have been unable to provide a quality level of service in sufficient quantities to meet municipal needs. This has prompted within these countries the trend of privatization and public-private partnerships.

The private sector in some of these countries has had varying results in the provision of public services. The involvement of this sector has significantly changed the role of government to one of regulator and monitor. This changed role has meant that the government in charge has had to develop new skills in order to regulate a new service sector.

Very little research has been carried out on PPP and micro enterprises. In view of the Lagos state PSP program which is a partnership with private micro enterprises, it will be very interesting in Chapters eight and nine to find out how this affects the policy and if anything new can be learnt about PPPs.
7. The informal sector: the underdogs of waste collection management

Inadequate waste collection, recycling and treatment is a critical problem in many low income cities where the capacity of municipal government to manage urban services is limited. In such contexts a wide variety of informal sector operators fill the gap particularly in waste collection and recycling. This Chapter looks at the role of the informal sector in waste management in developing country cities.

Chapter seven examines the role of the informal waste sector in developing country economies. It views the response to informal sector activities by Policy Makers in these cities and how their response affects informal sector activities. The informal sector has been a major service provider in some developing country cities. This makes them to extent street-level bureaucrats in the delivery of public services. Government responses to this sector, affect how the sector operates. This Chapter has both a governance context and a service delivery context and aims to inform us on how both affect implementation directly or indirectly. Implementation debates do not include this group within their debates. However, as they have been a core part of service delivery in Lagos, it is essential to understand how this group affects public policy implementation in developing country cities. This will further inform the hypothesis put forward by this thesis.
7.1. Overview of informal sector involvement in waste management

This paper uses the term “informal waste sector” to include all waste management activities which operate a domestic service outside formal provision of waste services. The term “informal waste operator” is used to describe people working in the informal waste sector. The term “formal waste services” is used to describe those services operating with the formal regulatory system, usually provided directly by municipal governments or contracted out to private sector companies.

High population growth rates in some developing country cities have left municipal governments unable to provide adequate waste management within the urban areas (ASAAP, 2003). Failures of formal response by national and sub-national governments have led to the development of informal responses to the problem of waste management (Klundert and Lardinois, 1995). Informal sector activities are complex and extremely varied. Services range from door to door collection of waste to diverse disposal options - such as waste picking and recycling; for example, in Jakarta, waste paper collected by waste pickers accounts for 90% of total secondary materials used in the paper industry. (Furedy, 1990)

In the composting sector, waste pickers account for a large portion of the organic waste used in the compost process. For example, in Cairo, waste collectors sell compost used as fertilizer to nearby farms within the urban environment (Klundert and Lardinios 1995, Medina, 1997, ASAAP, 2003, Taylor D. C, 1999).
In some cities, informal waste operators either account for a significant portion of
door to door collection, serving neighborhoods partially or not covered by formal sector
provision e.g. Cairo 50%, Jakarta 25%, (Klundert and Lardinios, 1995). The informal sector
may also fill gaps in the formal waste collection services, for example collecting waste from
slum areas with poor road access (Fahmi, 2005).

The distinction between formal and informal provision of waste services is often not
clearly distinguished within the literature. Nevertheless, the impact of the informal sector in
waste management in developing country is often significant as it is a major source of waste
services and valuable source of employment for unskilled workers (Charmes, 1990) e.g. in
the early 1990s it was estimated that 17,000 people made a living working as waste pickers in
the Manila dump (CAPS, 1992).

The diversification of waste disposal options in low income cities can be attributed
more to the activities of the informal sector than the formal avenues of service provision
(Fahmi, 2005). Informal waste operators can be found within the municipalities and at legal
and illegal dump sites (Nas and Jaffe, 2004). The recyclates materials are removed from the
bulk of the waste collected and sold to businesses which require them as raw materials
(Fahmi, 2005).
7.2. Activities and stages in the waste management process

The informal waste sector provides a range of services in the management of municipal solid waste, and is particularly active in the door-to-door collection of waste, materials recovery, and composting.

The services provided by the informal sector vary, but can be grouped into four main categories discussed below:

1) Door to door waste collection services:

   Informal waste collectors often use low-cost equipment like push carts, donkey carts and small pick up vehicles or adapted bicycles, to go to areas which have little or no formal service collection and collect the waste generated by households. For example, in Santa Cruz Bolivia, the informal waste collectors serve approximately 37% of the population. (Medina, a; Klundert and Lardinios, 1995)

2) Materials recovery:

   This activity is performed by the group often known as “scavengers” or “waste pickers”. A very large number of people can be found within this sector. For example it is estimated by Oepen (1993) that 37,000 people in Jakarta Indonesia work as waste pickers. They retrieve recyclable materials
from legal and illegal dumps. In some instances, they perform both collection services and materials recovery e.g. the Zableen who are the informal waste managers of Cairo (Klundert and Lardinios, 1995, Fahmi, 2005).

3) Composting:

This service is often not provided on the same scale as the other two services, but it is usually carried by those who undertake door to door collection of waste. E.g. the Zableen in Cairo compost some of the organic materials collected and sell them to farmer and landscapers. (Fahmi, 2005).

4) Middle men:

This is a poorly defined group which has not been well-studied, but they are sometimes involved in the brokering of services or products, and/or in revenue collection for informal waste services. For example the Wahiya of Cairo who act as waste services brokers between the Zableen and the municipality (Fahmi, 2005; Fahmi and Sutton, 2006)

The informal waste sector operators frequently work in small groups, often consisting of members of the same family (Klundert and Lardinios, 1995). Access to End Users is not difficult for informal waste practitioners as those who provide a door to door collection service usually need only go to areas where service is poor. They are usually paid upfront as
their costs are low and this makes it more attractive for the informal waste sector practitioners to want to participate. There is often a ready market within local industry for the materials recovered from waste (Furedy, 1993).

Responsibility for the delivery of waste services in developing country cities usually rests with municipal governments. They are mandated by law to provide waste collection and sanitation facilities for their municipalities' population (Schubeler, 1996; Attahi, 1999).

The informal waste sector exists because of poverty and a need for survival (Furedy, 1990; 1993). The informal waste sector also flourishes because of a lack of capacity from municipal governments of some developing country cities to provide urban services (Kironde, 1999). The resource requirement for entry into the informal waste sector compared to the resource requirement for formal waste service provision can be affordable (Onibukun, 1999). The shortage of supply of municipal public or private solid waste services in developing country cities means there is a market for private informal waste services (Klundert and Lardinios, 1995; Furedy, 1990; Fahmi, 2005; Medina a; b).

### 7.3. Responses of government to informal sector waste operations

The responses of municipal authorities to informal waste operators vary from tolerance to outright harassment with the intention of abolishing the sector, but can generally be classified as one of three main responses (Fahmi, 2005). The first response is to ignore the existence of informal waste operators; it is not politically practical to discourage the waste
operators because of the services they provide and the inadequacy of municipal services, but neither is it politically practical to encourage them.

A second response includes an outright ban or efforts to restrict informal sector activities. Municipal governments often view informal waste operators as part of the waste problem in their municipalities, and the thought is that their methods of service delivery adds to as opposed to reduce the problem of the management of municipal waste. Municipal policy is used to try and stop the activities of the informal sector, either with an indirect ban or hostile policy for example, the privatization of waste services in Cairo (Fahmi, 2005, Medina, 2000).

A third response from the municipal governments is the formal acknowledgement of the services provided by the informal waste sector and their accommodation within the policy created for the management of municipal waste services (Furedy 1997, Medina, 2005).

Few municipal governments acknowledge the informal waste sector as valid service providers. A common thread that can be found in these instances is that the process of recognition by the Policy Makers, of the informal waste sector as service providers began once informal sector groups had organized themselves into a lobbying or advocacy group. This was either an initiative of informal sector operators themselves, as in the case study discussed below of the Coopamare (Rolnik and Cymbalista, 2004), where the waste pickers formed their own co-operative and were then given official recognition by the municipal government, it could also be the result of external impetus, as in the case of the Zableen in Cairo, where World Bank funds supported an organization before it was given recognition by the governments (Fahmi, 2005).
The recurring theme for those governments which do integrate the informal sector into formal service provision is that the informal sector must organize itself one way or another to be integrated within formal services. In general municipal bureaucracies lack the capacity to manager, oversee or regulate large numbers of small-scale transactions, and a common response is to transfer the responsibility of streamlining the management process to the sector themselves. While the organization of the informal sector into groups allows for the regulation of the informal sector by Policy Makers, it fails to recognise the heterogeneity of social structure in many low income occupations, or the sometimes narrow base of representation that groups may have (Rolnik and Cymbalista, 2004). The inclusion of the informal sector into formal waste services that is regulated may give them some degree of security although this is often fragile and subject to reversal due to a change of political power or policy reversal.

7.4. Relationships between informal and formal waste operators

In reviewing the literature, there are very few references to a relationship between the formal and informal waste operators. When it is mentioned, the inference is that the relationship is unpleasant with the informal sector persecuted by formal providers (Attahi, 1999). In a study in Abidjan, Cote D’Ivoire, Attahi (1999) reported finding the formal provider had used the informal waste sector as a scapegoat to blame for its inefficiencies in service provision, even though collection capacity was seen to drop considerably with the consequent exclusion of the informal sector (Attahi, 1999).
While this may not be representative of the general relationships that can be found between the formal and informal providers within developing country cities, it is indicative of the kind of problems that informal sector operators do face in the process of trying to survive in providing its waste services. The problems which they face daily will be further illustrated in later Sections within the Chapter.

The two schools of thought on implementation studies were developed in countries where the informal sector is illegal and therefore recognise only formal avenues of service provision whether public, private or partnerships. The informal sector waste providers however in some Sub-Saharan cities are the main waste services providers even though most are unregulated. This limits the application of the implementation debates on waste services within these cities. The informal sector within these cities requires debates which recognise them as providers of urban services.

The informal service providers within Sub-Saharan African states usually represent the most disadvantaged groups within urban centres and require their elected officials to speak on their behalf. A transparent inclusive government should attempt to meet the needs of all members of the society especially the disadvantaged.
7.5. Informal waste collection providers, their place in society

There are relatively few examples in the literature of municipal governments that have acknowledged the contribution of informal waste operators to urban waste management. A particular problem is to find longitudinal studies, where the impact of the informal sector on waste management practices has been studied over time. Three case studies were identified and are discussed below. Ideally the case studies would have illustrated the three different government responses covered but due to the limitation of the literature available, the three are all examples of informal waste managers. The three case studies are as follows:

- Jakarta, Indonesia, the case study looks at waste pickers who collect recyclate material and their contribution to the Jakarta economy.
- Paolo, Brazil, the Coopamare waste pickers who were able to organize themselves and gain government and community support
- Cairo, Egypt, the Zableen waste management community who are gradually being forced out from their livelihood by the government

The Jakarta case was selected because it demonstrated an economic value to the services provided by the informal waste sector. The Coopamare case illustrated the ability of the government to regulate the informal sector activities, and the strength of the informal sector organization. The Zableen case was selected because of the change in status it has undergone in municipal government opinion. They went from being recognized within the provision of waste services to being indirectly excluded with the creation of hostile waste policy. A description of each case study is given below;
7.5.1. Jakarta, Indonesia

A collaborative effort from the German Society for Technical Cooperation and the Indonesian Home Affairs Department with the aid of an NGO and two planning institutes used the media to successfully lobby the rights of scavengers in Jakarta (Medina, 2007). They were able to increase the public image of the scavengers to make them more acceptable to the general public (Oepen, 1992).

Referral to the scavengers as the 'self reliant brigade' in 1989 by president Suharto (Furedy, 1993; Klundert and Lardinios, 1995) helped to increase their acceptance locally and encouraged institutions to develop programs for them. This institution like the institute for development studies encouraged the development of cooperatives, to further increase their bargaining power and access to processing technology (Furedy, 1993, Oepen, 1993; 1992).

In 1993 in Jakarta approximately 21,000 tonnes of waste a day was produced in the urban area. Approximately 25% of the waste was recovered by waste pickers. The activity was estimated to be saving the city approximately $270,000-$300,000 a month, and 78 factories used paper glass, plastic and metals recovered by the informal waste sectors within their production processes. The recycling rates for glass and paper were reported to be as high as 60-80% (Oepen, 1993; Klundert and Lardinios 1995; Medina, 2000).

The waste paper collected by the scavengers accounted for almost 90% of the secondary paper sources in Jakarta and was estimated to save approximately 6 million trees. Approximately $48.5million was generated through solid waste recycling with collection fees totalling up to $0.5million. (Oepen, 1993, Furedy, 1993).
The provision of an enabling environment for the waste scavengers allowed for the development of the group. Their rights were protected and their acceptance in society increased. The incomes realized within the sector also generally increased.

7.5.2. Case 2: Coopamare, Sao Paolo

Extreme poverty within some Brazilian cities encouraged the growth of the informal material recovery waste management sector. Despite the volume of waste traded, however, income levels still remained low. The predominance of middlemen within the informal material recovery sector in Brazil had encouraged the dominance of poverty within the informal material recovery sector (Medina, 2007; Klundert and Lardinois 1995).

The dynamics of scavenging changed in 1982 in Sao Paulo Brazil when eight paper pickers, working together, bought one cart. The formation of an association of waste pickers was able to generate support from a religious welfare organization called CEMPRE (Wells, 2000). These religious welfare organizations gave them some financial support and the new cooperative was able to construct more carts. In 1985 they founded an association called Coopamare to have a body to fight for the rights of waste scavengers (Medina, 1995). The activities of the Coopamare gained support from the political elite through the allocation a piece of land under a viaduct (in a middle-income area) from the then Mayor Luiza Erundina (1989-1993) under two conditions: 1), the cooperative would have to return the land as soon as it stopped its activities; and 2), the place should be kept clean (Medina, 2007; Klundert and Lardinios 1995; Rolnik and Cymbalista, 2004).
By the mid 1990s, Coopamare had approximately 100 members mainly working in two neighbourhoods of São Paulo. The Coopamare is run by the waste pickers with a former waste picker as the leader of the cooperative in the 1990s’ and various responsibilities shared amongst the cooperative members (Medina, 2007).

By acting in a cooperative, the waste pickers were able to collect larger volumes of waste. This allowed them to deal with businesses directly bypassing middle men and negotiating fair prices for their materials. Establishing good contacts with purchasing industries was seen as being of the utmost importance (Medina, 2000; Klundert and Lardinois 1995).

Similar cooperatives have now been set up in other cities in Brazil, including Santos, Belo Horizonte, Porto Alegre and Santa Catharina. Based on the experience of Coopamare, a training kit has been designed to help waste collectors in other cities to form cooperatives and to integrate these coops into officially run waste programmes. (Klundert and Lardinios 1995). One of the problems faced in some cities is the waste pickers and recyclers have become so successful that larger private sector companies have started to move into the same sector, undercutting the cooperatives as on Isla de Marhinieros, Porto Alegre.

A unique selling point of the Coopamare is that it was started by the waste pickers and it was also run by the waste pickers. They were able to generate as much interest in their activities because they worked together. They knew what they needed as a group and were able to generate the type of help that could help their industry grow. The Coopamare was not another poverty alleviation project put together by an NGO or faceless government body who guessed or assumed what the waste collectors needed. The Coopamare working on behalf of
the Coopamare were able to identify the obstacles they met along the way in delivering their service and what could improve the quality of life that they had.

The Coopamare were able to identify that trading through middlemen kept them below the poverty line and came together to form a cooperative that could boost their negotiating power (Rolnik and Cymbalista, 2004). The Coopamare required public acceptance and were able to find an NGO to help them improve their public image. Their efforts to make themselves more acceptable to the people got the attention of their government who gave them a place to work. The continued efforts of the Coopamare to boost themselves out of poverty and generate public acceptance for their activities is the main reason for the success of the Coopamare.

7.5.3. Case 3: Zabaleen Cairo, Egypt

The Wahiya migrated to Cairo from Dakhla Oasis in Western Egypt. The Wahiya collected waste from door to door and were paid by the End Users for the service. The Zabaleen originally moved to Cairo in the early 20th century as migrants from El Badary district in Assiut (a rural region in southern Egypt). In the 1930s and 1940s, the Zabaleen bought waste from the Wahiya to feed pigs. The Wahiya then introduced the Zabaleen to informal waste collection and entered into a kind of partnership with the Zableen (Fahmi, 2005). The Wahiya collected the user charges and the Zableen collected the waste and separated it. A large proportion of the Zableen live in Muqattam one of the seven settlements allocated to them by the municipal government. It is the largest Zableen settlement; the other six have been continually moved due to the expansion of Cairo (Fahmi, 2005; Fahmi and Sutton, 2006).
The Muqattam Zabaleen settlement was established in 1970 by the municipal government. It is part of a squatter settlement called Manshiet Nasser (Fahmi, 2005). This settlement was formed for the Zabaleen and squatters following a series of evictions of Zabaleens from other Zabaleen settlements. There is ongoing land diversification in the Muqattam as the city has continued to expand and the value of the land has continued to rise (Fahmi, 2005).

A pair of Zabaleen working together with a donkey cart can collect the waste from 350 homes in a day (Fahmi, 2005). A study in 1996 showed that the Zableen collected approximately 3,000 tonnes (a third of Cairo’s waste) of waste daily approximately 85% of which was recycled and a majority of the organic content was composted or fed to pigs (which were sold to tourist houses) with a minimal amount being unusable (Fahmi, 2005; Fahmi and Sutton, 2006).

In 1981, the Zableen received a World Bank grant which was used in collaboration with the Environmental Quality International (EQI) an NGO to create the Zableen Environmental Development Programme (ZEDP). This was used to improve their living conditions which included upgrading their housing stock, water supply, sewage disposal, electricity and road infrastructure (Fahmi, 2005; Fahmi and Sutton, 2006).

In 1982, the government proposed to relocate the waste separation activities of the Zableen to a desert settlement called Qattamiya. This settlement was 25km away from their current location. This move would greatly have increased the transport cost of the Zableen for their activities making their occupations unviable. The Zabaleen are attempting to resist this move by campaigning and enlisting the help of local NGOs’ (Fahmi, 2005; Fahmi and
Sutton, 2006; Saber, 2000). In 1989, the Wahiya and the Zabaleen formed the Environmental Protection Company (EPC). This gave the Zabaleen recognition as key participants within the local governments waste management programme (Fahmi, 2005).

With foreign assistance and the formation of co-operatives, the Zableen were able to establish micro enterprises which converted the recyclable materials collected e.g. conversion of collected plastic to pellets which were then sold to industry. The Zabaleen have been able to move from the lowest paid within the economy earning LE70- ($11.50) in 1983 to between LE360-LE450 ($60-75) per month by 2005. By 1995, 700 families owned collection enterprises, 200 owned and operated small to medium scale recycling enterprises and 120 owned enterprises trading in waste-related products (Fahmi and Sutton, 2006). It is estimated that these enterprises together invested an estimated LE2.1 million ($350,000) in waste management equipment such as trucks, plastic granulators, paper compactors, cloth grinders, aluminium smelters and tin processors (Fahmi, 2005). It is also estimated by Fahmi (2005) that the activities of the Zableen have greatly reduced the cost of waste management for the municipal government of Cairo.

The Cairo Cleaning and Beautification Authority argue that the Zabaleen methods were unhygienic and unsafe. The government policy became indirectly hostile to the Zableen for these reasons. In 2004 the decision was taken to privatise the waste collection within the municipality, opening up tendering to foreign companies to the supply of waste services within the municipality of Cairo (Fahmi, 2005). The argument was that foreign companies could afford more equipment and capital, which effectively undermined the business operations of the Zableen, who have been unable to compete effectively with these companies in the tendering process and face being relegated (Fahmi, 2005). While the
companies have offered to employ the Zableen and give them access to the collected waste, this represents not only a loss of income for the Zableen (e.g. they got LE 3.00 ($0.50) from the Wahiya for each house they collected waste from but the foreign companies pay LE 0.85 ($0.14)) but considering that most of the Zableen are self employed, it represents a loss of their independence (Fahmi, 2005).

The effects of the inclusion of foreign contractors on municipal solid waste management on the municipality of Cairo is an annual bill of approximately $50 million a significant increase in cost and a decrease of the recycling and composting activities and a subsequent increase in land filling (Fahmi, 2005; Fahmi and Sutton, 2006).

As of 2004, the Zableen were faced with forced evictions from their homes and places of work by the government and low compensation as a majority live on housing plots without titles. A move far from the city making their livelihoods unsustainable and they now have to work twice as hard to be able to gain a niche in the market. (Source: Klundert and Lardinios, 1995; Medina, 1997; Fahmi, 2005; Fahmi and Sutton, 2006).

7.6. Comparison of case studies

The three case studies were selected because this thesis needed to understand the role of the informal waste sector in developing country economies and the effect government response has on the sector.
I) **Operational activities**

As demonstrated by the cases reviewed, operational activities of the informal waste sector are extremely diverse. In some developing country cities, the informal sector are the main providers of extensive urban waste services (Fahmi, 2005), which include door to door waste collection and disposal; their activities also provide valuable sources of secondary materials and direct and indirect revenues for industry, farms and the municipalities (Klundert and Lardinios, 1995).

In 1995 the informal private waste sector of the city of Jakarta was estimated to provide $48.5 million worth of recycling trading within the municipality. The volume of recycling trading in Cairo can be approximated to $30 million. The figures show that the municipalities are able to reduce the cost of service provision by using informal private waste sector resources (Fahmi and Sutton, 2006). The composting content of the activities is usually a cheap source of fertilizers for nearby farms and private gardens (Fahmi, 2005).

The informal sector is also quite effective in the provision of jobs for unskilled migrant workers who would otherwise find it very difficult to survive as was illustrated with the Zableen in Cairo (Fahmi, 2005). The Zabaleen in Cairo have a communal system which helps new migrants into the city to live and learn and earn with an established family till the individual or family can afford their own housing and business. This communal system helps to give poor migrants a sense of stability and a steady income which grows over time (Fahmi, 2005; Fahmi and Sutton, 2006). A critical factor, however, seems to be that informal waste
operators find it difficult to cross over from providing small-scale services paid by individual End Users (for example in door-to-door collection householders usually make direct payments to the collector) to providing services on a larger scale funded by the municipality. It was clear in the case of Cairo, that even though they are well-established, the Zableen operators have been unable to migrate from informal providers to formal providers, and successfully compete in the contracting process once formal privatisation was introduced into the waste management system (Fahmi and Sutton, 2006).

II) Problems and issues

One of the critical problems to scaling up and establishing informal waste services on a more secure footing appears to be the complexity of managing a large group of people working individually or in very small scale operations. In the above cases, the accommodation of the informal waste operators with government policy and implementation was only possible by bringing them together in cooperatives and letting them collaborate in order to achieve common objectives (Klundert and Lardinios, 1995; Medina, 1997).

The common objectives which were as demonstrated in the case studies above include the increase of income generated, better working conditions, access to financial institutions, fairer prices for their recyclates and improved working conditions. This required some degree of both self-management and internal control as demonstrated by the case in São Paolo, Brazil (Klundert and Lardinios, 1995).
In the case of Coopamare, the government was able to set a standard of a clean environment at which against which the informal sector were required to perform. This made the informal sector accountable to the government for its actions as they would lose the land allocated to them for their activities (Medina, 2000). While, as was demonstrated with the case of Jakarta in Indonesia, the financial gains for the municipality from working with the informal waste sector made a significant difference in reducing the city budget waste management (Klundert and Lardinios, 1995; Fahmi, 2005). The Zableen case meanwhile demonstrates how this sector can be used to reduce poverty (Fahmi, 2005).

Several other issues of management were not fully explored in the case studies for instance, the quality of the urban environment with informal sector provision as opposed to formal sector provision. Public perception of informal waste activities is often very hostile towards the service providers even while patronizing their services another aspect which was not discussed in the literature.

Informal waste operators are also at high risk of diseases and infection as a result of poor working conditions and lack of protection and they also face exploitation from middlemen as they usually have no direct access to the industries that use the recovered materials (Fahmi and Sutton, 2006). Only recognition of the contribution of informal waste operators, and the importance of the services they render, will protect their rights as individuals and also give them other avenues to secure and increase their income (Klundert and Lardinios, 1995; Fahmi, 2005).
III) Prejudice and hazards

Informal private waste services providers endure considerable prejudice due to the nature of the service they provide. The very fact that they survive on what society has deemed “waste” ensures that they are often treated as outcasts (Perera and Amin, 1996). As stated earlier, the participants within this sector are often the poorest in society and enter the private informal waste sector as a way of surviving (Schubeler, 1996). Those working informally in waste management are often minority and excluded populations for example, recent rural-urban migrants, ethnic or religious minorities, low castes, women and children (Klundert, Lardinios 1995). While their services maybe used, they remain one of the most vulnerable sectors of society, especially waste pickers (scavengers).

The middlemen in between the scavengers and the industries that use the materials that they collect usually take full advantage of the waste pickers (Medina, 2000). These middle men tend to create monopolistic markets where the sellers have no choice but to go through them and the middle men buy from the waste pickers at a fraction of the actual market value of materials recovered (Medina b, Taylor 1999).

Private Informal waste sector practitioners may also be the targets of violence: for example in 1992 paramilitary groups in Colombia carried out a ‘social cleansing’ operation and killed 40 waste pickers and gave them to the local university as cadavers (Medina, b).

Due to the nature of the sector, private informal waste practitioners face health and accidents hazards on a daily basis. In cities where waste management is poor, landfill sites
and informal dump sites are often used for both hazardous and non-hazardous waste. Accidents occur at the dumps e.g. waste slides. The informal waste pickers are thus prone to disease like typhoid, diarrhoea, parasitic diseases, and malaria (Klundert and Lardinios, 1995). Due to the presence of pregnant women within this profession, there are reported cases of birth defects and high infant mortality rates. Health problems and accidents affect the income of this sector as their income stops when they are not working (Cointreau, 1994).

IV) Policy implications

The policy implications of the discussion above are that, when there is political acceptance of a potential role for informal sector waste providers, inclusion of the informal sector as actors in waste management services can be mutually beneficial for both the informal sector and municipal government. As the case study of Coopamare in Brazil illustrated, the municipal government is able to regulate the informal sector to an extent and in return, its waste bill could be fractionally or significantly reduced (Klundert and Lardinios, 1995). In Sao Paolo the municipal government were able to set conditions such as keeping the urban environment clean at all times, which was adhered to by the sector, which also increased the informal workers acceptability within the community. For example, the community in Sao Palo had originally not accepted the government plan to give the informal sector land within municipality for fear of decreased land values but the informal sector had been able to prove itself not to be a societal menace (Klundert and Lardinios, 1995) and generated acceptability within the society.
The government of Sao Paulo were able to demonstrate that they considered the needs of all citizens within the urban environment by creating policy which was inclusive of one of the most socially disadvantaged groups in their urban area. This allowed the informal waste picker sector to develop eventually becoming the benchmark group for assisting disadvantaged groups in developing urban cities. The government of Sao Paulo with the cooperation sector was able to monitor the informal sector activities, improve informal working conditions and public acceptability. Monitoring of formal service delivery could be challenging in some developing country cities could be challenging due to scarce resources. The ability of the Coopamare to monitor themselves effectively (reporting any problems to the officials) made it easier for the Policy Makers to be able to include their services with formal providers.

The informal waste collection in Lagos as of 1996, was the main waste collection service providers in Lagos state. The methodology to be used with the sector will be the semi structured interview method. This will allow this thesis to explore the problems faced by the sector and how they feel their services and circumstances could be improved.

7.7 Gaps in literature

The study from Coopamare in Brazil while indicative of what could be done, it is by no means a yardstick as the number of waste workers involved are very low (100) and it covers mainly materials’ recycling and not door-to-door collections or composting.
From the point of view of governments, a critical problem in managing the informal sector is the number of operators and difficulty of establishing representative organisations of informal sector operators. The question of how can they be regulated, and how can this regulation be enforced to reduce any negative impact the sector could have on themselves, the community and the environment is significant.

During the secondary research carried out for this paper, it appears that there are several gaps in the literature. The first gap is the lack of recent case studies of the informal sector. The case studies found during the literature review were not only old (usually more than 10 years); they lacked depth (data from the informal service providers, data from the End Users and effects of informal sector activities on the urban environment were missing) and were not longitudinal, with the exception of the Cairo case study which was carried out recently by Fahmi, (2005). The reviews of the case studies also left a lot of questions unanswered, in particular the relationship between the informal sector and the formal waste service providers and the extent to which the informal sector was included in public policy on service provision.

While the case studies implied the kind of problems that the informal waste sector faced, none of those reviewed were in-depth. The same could be said for the benefits that the informal waste sector gained when they were included within public policy. While it is implied that informal workers earned more than some public sector workers, did the higher income actually make a difference in their income, quality of life and overall health? The arguments though passionate were not enough to convince sceptical Policy Makers that they would do more than gloss over the informal waste management sector.
The focus of this thesis however is can governments in developing country cities successfully create effective policy and implement it to provide basic waste management services within developing country urban areas. The question this thesis would seek to ask is how the informal private sector can be added to waste policy in order to provide effective waste management within the municipal urban area. A majority of the literature has focused on the strengths of the informal sector without really dwelling on their weaknesses. Being able to view both strengths and the weaknesses of the informal private sector objectively can aid their successful integration into formal waste services provision.

7.8. Conclusion

The informal sector in developing country cities like Lagos form an integral part of service delivery. They can either contribute positively or negatively to the urban environment and urban economy in which they operate. It is important for this thesis to understand how this sector operates as discussed earlier because they form a large part of the street-level bureaucrats in some developing country cities. The government/Policy Makers’ response to the activities of this sector has an impact on service delivery and the lives of the practitioners who operate within this sector. This further contributes to proving or disproving the hypothesis developed at the beginning of this thesis.
8. Lagos State waste collection management: Introducing the Lagos PSP Programme

8.1 Phase I: 1996-2004

Chapter 8 is the first half of the empirical work of this thesis. Its aim is to test the hypothesis which was put forward in Section 2.11. As discussed in the conceptual Chapters of this thesis, certain characteristics are found to be present in developing country cities which are absent in developed country cities. These characteristics have an impact on the applicability of western models of implementation. This Chapter aims to apply those western models to Phase I of the Lagos state waste collection PSP Programme and evaluate the results. This Section shall look at the role of governance, the informal sector and End Users as they affect implementation in developing country cities. This Chapter begins by first examining the waste management problems in Lagos State. The information in the Chapter is drawn mainly from relevant reports and documents and from key informant interviews. For the purposes of anonymity, key informants are referred to as P1, P2, P3 and P4.

8.2 Lagos PSP Programme

Privatization of Lagos State solid waste management has occurred twice since Nigeria's independence in 1960. Waste privatization in Lagos first occurred from 1980-1985 (Section 3.9). The second and the current form of waste collection services privatization created by the Ministry of the Environment (MoE) Lagos State is the Lagos State Private
Sector Participation (PSP) Programme for solid waste collection created in 1996. Its aim was to re-introduce formal private sector waste collection management a service which until 1996 had been provided free to End Users by the State.

The Lagos State PSP Programme invited the private sector to deliver solid waste collection and transfer services. A bidding process is not used within the PSP Programme. Contractors who met the minimum criteria of owning ten 10-tonne trucks were invited to apply to deliver the service. The qualifying Contractors payed the MoE a fixed sum of N100,000 (£400) per annum and were expected to market their services to the End Users directly and recover their cost and earn a profit from waste levies. The levies were preset by the MoE and an official price list was given to the PSP Contractors to charge End Users. The PSP were mandated to collect the waste and transfer them to the MoE designated disposal sites (MoE, 1995).

The PSP Programme started with 1,500 participating Contractors in 1996-7. This turned out to be a misleading figure because the MoE found that the companies who claimed to meet their criteria did not actually meet them. Some Contractors could barely cope with waste collection on a street. (The original contracting process proved to be inadequate as the Contractors were taken on on the basis of what they claimed they could cope with without any physical verification). By 2000 this number had diminished to 645, the remaining 855 companies had folded up (MoE, 2007). By the end of Phase I, there were approximately 200 PSP Contractors participating within the PSP waste collection policy. The cause of the decrease in the number of PSP Contractors was their inability to make a profit. It is unknown at what rate the Contractors left the programme as no accurate records from this period were available during the data gathering process.
In this thesis, the Lagos State PSP Programme is divided into two phases. Phase I covers the period from 1996-2004 when the PSP Contractors were expected to collect payment for their services directly from the clients. Phase II covers the period from 2004 to 2007 (2007 was the empirical data gathering phase of this thesis) when the government paid the PSP Contractors directly and recovered the cost of the service by laying a PSP waste tax on the End Users (MoE, 2004). Phase I is discussed in Chapter 8 while Phase II is discussed in Chapter 9.

8. 3 Lagos State waste problem

Although waste is usually a municipal function, a weak local government system as discussed in Section 3.8 has meant that the State has retained responsibility for waste collection (P1, 2007; MoE, 2006). Waste problems in Lagos State include disposal of industrial and medical waste, collection and transfer of domestic waste, illegal waste dumps, and incidental environmental problems due to the poor management of waste within the State (P1, 2007; P4, 2008; MoE, 2007; LAWMA, 2005).

One of the most acute problems in the State has remained the collection and transfer of waste from domestic and commercial premises in the municipal areas (usually classified as municipal solid waste), the focus of this research. This problem has been given high priority by the MoE (Ministry of Environment) and LAWMA (Lagos State Waste Management Authority) because of the illegal dumping of waste in the municipal environment, its direct health and visual impacts, and the indirect or transferred impacts on the Lagos urban
environement such as traffic and flooding, which affected the socio-economic fabric of the State (Civil Liberties Organization, 2004).

The waste problem was defined by the Ministry of Environment (MoE) on behalf of the State (P1, 2007; P2, 2007; P3, 2007; P4, 2008; MoE, 1995). According to key informants in the research, by the mid-1990s, the problem, as defined by the MoE during a series of Ministry and agency meetings, was twofold. The first issue was the inadequate collection and transfer of municipal solid waste from its point of generation to its point of disposal (P1 2007; P3, 2005) which resulted in extensive uncontrolled dumping of waste and the associated aesthetic, health and environmental hazards (Onwumere, 2002). In 2006, it was estimated that of the 6,000 tonnes of municipal solid waste generated in the State daily, an estimated 4,000 tonnes was dumped illegally within the urban environment (Lagos State, 2006). The second problem was the inability of formal provision to meet demand for waste collection and transfer, and the difficulty of collecting solid waste in low-income informal areas where the network of access roads was limited (P1, 2007; P2, 2007; P3, 2007; P4, 2008; PSP Focus group, 2007). Previous policies had relied on organized collection from LAWMA. This was supplemented by emergency clean-ups (The policy was to let the waste pile on the roads and then clear the waste when the nuisance factor was very high) when waste accumulated as LAWMA had lacked sufficient waste collection capacity to meet demand. The cost of emergency clean-ups and the failure to acquire equipment to increase and maintain waste collection capacity had been a major concern to the MoE Policy Makers (P1, 2007; P2, 2007; P4, 2008, Technical Committee, 2004). By the beginning 1996 the cost of waste collection, transfer and disposal and the emergency clean-ups were approximately a quarter of the total State budget, so the issue had reached crisis proportions for the Policy Makers in
The MoE and LAWMA predict the amount of waste generated will rise in line with population growth. LAWMA predicts the amount of waste generated could rise by approximately 10-15% (P3, 2005; P1, 2007; P4, 2008, MoE, 2007; LAWMA, 2004). Population growth was predicted to rise at a rate of approximately 8% per annum (Lagos state, 2006).

Between the years of 1981-1991, LAWMA was responsible for municipal solid waste collection and transfer, but large proportions of the urban settlements were either unserviced or relied on informal waste collectors known as 'cart-pushers'. During this period, LSWDB (Lagos State Waste Development Board) (which then became LAWMA) was supported by a $54m grant from the World Bank in 1988 (World Bank, 1991) to purchase 375 trucks 141 compactors, 23 bulldozers, 4 maintenance workshops and 84 tippers.

As discussed in Section 3.9, there are two problems with imported equipment - it is often poorly designed to cope with the high organic content of waste found in developing countries, and the maintenance is difficult due to a lack of experienced technicians and available spare parts, which results in a constant breakdown of the equipment and the service (P1, 2007; Technical committee, 2004). By 1991, only 42 compactor trucks remained with the other trucks having been cannibalized for their maintainance (P1, 2007; Technical committee, 2004; Nkwoh, 2006; LAWMA, 2007).
8.4 Solution

The Policy Makers wanted to avoid the inefficiencies of previous waste policies, both the regular service provided through LAWMA, and the emergency clean-ups (P1, P2, 2007). The emergency action was particularly unsatisfactory due to its high cost, irregularity, and the environmental nuisance and hazards caused between interventions (P1, 2007).

The first stage was to develop a Private Sector Partnership (PSP) Programme to tackle the inefficiencies of waste collection and transfer services that had been provided by LAWMA. A policy was required that recognised past inefficiencies in formal government provision and the decision was made by the Policy Makers of the MoE to introduce private sector service provision as a more efficient mechanism for service delivery (P1, P2, P3, 2007; MoE, 1995).

It is evident from this example that implementation of waste services in Lagos State is primarily driven from the top. As in the discussion of top-down literature, Policy Makers instigate change (Pressman and Wildavsky, 1983, Sabatier, 1984, 1993) and are able to an extent direct the allocation of resources for a service (Sabatier, 1986). It is notable however, that in the case of the PSP Programme in Lagos, while a Public Private Partnership (PPP) Programme was initiated to deliver the service, full privatisation is not possible because ultimately the role of service delivery still rests with the government (Li and Akintoye, 2003).

The model of PPP that has been employed in the delivery of the Lagos PSP Programme is Service Contract C (see Section 6.1:1.c). In Service Contract C, the private sector owns its own equipment and has the option of acquiring government equipment in the
provision of the contracted service (Li and Akintoye, 2003). Service Contract C ensures that the PSP Contractors have the necessary equipment to deliver waste collection and transfer services. This method of service contract allows the government to go from a service supplier to a service regulator (Li and Akintoye, Edwards, Hardcastle, 2003).

The disadvantage of the Phase I PSP Programme is that it did not take full advantage of the Service Contract C model, as it did not use a bidding system to determine the cost of the service as the cost of the service was predetermined by the MoE (PSP focus group, 2007). This was possibly because private waste collection using Nigerian Contractors was new in Lagos State. The informal sector waste collection service providers have mainly represented private waste collection till this period in Lagos state. The Policy Makers wanted to make waste collection attractive to private investors who had no history of delivering the service and this precluded them from bidding to provide the service.

The main advantage to the client organisation of Service Contract C is that all equipment is acquired maintained and owned by the private sector Contractors (Fiscal Affairs Department, 2004) (Section 6.1.1.c). The aim was to overcome the problems that LAWMA had experienced, when equipment mostly through grants and loans from the World Bank, was not maintained resulting in constant breakdown of the service (P1, 2007, Technical Committee, 2004).

A second advantage of Service Contract C in the Lagos context is that it allows a wide range of private firms including small, medium and large sized firms to participate in the project. Firms which do not already have equipment can acquire what is needed at subsidized prices, provided that they already met the minimum requirement of owning ten 10-tonne
trucks (Bennett, Grohmann and Gentry, 2000). This also gave the implementing agency the option of selling off its equipment in a ready market.

An interesting feature of the PSP Programme is that it was inspired by the informal waste sector that filled the gap left by the inadequacy of formal waste collection (P1, 2007). The MoE, in searching for an answer to the problem observed the informal sector practices and learnt an important lesson from their activities which was ‘if the service provided was of a good standard, the citizens of the State were willing to pay for the service’ (P1, 2007; P2, 2007; P3, 2007; P4 2008). There was, however, no understanding of the complimentary role provided by cart-pushers, or consideration of an integrated solution which would involve them working in parallel with larger private sector waste collection firms.

8.5 Phase I Lagos State PSP Programme: 1996-2004

By 1995, in the face of increasing international pressure and internal civil unrest, the then ruling head of State, General Sani Abacha, announced a timetable for a 3-year transition to civilian rule. Abacha died under mysterious circumstances in 1998, and his successor General Abdulsalami Abubakar reformed the civil service and set up a national electoral commission to supervise elections for the presidency, national assembly, State legislature and governors, and local governments, which were held in 1999 (BBC 2009).

By 1996, formal provision of waste services was virtually non-existent within the State. The first phase of the PSP Programme began in 1996 under Military rule (P1, 2007;
The Lagos State Military Governor at the time, General Marwa, was a close ally of General Abacha, and would probably have been aware of General Abacha's plans to succeed as a civilian president; General Marwa may well have intended to follow suit and was not willing to risk any policy that could be prejudicial to his political future (See Table 3.1 for complete list of Lagos State governors).

Although, the MoE had observed that the general public seemed to willing to pay cart-pushers for waste collection services, there were many problems with the informal sector operations. Although the cart-pushers were highly efficient in collecting the waste generated, waste collected was often dumped by the roadside as designated formal disposal points were too far for the cart-pushers to transfer the waste (Cart pusher interviews (CaPI) 1, 2007; CaPI 2, 2007; 3, CaPI 4, 2007, cart-pushers group interview 1, 2008). The waste collected by the informal private sector frequently ended up in illegal waste disposal sites adding to the waste problem of the State (Olori, 2005). There are currently very few waste transfer centres within the municipal areas of the State and LAWMA during Phase I of the PSP Programme did not have adequate capacity to collect waste from these approved centres (MoE, 2004).

The Military governor at the time, General Marwa, was unconvinced that households would pay for waste collection as many saw formal waste collection as a government service, and he required the service to be implemented as a pilot study before it was implemented across the State for this reason (P1, 2007). Formal collection had a history of being paid for by the government (LAWMA, 2005), and over 53% of respondents to the structured interview conducted for this research in 2007 saw formal waste collection as a government service which had always been paid for by the government as shown in Table 8.1 below.
Table 8.1 Response to question, *Who pays for waste?*

Source: Structured interview survey

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>7</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Government</td>
<td>86</td>
<td>53.8</td>
<td>53.8</td>
</tr>
<tr>
<td>You</td>
<td>61</td>
<td>38.1</td>
<td>38.1</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>160</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The pilot scheme for the PSP Programme, which started in 1996, was tested on Kosofe Local Government area (which was later divided into two local government areas Kosofe and Somolu Local Governments). These areas were probably selected as they are predominantly high-income areas that would be more receptive to paying for waste collection than residents of lower income areas.

The pilot scheme was designed as a self-financing project. The collection and transfer of waste was to be collected by the private sector and paid for by the End Users (Li and Akintoye, 2005). The government advertised in the local press for private waste collectors that fit the eligibility criteria (P1, P3, 2007, PSP group interview, 2007). Contractors were required to own 10 ten tonne trucks, create route maps and generate statistical data for instance, number of residents, and income levels of their allocated areas and market their services to the End Users (P1, P2, 2007; P4, 2008; MoE, 1995).

The characteristics of the pilot scheme were;

1) In 1996 the MoE did not have firm political support from the government of the day for the policy (P1, 2007)
2) The MoE on behalf of the State created the policy in 1996. However, legislative backing did not start until 2001 after the civilian-led (led by Mr Tinubu) government took power in 1999 (P1, 2007; P2, 2007; P3, 2007; Gazzet, 2001).

3) The private sector for the second time was formally invited to participate in the waste collection process, although this was the first time in the country that local companies had been involved in solid waste collection services, as the first privatisation programme which ran from 1980-1985 was contracted to a foreign company (P1, 2007; LAWMA, 2005 and 2006).

4) This policy was unprecedented within the State as it was the first time the citizens were being charged directly for the collection and transfer of domestic waste (P1, 2007; P2, 2007; P4, 2008). Other services such as water, run by the water corporation, had been subject to a fee for some time (the corporation was Federally-run but now privatized) but waste has traditionally free.

5) The PSP Programme was designed to reduce the State’s role in the provision of waste collection and transfer services. The privatization changed the MoEs’ and LAWMAs role from service provider to service regulator (P1, 2007). The public sector became service regulators when private provision is introduced into public services (Owen and Merna, 1997).

The policy had been created, and its implementation through the PSP Programme is discussed below.
8.6 Implementation schools of thought

8.6.1 Objectives, and resources

The MoE wanted the waste collected and transferred from the municipal areas of generation to the designated areas of disposal. The State budget for waste collection and transfer at the time of the policy creation was around a quarter of the total State budget (P1, 2007; Onwumere, 2005; Momodu, Suleiman and Isiguzo, 2006; Achankeng, 2003; P4, 2008) and the Policy Makers were keen to reduce State expenditure on waste collection and transfer costs to the general public.

The MoE at the start of the policy had limited political and legislative backing, described as important in the literature (Van Horn 1975; Sabatier 1993; and Hood 1976). The policy set out to try and use market efficiencies (Jensen, 1978) to achieve its objective to improve its short fall in service delivery (P1, 2007). If the test was successful within the test area, then the following benefits were expected by the Policy Makers;

a) Less government revenue would be expended in the collection and transfer of municipal waste as it would be paid for by the End Users (P 1, 2007; MoE, 1995).

b) A sector of the economy would open up and more jobs and skill opportunities would be created through the PSP Programme (P1, 2007; P2, 2007; P3, 2007).

c) Efficiency would be introduced within the collection and transfer of waste from the municipal areas (as recommended by Sabatier, 1983)
d) The MoE could improve its services as regulators of the service (Ahmed, 1996; P1, 2007; P3, 2007).

e) Waste collection resources could be diverted for other environmental services

f) The government monopoly on waste services would be curtailed (Li and Akintoye, 2005)

g) Provision and maintenance of infrastructure would mainly be the responsibility of the private sector (Ball, Heafey and King, 2000).

The companies participating in the PSP Programme were expected, like the informal sector, to market their services to the consumers directly. This was expected to ensure that the service provider conducted their services efficiently. The test pilot was supposed to achieve two main objectives:

i) It was supposed to prove that the private sector was capable of delivering an efficient service, and

ii) Prove that if the targeted End Users (households) were provided with an efficient service, they would be willing to pay for the service contrary to the expectations of the Military State government in 1996 (P1, 2007; P2, 2007; P3, 2007).

The outcome of the pilot test set the precedent on what the MoE/LAWMA needed to achieve and the potentials of the PSP Programme. The shortcomings of the programme
were used as a learning curve within the MoE/LAWMA to improve the service. The PSP service developed a number of unanticipated problems that are listed below:

i) The End Users were often late in payment or completely defaulted in paying the PSPs (PSP focus group, 2007; P1, 2007), partly because they saw the formal provision of waste collection and transfer services as a service which had always been paid for by government. There was possibly the sense of mistrust from the End Users who thought the PSP Contractors were being dishonest and trying to get paid twice from the government and from them (Structured interview, 2007). More than 67% of the respondents interviewed in the structured interview undertaken for this research were not aware of the PSP Programme during this phase of the PSP Programme (Structured interview, 2007).

ii) The PSP Contractors found it difficult to canvass for new customers, and some found it difficult to make some households relinquish their waste as these residents used the waste they generated to landfill their land (PSP focus group, 2007).

iii) The private sector had little or no experience in the large scale collection and transfer of waste prior to 1996. The PSP Contractors who signed up at the beginning of the policy were the first set of local companies to engage in formal private collection and transfer of solid waste in the country (PSP focus group, 2007; P1, 2007; P3, 2007). The inexperience of the collectors
possibly led them to underestimate the true requirements of waste collection and transfer (Attahi, 1996).

iv) The PSP Contractors, in a bid to cut costs, also engaged in fly tipping at illegal dumpsites exacerbating the problem they were brought in to solve. This is because the PSP Contractors had larger collection vehicles than the informal sector and thus tipped larger amounts of waste due to their larger capacity at illegal dumpsites. This led the MoE to create a monitoring department in 2003 (LAWMA, 2003; P1, 2007; P2 2007; monitoring official, 2007; MoE, 2007). The formal private sector activities were difficult to monitor due to the inexperience of the monitoring department and the ratio of the monitoring teams to the PSP Contractors which was 1:350 (P1, P2, 2007, monitoring official, 2007).

The result of the initial test was disappointing and well below what was expected by the MoE officials. The test could have developed the problems it did for a number of reasons. Hogwood and Gunn (1993) describe this form of policy implementation as managerial. The creation and the implementation of the policy was very much top-down in nature and the PSP Contractors had no input in the creation of the policy (Sabatier 1986, 1993; Hjern, Porter, Hanf and Hull, 1978). The policy was created first and then the PSP Contractors were sought, effectively dividing the policy and implementation process (Barret and Fudge, 1981). This could mean that the PSP Contractors were unable to identify with the policy they were recruited to implement and what the policy was designed to achieve, which could account for the predominance of flying tipping amongst the new PSP Contractors.
The consultation for the policy, if any had been carried out, could have included the clients, possible PSP candidates and waste consultants. The Policy Makers based the creation of the policy on which institution or sector can provide the most efficient waste collection service and where to acquire the resources to implement the policy and keep the service running continuously (MoE, 2007).

Barret and Fudge (1981) suggest that policy implementation should begin from the target group expected to deal with the End Users on a one-to-one basis (Meyers, Glaser and Donald, 1998). In the case of the Lagos waste collection PSP Contractors, the PSP Contractors could not be involved in the policy planning stage as before the policy was set up they had no experience in the sector (PSP focus group interview, 2007).

The informal private sector could have been consultants in the policy process (Fahmi, 2005) because they had the experience of providing the service as private service providers. Consultation with the cart-pushers could have resulted in two conflicting outcomes. First, the sector would prove to be very unhelpful as the policy would essentially threaten the livelihoods of cart-pushers (Fahmi, 2005). Alternatively, a suitable agreement could have been reached between the Policy Makers and the informal private sector for the regulation of their activities, as described in Section 6.6. with the Coopamare and the Mexican government (Furedy 1997).

A problem of the PSP Programme can be traced back to simple lack of resources. Pressman and Wildavsky (1984), Hogwood and Gunn (1993), Hjern and Porter (1993) argue that adequate resources must be provided in terms of financial resources and manpower from the Policy Makers for policy implementation to be successful. The Policy Makers went from
a position of spending approximately 25% of State budget on waste collection management (Onwumere, 2005, Momodu, Suleiman and Isiguzo, 2006, Achankeng, 2003), to wanting to minimize cost and to for the service to become completely private sector led over night (Attahi, 1996).

From the fieldwork, no detailed estimates of the cost of the programme were made by the MoE, nor did the PSP Contractors have an idea of the requirements needed to run a waste collection service. For example, basic costs of advertising were shifted to the PSP Contractors who had limited resources for advertising and had to market their services from house to house, and only limited advertising was carried out by the MoE (P1, 2007; PSP group interview, 2007). This had the impact on the programme of severely limiting the public awareness of the Programme, and as mentioned earlier, more than 67% of the respondents of the household interviews were unaware of the PSP until Phase II was introduced in 2004 (see Chapter 9) (Structured interview survey, 2007).

Very few resources were spent on training the PSP Contractors for their new role. The training given to the PSP Contractors was insufficient to prepare them for reality of service delivery (PSP Focus Group, 2007). The training did not include vital facts for instance on how waste collected can affect the life span of the vehicles used. Capable manpower with the right qualifications and experience is essential for the successful implementation of policy (Pressman and Wildavsky, 1984, Sabatier, 1993, Weissert, 1994). The PSP Contractors still in business at the end of Phase I have now acquired the skills that are required to fulfil their contracts in the process of providing the service. Training is essential as the PSP Focus Group (2007) readily admitted that they had no prior experience in delivering the service prior to joining the PSP Programme. The lack of information from LAWMA with regard to the
service also hindered the progress that the PSPs made as the residents could view them as fraudsters and feel the service was not mandatory by law (Sabatier, 1986, Pressman and Wildavsky, 1983).

8.6.2. Conditions for policy implementation

‘If an efficient waste collection service is provided, then the public would be willing to pay for formal waste collection management services’ (P1, 2007; P2, 2007). As it was, a market for the service already existed with strong supply and demand which was demonstrated by a thriving informal sector. The MoE’s aim was to create a more efficient service than that provided by the private informal sector to meet the demand for waste collecting and importantly which also did not culminate with the waste collected remaining within the municipal areas in illegal dumps. Hjern and Porter (1993), Bish (1974), Ostrom (1973) an effective service is expected to engender support from the targeted End Users.

The increase in the number of private firms participating within government services in a society would also affect the efficiency of public services in administrations that contract out public services (Hjern and Porter, 1993, Hogwood and Gunn, 1993, Pressman and Wildavsky, 1983).

It is notable that even when the fieldwork was carried out in Lagos in 2007, in structured interviews over 53% of those interviewed believed that the government should pay for waste collection as it was a government responsibility, compared to just over 40% who felt it was their responsibility as they generate municipal waste (End User survey, 2007). Respondents from different income backgrounds especially those from the high income bracket (over
50%) felt that waste collection was a government responsibility and should be paid for by the
government using the tax that the government already collected as seen in Table 8.2 below
(Structured interview Contractors, 2007).

Table 8.2 Waste responsibility
(Source: End User survey, 2007)

<table>
<thead>
<tr>
<th>Income</th>
<th>Government</th>
<th>You</th>
<th>Not Applicable</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000,001 -</td>
<td>0</td>
<td>17</td>
<td>16</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Above</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000,001 - 5,000,000</td>
<td>0</td>
<td>9</td>
<td>10</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>500,001 - 1,000,000</td>
<td>0</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>100,001 - 1,000,000</td>
<td>0</td>
<td>9</td>
<td>7</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Below - 100,000</td>
<td>0</td>
<td>21</td>
<td>8</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Optional</td>
<td>4</td>
<td>20</td>
<td>11</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>83</td>
<td>60</td>
<td>2</td>
<td>149</td>
</tr>
</tbody>
</table>

There was no research before the pilot project started on how the policy would be received by the End Users (P1, 2007). Although demand had been established through the activities of the informal sector, why then did the policy implementation give such poor results during its trial phase?
Part of the problem was a lack of public consultation prior to the launch of the policy, especially with the informal sector upon whom the policy was modelled. 55% of respondents surveyed said they would have attended a public consultation on the collection of their waste. In the fieldwork the informal sector service providers provided information that showed that the customers are not always prompt with their payments (Informal Sector Contractors (CaPI 1, 2007; CaPI 2, 2007; CaPI 3, 2007, CaPGI 2, 2008, PSP group interview, 2007, household interviews, 2007).

Consultation would also have demonstrated that a majority of the householders were unwilling to pay the government in particular to have their waste collected (Structured interview, 2007). Waste is often not the most important item on the End Users agenda and that the informal sector often has to be very flexible when it comes to being paid by their End Users and still deliver an efficient service (CaPI 1, 2007; CaPI 3, 2007). This understanding between service provider and client works well with the informal sector as many are owner-workers, their overheads are low and they do not hire workers that need to be paid or equipment to be maintained (Fahmi, 2005). Their equipment requires relatively small investment to acquire and maintain, and in some cases the carts utilized in the provision of the informal waste collection services are leased and the cart owners only maintain these carts (Fahmi, 2005, CaPGI 2, 2008).

In contrast, the formal PSP Contractors require prompt payment for services due to their large overheads. A large percentage of End Users were usually late with their payments or completely defaulted on their payments (PSP focus group interview, 2007; Madu, 2004; Ehigihator; 2001). This led to a number of initial PSP Contractors going bankrupt; (PSP Focus group interview, 2007; Ehigiiator, 2001). The most important lesson of Phase I for the
Policy Makers of the MoE was the End Users are not always willing or able to pay for services, and the PSP Contractors needed to be paid on time to maintain their businesses and levels of service (P 1, 2007; LAWMA, 2007; PSP focus group, 2007). The Policy Makers had to reconsider the policy as a public good and an essential service and find a means of changing public perceptions and make people to take personal responsibility for their waste (P1, 2007). The implication of this for the bottom-up school of thought is while the street-level bureaucrats might develop coping mechanisms in the delivery of their services to the End Users (Winter, 2002), the ultimate decision for implementation within the Lagos context lies with who has the resources for implementation. Phase I saw the Policy Makers attempt to shift resource input from themselves to the End Users. The street-level bureaucrats had no input within the policy process. The End Users were able to exercise their rights as consumers not to pay for the service and the Policy Makers were able to go with the contract agreed between them and the PSP Contractors.

The MoE rationalized that if they were to create the enabling environment for the private sector to participate within the sector of waste collection and transfer, then PSP Contractors would adhere to the terms of the contract agreed with the MoE. The MoE would then be able to acquire the level of service required as the PSP Contractors are agents of the government (P1, 2007; P2, 2007; MoE; 1995). This was initially the case when the PSP Contractors started their role as private sector service providers in 1996 (PSP group interview, 2007).

The assumption that an enabling environment could be created without adequate safeguards seems highly flawed. In Nigeria, past governments military governments have tolerated corruption (BBC News, 1999) and the new civilian governments which came into
power in 1999 had to launch an anti-corruption agenda which is still being carried out (Njoku, 2007). For this reason, it was naive of the State government to start a policy without an adequate fraud assessment (Nijhof, Cludtf, Fisscher and Laan, 2003). In order for the PSP to make up for the fall in estimated revenue, they had to essentially cut operational costs in terms of how much they paid for transporting waste and started to dump the waste in illegal dump sites adding to the existing problem (PSP group interview, 2007; P1, 2007; MoE; 2005).

The literature indicates that Policy Makers assume in some circumstances that because a policy covers an essential service, core actors will automatically follow their lead (Pressman and Wildavsky, 1984). In Lagos, the premise was the End Users would demand a level of service that the PSPs would be forced to supply (P4, 2004). The PSPs were in competition with informal service providers who were able to collect household waste on a daily basis and are quite flexible about when they received their remuneration as has been mentioned earlier. The PSP Contractors found it very difficult to modify the thinking of the End Users to collect their waste on a weekly or bi-weekly basis and therefore found it even harder to compete against the informal waste collectors (PSP focus group interview, 2007).

It would have been more pertinent for the Policy Makers to try and change this cultural mind set before embarking on the Programme as opposed to assuming that because End Users already pay the informal sector for waste services, they would automatically pay the formal sector for the same service even though carried out at a higher standard.
8.6.3. Enabling legislation

Mazmanian and Sabatier (1989) state that the legislation which backs policy must be clear and unambiguous in what is required of the policy. It should state the policy goals and objectives and how they are expected to be achieved. The policy should also state the implementing agency within it. The legislation which backs the domestic PSP waste collection Programme is the Lagos State Environmental Sanitation Law (2001) (Annex C). This Legislation, states that the End Users are expected to patronize the PSP Contractors for their domestic waste collection services. It includes penalties for the non-performance of the PSP Contractors, penalties for the non-compliance of the End Users and penalties for cart-pushers. This legislation also introduces the KAI Brigade and States its functions and powers (Lagos, 2001). Below is an analysis of the effect the Lagos State Environmental Sanitation Law has had on the PSP Programme.

The Military heads as it was mentioned earlier did not believe that the End Users would be willing to pay for a service that has always been provided by the government for free (P1, 2007). For this reason, there was no enabling legislature that originally supported the PSP Programme itself when it started in 1996.

The Environmental Sanitation Law for Lagos State was published in 1998 two years after the pilot scheme started and repealed in 2001 (Lagos State, 2001) to be replaced with new legislation the Environmental Sanitation Law, 2001, which includes the PSP vaguely by saying who they are and what they do but gives it very little other legislative backing. Within the top-down literature, it is recommended that there should be strong legislative backing for a

The legislation is written in a manner that could be construed as giving the Policy Makers a get-out clause from the policy. To begin with, it does not introduce the PSP Programme, the actors or their roles, as it did in the same document for the Corps (also known as KAI) which detailed the K.I.A, the actors, their role within the MoE and the local government councils and the penalties for non-compliance with the Corps (Gazette, 2001; P2, 2007; PSP Group interview, 2007).

There is nothing within the Environmental Sanitation Law to say who these registered private people are and how they can be identified as government service providers. The 2001 Environmental Sanitation Law lists some fines for the patronage of the informal sector service providers and for the formal and informal service providers themselves which are not high enough to be deterrents against breaking the law (See table 8.3 below) (LG 2 interview, 2007). The PSP practitioners did not have the authority to make the End Users give up their waste or make them pay for the service received. The bottom-up school of thought believe that the street-level bureaucrats (in this case the PSP practitioners) because of the relationship they have with End Users, have a better ability to implement policy (Lipsky, 1980; Matland, 1995). In the case of the PSP practitioners, this was not the case, they had difficulties in establishing the sort of relationship (they deliver the service and the End Users pay for the service), which their contracts required.

The Policy Makers shifting the public enlightenment aspect of the policy also contributed to the lack of cooperation the PSP practitioners received from the End Users. The
End Users needed the Policy Makers to certify the PSP practitioners, which they did not do. Bardach (1977), proposes that the Policy Makers need to be managerial in their approach to policies created and be ready to micro manage their projects. The Policy Makers were quite lackadasical about their role within the implementation process during this phase. The lack of input from the Policy Makers and the use of private firms gave the End Users liberty for license not to comply with the policy.

Table 8.3: Fines
(Source: Lagos State Environmental Sanitation Law, 2001)

<table>
<thead>
<tr>
<th>Offence</th>
<th>Minimum fine</th>
<th>Maximum fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure of PSP Contractors to service End Users</td>
<td>5000</td>
<td>10000</td>
</tr>
<tr>
<td>Direct dealings of End Users with unregistered operators</td>
<td>5000</td>
<td>10000</td>
</tr>
<tr>
<td>Failure to pay for services rendered by the PSP Contractors</td>
<td>500</td>
<td>1000</td>
</tr>
<tr>
<td>Cart-pushers</td>
<td>5000</td>
<td>10000</td>
</tr>
</tbody>
</table>

The fine of N500 (£2) for the End Users is not sufficient to patronize the PSP Contractors as most End Users can afford to pay this amount. In some instances, it was cheaper to pay the £2 fine than patronize the service. For instance, a Duplex (detached house) had a bill of N5000 (£20).

Furthermore, the residents of an area were able to opt out of the service in two ways. First, they could choose not to participate in the service was being marketed to them, so they could choose not to participate, and second, the fine imposed for non-compliance or non-co-operation with the PSP Contractors was nominal and in some case less than the service charge i.e. the fine was between N5000-N10000 (£20-£40) and the charges depending on the
type of accommodation being fined were as much as N4000 in 2001 (MoE, 2004; Gazette, 2001).

The Environmental Sanitation Law 2001 does not mention the implementation or regulatory responsibilities. It is not clear whether the responsibility for regulation falls to MoE or LAWMA or to the clients. Baradach (1977) argues that the legislation which backs policy can be used to map out its implementation making it legally binding. This is important, because during Phase I, the implementation of the PSP Programme resided with the MoE and not LAWMA. That meant if the End Users had any problems or issues arising from the implementation of the policy, they would not be so easy to resolve, it especially as the MoE and LAWMA are on opposite sides of the city. The importance of legislation as Pressman and Wildavsky (1983) and Hogwood and Gunn (1993) found within implementation would apply here, as strong legislation is required to a new policy that requires large-scale compliance.

The literature argues the need for adequate legislation to govern the implementation of policy. It defines all the actors that are affected directly or indirectly by the policy. It designates the implementing agencies and the powers associated with them in carrying out their allotted tasks (Pressman and Wildavsky, 1973; Hood, 1976 and Sabatier, 1993). It stops encroachment from other agencies especially those agencies whose objectives are contrary to the successful implementation of the policy while giving ample power or opportunity for agencies that have similar or symbiotic goals to work together (Pressman and Wildavsky, 1983; Hjern and Porter, 1993).
The incidence of corruption as discussed in Chapter 6 and that will be discussed in Section 8.7.2 later in this Chapter often clouds the legislative process in developing country cities like Lagos. In Nigeria, the time taken for a bill to be sent to the executive from the legislature is approximately 1-3 months from first reading (Nigerian Senate, 2006). The legislative process can be held up indefinitely in some instances because bribes have not been given (Affe, 2009). While legislative backing is important in the implementation of policy as discussed above, for it to be enforceable it is important that other powers be conferred to the Policy Makers to allow vital services be delivered to End Users. The issue of corruption at any point in the implementation process does not arise in either school of thought on implementation.

The policy while making the activities of the cart-pushers illegal and placing a fine on their activity, was an insufficient deterrent to the Informal Sector Participants. Firstly they were very difficult to police due to their erratic schedules and sheer numbers, and secondly, they did not lose their as equipment as it was returned to them upon the payment of the fine, enabling them to continue operation (LGA 1, 2007). This meant they could continue to compete with the PSP for customers after their fines were paid.

8.6.4. Committed and Skilful Implementing Officers

Skill availability and commitment to the PSP Programme can be considered in two parts. The first stage is assigned to the MoE who are effectively both the Policy Makers and the implementing agency. A point of interest that must be put forward here is that LAWMA was the waste management implementing agency for the MoE. The MoE choose to implement the PSP waste policy directly because:
1) LAWMA was still designated as the formal waste collector for the rest of the State. LAWMA’s role at the time had been redefined for emergency evacuation in areas which had not be assigned to PSP Contractors.

2) The MoE Policy Makers preferred the hands-on approach for domestic waste and delegated industrial waste collection to the implementing agency LAWMA. The PSP Programme was designed for domestic waste collection and was in its infancy stages. MoE The amount of industry available in Lagos at the time was low due to inadequate electrical supply and a heavy reliance on generators which increased production costs. The level of industrial waste was more manageable for LAWMA than domestic waste.

3) Methods of implementation differed for the two agencies. The MoE prefers the door to door method of waste collection while LAWMA prefers the use of communal bins - a major disagreement point between both agencies (P1, 2007; P3, 2007; MoE, 1995; LAWMA, 2006). In 1996, domestic waste was the highest source of waste in the urban environment in Lagos state. As will be discussed later, a contributing factor to the waste visible within the urban environment were the central pick up points supplied by LAWMA. This was because LAWMA had insufficient equipment capacity to collect the waste as it was generated.

4) A last possible reason could also be that LAWMA’s ineffectiveness in the past to deliver on waste services to municipal areas made it unacceptable to the MoE to delegate implementation of the PSP Programme to LAWMA.
As Matland, (1995) stated, the service which policy is proposing needs to be delivered with adequate manpower with skills (and preferably) experience in the delivery of the service. In addition, there has to be a high level of commitment from the Policy Makers and the street-level bureaucrats (Sabtier, 1986). These two factors will increase the ability of implementation to meet policy goals. The commitment of the MoE to the PSP Programme is not in doubt nor can it be questioned. What can be questioned however is their method of implementing the PSP waste collection policy. From the interviews conducted at the MoE in 2007, it would seem that the PSP Programme model for this phase was based on a pattern that was not particularly understood by the MoE (MoE, 2007). Two assumptions were made by the MoE which hindered the implementation of the PSP Programme. First was a lack of a true understanding of how the informal sector actually worked and how it was being sustained. Second was the fact that the MoE believed that the private sector would naturally be able to provide an adequate waste collection service that the Policy Makers at MoE/LAWMA have found difficult with skilled man power to provide in the past.

The skill of the MoE in implementing a project like the PSP is also called into question. Prior to the implementation of the PSP project, the MoE had little experience in supervising the private sector or in handling a project of this nature and size (MoE, 2007; LAWMA, 2005). It must be understood that prior to the PSP Programme, the MoE only had experience supervising LAWMA and for the most part according to Olowomeye (1991) and interview with the MoE Policy Makers in 2007, the MoE had been unsuccessful in supervising LAWMA effectively because of the inefficiencies in LAWMA i.e. the LAWMA equipment was often in a state of disrepair (Olowu, 1991; P1, 2007; P4, 2008). Sabatier (1986) advocates that there should be adequate skill and dedication in the implementation of policy. While the Policy Makers were dedicated to the policy, they did not have the required
skill to implement the policy. The lack of skill within the PSP Waste Collection Policy was not limited to the Policy Makers, the implementing agency LAWMA and the PSP contractors did not have the required skill to implement the PSP Programme.

It might suffice to say that the Policy Makers were not really aware of the scale that the PSP Programme would be, and so were unable to make adequate provisions to ensure a successful test of the policy (P1, 2007; P4, 2008). It can also be said that they placed a lot of emphasis on trust and obedience. Trust in the PSP Contractors and obedience from the general public. The MoE soon found that they were poorly equipped to monitor the PSP Contractors (P1, 2007).

The almost non-existent relationship that the MoE had with the public did not give them the added resource that the public could give in the view of them reporting poorly performing PSP Contractors or PSP Contractors who engaged in fly tipping. The respondents in an interview, who were asked if they would or were even able to contact the MoE or LAWMA to report a problem, all responded either negatively or were under the impression that nothing would be done about their complaints (respondents structured interview, 2007). In an interview with the MoE Policy Makers in 2007, they reported that the biggest problem that they faced was fly tipping by the PSP Contractors and they had very little control over the actions of the PSP Contractors (P1, 2007; P2, 2007; P4, 2008).

The MoE possibly did not consider the reception that the PSP Contractors would receive from the general public. In a focus group interview in 2007, the CEOs of the PSP companies, indicated that they were very poorly treated by the clients, and they could only imagine how poorly treated their workers were (PSP focus group, 2007).
8.6.5. Support of stakeholder groups and sovereigns

Sabatier (1993) divides sovereigns into legislative and executive sovereigns. The importance of sovereigns and interest groups is built on the premise that without their positive input, implementation can not be successful even if all four elements listed in Section 8.5.1-8.5.4 above are in place (Pressman and Wildavsky, 1984; Sabatier, 1993).

In order to understand the implementation of the first phase of the PSP Programme, it is pertinent to explain to those readers who are not proficient with Nigerian law that the Policy Makers and the law makers are two different entities (Dibie, 1999, 2003). As discussed in Section 3.8 the MoE can make policies that they would like to become law, but it is the executive arm of the government (i.e. the office of the governor) and the House of Assembly that transforms policy into State laws (Dibie, 1999, 2003). Sovereigns can however direct Policy Makers to create policies to meet political agendas or perceived social needs. During the military era, there was no House of Assembly, and laws were created by the office of the State administrator/military governor.

During the implementation of the first phase of the PSP Programme, support for the policy from the both the sovereigns and the interest groups was minimal (P1, 2007). On the part of the law makers, they need to be divided into two groups. The first group consists of the sovereigns from 1996-1999 who were military (and were both the executive and legislative arms of government), and has been explained earlier in Section 8.5.3, there were serious doubts about the success rate of a policy which expected the municipality to pay for services traditionally paid for by the government (P1, 2007). There is also a need to shed some light about possible political processes during this era. This period in the country’s history was
fraught with political tension with calls both domestically and internationally for the military government to hand over power to a democratically elected civilian government (Anderson, 1997).

By 1996, the military government was advocating switching to civilian rule while at the same time frustrating and banning public meetings (Soliman, 1998). The government did not want to be seen to add to the tension and mistrust that was already rife at the time and the then governors' possible political ambitions. For these reasons, the government did not want to be seen as directly backing the PSP Programme even though it gave the MoE the permission to test the policy (P1, 2007). Mazmanian and Sabatier, (1989) stress the importance of sovereign support for a policy. Sovereigns can use the powers of their office to promote or end a policy. They can do this in two ways, the use of veto powers or the denial of resources to the implementing body for implementation (Cairney, 2009). As will be demonstrated in Chapter 9, sovereign support is invaluable to the implementation of a policy. The lack of political support for the policy could also be the reason for the limited resources available for the PSP Programme in Phase I.

In 1999, after the hand over to civilian rule (from the military governor to the civilian governor), the civilian sovereigns inherited massive waste collection and transfer problems, State debt and other problems (P1, 2007; P4, 2008; MoE, 2007). The PSP waste collection policy was tested by the MoE and its implementation gradually grew but it was not until 2001 that it was formally incorporated into the Lagos State Sanitation Law (P4, 2008). The new civilian government showed more of an interest in the PSP Programme than the former military government. The new civilian government had the environment as one of its key political mandates (Fashola, 2006). The PSP Programme regardless still remained unchanged.
until the next phase which began in 2004, and waste management had gone higher up the political agenda. The stakeholder groups involved in the implementation of the PSP Programme can be grouped as the MoE (Policy Makers, law makers and monitoring dept), LAWMA, the PSP Contractors and the End Users (P1, 2007; P2, 2007). The stake holder groups according to Sabatier (1986), can influence policy through lobbying sovereigns directly or indirectly through the media. This is key as their participation within the policy implementation process is essential to its success. The stake holder groups especially the End Users who are used to gauge policy outcome are required to participate positively within policy implementation. If Policy Makers are unable to gain stakeholder support for their policy, there is the possibility that the implementation of the policy will fail and the policy will most likely be cancelled or substituted for another policy (Matland, 1995).

a) PSP Contractors:

An important point that must be noted about this group during this phase is that they are the first group of indegenous business women and men to provide formal waste collection and transfer services privately (PSP Focus Group, 2007; P1, 2007; P3, 2007). Prior to the inception of the PSP Programme, private sector waste collection and transfer of waste was performed by the informal sector (MoE, 2007, Informal Sector Participant Interview, 2007). The private sector had no prior experience in waste services delivery except for the training provided for them by LAWMA (PSP focus group interview, 2007). All the facilities used by this group to provide the service they were contracted to provide were procured by the PSP.
Contractors especially for the implementation of the PSP Programme (Focus group PSPs, 2007).

The criteria to participate within the PSP Programme were stipulated by the MoE without any input from the PSPs. The PSPs were expected to own a minimum of ten 10-tonne trucks and make their own routing plans which they were to bring to the MoE for approval (MoE, 1995; 2007). The start of the project met with some companies registering that they had vehicles that did not belong to them and that they could not make use of (P1, 2007). The focus group interview (2007) revealed that the Contractors were not fully prepared for the task to which they had been contracted for and had to learn how to provide the service on the job.

Attahi (1999) explains that some indigenous waste service Contractors in some developing country cities usually underestimate the demands to deliver an efficient service in developing country cities. The equipment required, manpower and technical expertise, are often miscalculated or not involved in the calculations for the delivery of waste services and find they are unable to provide adequate supply to meet demand for efficient waste service (Attahi, 1996). It would appear in Lagos that the requirements for providing a waste collection service were grossly underestimated by the service providers and their LAWMA trainers, who should have prepared them much better.

There was a distinction between what they were told to expect and what they actually experienced in providing the waste collection service. What the Contractors expected was a service that was in high demand and took very little effort to provide.
What they found was that service was in high demand, but, directing the demand towards a government approved supply was difficult and generating supply to meet the demand for waste services was more difficult than anticipated. This made the business less profitable than anticipated.

Policy Makers were able to gain the participation of this group as prescribed by Mazmananian and Sabatier (1989). However, the groups lack of experience in delivering this service meant that the service which they delivered was not of a standard acceptable to the End Users. Their support of the policy did not enhance or add to the PSP waste collection policy.

b) End Users:

The End Users are the most important actors within this policy implementation. As mentioned earlier, it is their co-operation with service providers that will determine how successful or unsuccessful the policy will be (Pressman and Wildavsky, 1984). The End Users or their representatives in this case, were not represented during the policy making process. This, coupled with the lack of direct information from the Policy Makers contributed to the low participation rates from the clients. A majority of the End Users refused outright to pay for the service on the basis that the charges were too high (PSP focus group, 2007).

The added complication of the service provided by the PSP Contractors being compared to the informal sector especially in terms of frequency and cost of the
service also contributed problems to the PSP waste collection service (Household survey, 2007, P1, 2007; P4, 2008; PSP focus group interview, 2007). Involving the End Users directly or indirectly within the policy and receiving input from them could have improved the way in which the service was received and perceived by them and boosted the PSP Programmes chances of success. This would to an extent have allowed them to understand the policy, what to expect from it (Hjern and Porter, 1993). The inclusion of the End Users in the implementation process would also have gone to an extent of begin to change the attitude of the End Users in their attitude towards the waste they generate.

Pressman and Wildavsky (1984), argue that the impact of policy implementation can be measured on its impact of the targeted End Users. If implementation has a positive impact on them, then implementation will be seen as meeting policy goals and objectives. If it has a negative impact, then there is a need to reaccess and revise the policy. Cairney (2009) suggests that, policy implementation can not simply impact on a small percentage of the End Users positively and the others negatively, because then implementation will still not have met its policy objectives. Implementation therefore must impact the End Users fairly evenly across the board and the impact should be positive. The impact of the PSP waste collection policy in Phase I of the PSP Programme was mainly negative across the board for the End Users and this led for calls for the informal sector to be aided in the delivery of their service by the End Users (Ndiribe, 2000).
c) Informal private sector:

The informal sector while an interest group within waste policy were considered by the Policy Makers during this phase as a nuisance and part of the problem (MoE, 2004). Unable to find a workable solution to allowing the informal private sector to continue to operate, it was decided that the sector be forced out of waste collection and transfer services and their activities were made illegal (P1, 2007; P2, 2007; P4, 2008; MoE, 2004).

The inclusion of all the interest groups, directly or indirectly in the policy process helps to increase the probability of it succeeding and increases the sense of personal ownership of the policy (Sabatier, 1993; Hogwood and Gunn, 1993).

8.6.6. Socioeconomic changes:

Sabatier, 1993; Hofferbert, (1974) and Aaron, (1978), Hogwood and Gunn (1993) Darling and Hammond (1990) argue that for implementation of policy to be effective, there needs to be a stable economy. This directly affects the cost of delivering the service and how much End Users are willing to pay for the service. For instance, the cost of running the collection vehicles increased significantly with the increase in the cost of diesel in Nigeria which was N30 in 2004 and is now N100 (PSP focus group, 2007). The constant increase in fuel costs (BBC News, 2000), which is an important element to the operation of the PSP Contractors hinders the level of service that they can provide to the client as the increase in
the cost of fuel has made the cost of delivering of the service of some Contractors exceed the income made revenue collected (PSP focus group, 2007).

The remuneration received by the PSP Contractors for the services was not increased according to the rate of inflation (PSP meeting, 2007). The effect of inflation will not solely concern the service providers alone. The End Users will also be affected especially as the income system in Nigeria is not designed to cope with increases in inflation (Odusola and Akinlo, 2001; Akinbobola and Saibu, 2004). This means that for a proportion of the population, their living costs will not be in line with income. Thereby leading to a prioritization of what End Users are willing to use their scarce resources to meet (PSP focus group, 2007; informal participants 3, 2007, structured interview, 2007).

As the socio-economic conditions change within a city, this can have an impact on policy (Bardach, 1977). When the economy is bouyant, resources are available for the implementation of policy, but when the economy is stagnat or declining, policies will have to compete for resources and either face being cancelled or being replaced by another policy (Sabatier, 1986). In some developing country cities, the economic impact felt by some policies is political made, for instance, funds being diverted from implementation to fund political campaigns (Njoku, 2007). For a policy to survive turbulent economic climates, it must prove itself relvant and necessary to the End Users.
8.7 Problems faced by the PSP Contractors

Some of the problems faced by the PSP Contractors have been discussed briefly in Section 8.5.5 above. Those however, were not the only problems faced by the PSP Contractors in the carrying out their contracts. Some of the problems faced were unique to some PSP Contractors operating in specific areas. It must be noted, that the MoE did not allocate the area to be serviced to service providers, the areas to be serviced are chosen by the service providers themselves (PSP group interview, 2007; P1, 2007; P3, 2007).

The service providers usually choose areas which are very well known to them, and close to their vehicle depot, to reduce the cost of running the vehicles to the collection area and on to the landfill site.

The problems mentioned earlier in this Section are varied for different service providers. This Section will analyse the problems as a basis for discussion of the effectiveness of Phase II of the PSP Programme in Chapter 9. The problems are discussed below;

1) Peoples attitudes to waste and waste service providers:

The attitudes of the End Users to waste collection management services vary from place to place in Lagos State. However, one constant attitude was experienced by most of the PSP Contractors: The PSP Contractors and their staff are at the bottom of the social ladder and are treated like lepers of
society because they were handling waste (PSP group interview, 2007), this is an attitude also found in other places as discussed in Section 7.6.iii; (Klundert and Lardinios, 1995). There is often no distinction made between the company owners, their staff and occupation (PSP group interview, 2007), a problem also highlighted in the literature (Klundert and Lardinios, 1995). This attitude affects the types of waste that the PSP Contractors were expected to collect, which on for some had even included corpses (PSP group interview, 2007).

The second attitude is specific to some neighbourhoods. The waste generated in these areas is used to reclaim water-logged land and some people are reluctant to part with their waste (PSP group interview, 2007; P1, 2007). Although reclamation is a secondary use for the waste generated, the use of untreated waste as casual landfill causes all sorts of environmental problems, including pollution of the waterways, health hazards, and exacerbating flooding. (P1, 2007; P4, 2008, PSP group interview, 2007; MoE, 2005).

2) Equipment:

The equipment used in the collection of waste in Lagos State has been found by PSP Contractors to have a general life span of eight months (PSP/LAWMA meeting, 2007). The waste collected in Lagos State as was mentioned earlier is very corrosive and most of the PSP Contractors are not able to afford new equipment (PSP group interview, 2007; P1, 2007). Equipment procurement can be a benefit in the quality of service which formal
providers can provide (Cointreau- Levine, 1983), but in Lagos, the high cost of
the equipment and maintenance of the equipment is a considerable factor
for the PSP Contractors which depresses profits (PSP group interview, 2007).

3) Service cost:

The cost of the service has increased at a steady rate in some cases,
especially because of increases in the cost of fuel, but the renumeration
received by the PSP remained constant (PSP group interview, 2007). The PSP
Contractors also found that a significant proportion of the client households
were either late with their payment or defaulted on paying completely for
services rendered. The late payment of user chargers from the End Users
meant that the service was run at a loss by some of the PSP Contractors and
the service often broke down due to a lack of funds (PSP group interview,
2007).

8.8 Problems in Phase I

Several critical problems emerge from the implementation of Phase I of the PSP
waste policy, identified partly by Policy Makers (1-3 below) while the other lessons have
been identified by the researcher. These topics will inform the evaluation of Phase II of the
PSP Programme, and can be summarised as:
1) Politics
2) Corruption
3) Infrastructure
4) Economics
5) Consultation
6) Legislation
7) The actual ability/capacity of the private sector to provide a viable public sector service
8) The attitude of the End Users to the PSP Contractors

8.8.1. Politics

Political backing is seen as an essential factor in the implementation of policy (Sabatier, 1994; Jordan, 1999). The PSP Programme was hindered by a lack of political support especially during the period of the Military era 1996-1999, when Lagos State was under an appointed Governor and the State Executive was the legislative body (Mbaku, 1996). State legislatures must not pass legislation which contravenes central government policy, especially in a dictatorship (Kimenyi, 1987). The 1996 PSP Programme does not contravene the Federal Decree 58 (1988) which mandates the efficient collection and disposal of municipal solid waste (Agunwamba, 1998). Matland (1995), stresses that accountability is lost within the policy implementation process at the bottom because the street-level bureaucrats are appointed and not elected officials and are therefore not accountable to the End Users. At the beginning of the PSP Programme from 1996-1999, the sovereigns who should have been accountable to the End Users were themselves appointed and not elected officials. This meant that while waste was a big issue within the urban populace of Lagos
state, the sovereigns could choose whether or not an effective waste collection policy was important to them (the sovereigns).

The unwillingness of the political leadership to commit to Phase I (see Section 8.5.5) shaped the method which was employed in its implementation. The political support was sufficient to start the pilot scheme but not enough to launch the policy State-wide (P1, 2007; P4, 2008). The lack of political support limited the resources for implementing the policy, reinforced the need to shift all the cost of service delivery to the private sector (P1, 2007; P4, 2008).

8.8.2 Corruption:

Corruption within the provision of public services usually has three negative outcomes attached to it (Gupta, Davoodi, Tiongson, 2001). They are:

1) The artificial increase in the cost of service provided and a reduction in the supply (Shleifer and Vishny, 1993).

2) Reduction of investment in manpower (Ehrlich and Lui, 1999).

3) Reduction of the revenue generated which in turn reduces the quality of the service provided further discouraging its use (Shleifer and Vishny, 1993; Hindriks, Keen and Muthoo, 1999).
Although the intention of the PSP Programme was to create an enabling environment for the private sector delivery of waste services (P1, 2007; P2, 2007; P4, 2008), during one of the interviews the phrase which kept coming up was; “You know how our people behave” (P1, 2007; PSP group interview, 2007). The interviewee was referring to corruption in the provision of some services (P1, 2007; Bardhan, 1997) and the mentality of some of the shadier businessmen who liked to cut corners in either their service delivery or remuneration gains (P2, 2007; PSP focus group interview, 2007; Rose-Ackerman, 1997). Corruption during the implementation of Phase I of the PSP waste collection policy had two impacts on the newly privatised service:

1) Fly tipping and
2) Untrue declarations of actual number of trucks owned.

Fly tipping in illegal rubbish dumps was a major problem, as the PSP Contractors were not providing the service contracted, but were exacerbating the problem they were brought in to solve (P1, 2007; P4, 2008; LGA I, 2007).

Untrue declarations of number of trucks owned also set back the Programme (Ehrlich and Lui, 1999). Some of the first companies which signed up to deliver private waste collection services had declared they owned a minimum of ten 10-tonne trucks thereby claiming a minimum capacity of one hundred tonnes. In reality several of the companies (which cannot be named for privacy purposes) owned only two 5-tonne trucks (P1, 2007; P2, 2007; PSP focus group interview, 2007; MoE, 2005) thereby reducing the daily collection rates from those estimated (P1, 2007; P2, 2007).
The researcher was not able to discover if any other sorts of corrupt practices took place, for example in letting contracts. In a bid to reduce corruption, the MoE mandated the inspection of the trucks declared by the PSP Contractors to confirm if the companies had the capacity stated in their agreed contracts to collect the waste from their allocated wards (Mbaku, 1996; MoE, 2005). The stipulation of ten 10-tonne trucks severely reduced the potential pool of Contractors and encouraged the false declaration of equipment (P1, 2007; P2, 2007; P4, 2008; PSP group interview, 2007). The false declaration of equipment did not improve the delivery capacity. The need for accurate data from the PSP Contractors influenced the redesign of the PSP Programme in Phase II (MoE, 2005).

Corruption is not featured as a specific problem in either the top-down or the bottom-up implementation school of thought. Provision is made in both schools of thoughts for the monitoring of implementation. This is mainly to ensure that implementation is meeting policy targets as opposed to limiting or eradicating corrupt practices at any point within the implementation process. Corruption is however a serious problem for some developing country cities (Njoku, 2007) and any implementation school of thought which will be applicable to them will need to incorporate measures which guard against or at least mitigate the probability of corrupt practices.

8.8.3 Infrastructure

The inability of the PSP Contractors to meet waste collection demand in the two pilot areas, allowed the gap in service provision to continue. This strengthened the position of the cart-pushers as the main waste collection providers in the State (Structured interview, 2007; P1, 2007; P2, 2007; P3, 2007). Most implementation literature assumes that the infrastructure
required for the implementation of policy is either already provided, or the provision of adequate infrastructure will be provided at some point during the implementation process.

### 8.8.4 Economics

Sharp increases in the cost of fuel, and shortages of supply also limited the service (PSP focus group interview, 2007; Adenikinju, 2008). Shortages of diesel and petrol in Nigeria are exacerbated due to erratic electricity supply and the dependence of households and businesses on electricity generators. Fuel dependent businesses have to compete with households and businesses for fuel (Igbikiowubo, 2008). Although Nigeria exports crude oil, it has no working operational refinery at present (Okwuonu, 2008).

As increasing fuel costs depressed profits for the PSP Contractors (PSP focus group interviews, 2007) the cost of foreign exchange increased, and so made buying new vehicles, equipment and spare parts more expensive (Leigh, 2008). Reducing the profits which private Contractors could make in turn reduced the payments the State received from the Contractors (PSP focus group, 2007).

As was discussed in 8.5.6 above, stable economic conditions are essential for the implementation of public policy. It should be argued however, that while the economy of Nigeria is fairly stable, its fuel supply which is needed to run the country however is not. Fuel is required for the implementation the PSP waste collection policy. The cities where the two schools of thought were developed rarely get this problem, which therefore was not significant enough to be included within the implementation theories developed. The PSP
Programme will not be shelved or discontinued because of a lack of fuel, but the services will not be delivered therefore impacting implementation directly.

8.8.5 Consultation

The main aim of consultation is to reconcile End User needs to policy objectives and means of service delivery (Maloney, Jordan and McLaughlin, 1994). In Lagos, there was a high demand for an improved waste collection service and the policy was implemented based on this perceived demand rather than a wider evaluation normal in policy change (Crosby, 1996; Sabatier, 1996). During the Military dictatorship, consultation was an exception rather than the rule (Osoba, 1996). In addition, the economy was uncertain because of international sanctions imposed during the last years of military rule (Elliot and Hufbauer, 1999; Nossal, 1999). This included Nigeria’s suspension from the Commonwealth in 1995, which limited its interaction with Commonwealth countries and completion of on-going projects and humanitarian aid. Economic interaction with Nigeria and the Commonwealth States was also limited (Baird, 2008; Ohazuruike, 1997). The effect the suspension had was the restriction of hard currency supply, creating inflation as demand for currency remained high while supply was limited. Furthermore, movement restrictions between countries affected the cost of importing machinery into the country (Hoffman, 1995).

To make the sector financially viable, the government had set user charges that were relatively high (MoE, 1996), limiting the number of End Users who would be willing to pay (PSP group interview, 2007). The lack of affordability and the unreliability of the service possibly more than any other reason played a role in the lack of success of the implementation of Phase I (structured interview, 2007).
The top-down school of thought advocates for the inclusion of the sovereigns and stakeholders with the implementation process (Sabatier, 1994). Consultation however, is an exception rather than the norm in some developing country cities in the creation of policy and its implementation.

8.8.7. Legislation

The absence of formal regulation and weak controls created an awareness of the need to strengthen the legislative basis for implementing (Sabatier, 1993) the PSP Programme and awareness of its intentions and operation (P1, 2007; Lagos State, 1999). In Lagos, advertising and enforcement are the main instruments used to create awareness of government policies, both of which were nonexistent in phase I (P2, 2007; PSP focus group, 2007). The importance of legislation is to make citizens or End Users know what their obligations are. The absence of legislation or poorly constructed legislation hinders implementation (Sabatier, 1996; Lipsky, 1970).

Effective legislation is an essential to underpin policy implementation (Sabatier, 1996; Lipsky, 1993). A crucial problem in the Lagos PSP Programme was the lack of effective sanction against the PSP Contractors. There were low penalties for failure to deliver services in the 2001 legislation outlined in the Official Gazette (Lagos State, 2001). At the initial stage of the implementation of the PSP Programme, it became quickly apparent that the PSP Contractors were having the same problems LAWMA had with their equipment in 1994 (P1, 2001). The difficulty in acquiring and maintaining the equipment meant that MoE staff had to be very lenient to non-performing PSP Contractors (P1, 2007; P2, 2007). For this
reason, during Phase I the PSP Contractors were not obliged to provide an efficient service while still seeking full payment from End Users (structured interview, 2007).

The bottom-up school of thought suggests that legislation is not important in the implementation of policy, as most End Users do not actually read legislative documents and what they learn of the policy and its legislation is through the street-level bureaucrats (Winter, 2002). However, neither the proponents for a strong legislature from the policy makers to guide implementation (Gunn and Hogwood, 1994; Sabatier, 1994) nor the proponents of more powers to the street-level bureaucrats (Matland, 1995) account for the situation where End Users use their numbers to boycott a policy and its implementation other than to go back to the drawing board. End Users in some developing country cities when faced with policies which are not advantageous to them, simply do not comply with the policy without necessarily voicing their displeasure.

8.8.8 Private Sector ability to provide a viable public service in Lagos

The PSP Contractors were ill-prepared for delivery of this new service. They knew little of the requirements of waste collection and transfer services and even less about the types of waste they would be collecting and how this should be handled (PSP group interview, 2007). The private formal sector can sometimes underestimate the requirements of providing an effective waste collection and transfer service (Attahi, 1999). Some Contractors remarked that the training and the reality of delivering the service did not match up (PSP, group interview, 2007). This naiveté it would seem was a further hindrance to service provision from the formal private sector (Attahi, 1996).
Some PSPs Contractors were able to stay in business throughout the implementation of Phase I and were able to adapt (although some of their methods did not meet the targets of the PSP Programme) and stay within the field of private waste collection (PSP, focus group interview, 2008). These PSPs brought two advantages to the table;

1) They were in a better position to train new entrants within the field than LAWMA which is a publicly owned organization;

2) These sets of PSP Contractors were able to contribute positively to consultation on waste collection management policy being created or modified within the State.

The PSP Contractors, while the service delivered by them in Phase I was erratic at best, still showed a potential to be able to deliver the service. The main observation from the MoE was the inability of the PSP Contractors to generate enough profit to stay in business. It was reasoned that if financial security was provided for the PSP Contractors, the sector would deliver a higher level of service than the public sector. This was one of the factors which informed the revision of Phase II of the PSP Programme.

8.9 Conclusion

The conclusion of Phase I of the Lagos State PSP waste collection policy yielded a number of lessons. The fact that the policy did not produce the anticipated results in Phase I does not necessarily mean that it has failed as a viable method of providing waste collection
services to the State. Valuable lessons were learnt from the policy as it stood at the end of Phase I, briefly listed below;

1) The private sector with the adversities that it faced which include poor preparation, limited advice from LAWMA, and hostile attitudes and non-payment from the public, have nevertheless proved that under the right circumstances, the private sector is able to contribute to formal waste collection management services and adapt itself to the local conditions prevalent within Lagos State.

2) There is a need for the State government to re-evaluate its role as the service regulator to facilitate the smooth running of the PSP waste collection management Programme, for example through providing better assessment and monitoring.

3) There is a need for firm political commitment from the ruling elite that transcends the mere introduction of the service to the State.

Phase I of the PSP Programme ended in 2004. The programme was a new experience within the State for the Policy Makers, policy implementers and the End Users, with different outcomes for different actors:

1) **Policy Makers:**

The Policy Makers learnt that while their role within waste collection management service had changed, it was by no means to a diminished capacity that the Policy Makers had originally hoped. Their new role as service regulators and
service enablers demands more from the Policy Makers in terms of
administration and contract management than when the MoE and LAWMA
provided the service directly.

2) **PSP Contractors:**

The PSP Contractors learnt that they needed to be able to adapt to the new role
of public service providers and deliver an adequate level of service for them to be
able to get the cooperation End Users.

3) **End Users:**

The End Users are coming gradually to the realization that they are to be
responsible for the domestic waste that they generate.

From Phase I of the case study of Lagos State, it is evident that the major policy shifts
often found in administrative environments often found in developing country cities, requires
a strong facilitator to lead the processes. This is because while the MoE Policy Makers were
not alone in observing the activities of the informal sector, it took the MoE a significant
amount of time to introduce formal private collection within the State and create an enabling
environment for the formal private sector to develop. What must be noted in Phase I is the
Policy Makers’ inability to make the PSP Programme work as a viable self sustaining
programme. In Phase II, the Policy Makers assess the PSP Programme and attempt to
redesign the Programme to meet public service needs. Chapter 9 will analyze whether these changes have an effect.

The implication of the findings of Phase I for implementation debates is that End Users have a significant role to play in policy implementation. The type of governance found within urban environments also affects how the End Users relate to policy implementation. The top-down and bottom-up schools of thought usually view the End Users as a measure of implementation as opposed to an actual part of implementation. These issues are further discussed in Chapter 9.

The implementation debates are formed within countries that have established democracies and practise good governance. These characteristics give the implementation process have characteristics that will not necessarily be found within developing country cities like Lagos. Accountability within the implementation process is taken for granted with public access to Policy Makers and implementers and the presence of watch dogs and oversight committees for implemented policy.

In developing country cities like Lagos, where the implementation of the policy under discussion started with a sovereign appointed by a dictator and who was then replaced by an elected official. This newly elected official came in as a transitional ruler, democratically elected but with dictatorship characteristics. This means that while the government was supposed to have changed in dimensions, it still retained some of its predecessor’s characters. Implementation debates were not created for dictatorship rule. Top-down implementation debates were also not created for none participating governments.
The next problem faced by cities like Lagos, as discussed earlier and witnessed in the implementation of Phase I of the implementation process was a lack of skilled man power. The top-down and bottom-up school of thought view adequate skill to implement a policy as core to implementation being able to meet policy objectives. However, as observed in Phase I, there was a fundamental lack of skill for the implementation of the policy starting from the Policy Makers who created the policy to their designated implementers. The two schools of thought do not make provision for this large skills deficit. Both schools of thought assume that because policy has been created, the skills for the implementation of the policy must be available for its implementation.

While it is acknowledged that the End Users are the recipients of policy and are accorded limited veto powers by the top-down and bottom-up schools of thought, they are rarely featured in implementation studies except as a measure of implementation success. Or as a tool with which to argue influence. Phase I of the PSP Programme has shown that this group in some developing country cities is more than an instrument of measurement and influence. This group will readily use its veto power and that power can affect policy outcomes especially in cases where the veto is by a significant proportion of the End Users. The most significant aspect/ characteristic of this group’s use of its veto power is the lack of demonstration (rally, marches) which can be found in developed country cities. The group is most likely to show its displeasure by simply refusing to participate in implementation, a factor not included within implementation studies.

Finally, the top-down and bottom-up schools of thought have not been applied to situations where policy is created to replace the public services being provided by a large informal sector. The informal waste collection sector in Lagos was able to provide an
efficient service compared to the service or lack of service being provided by formal channels. This aspect of urban services delivery while not unique to Lagos, as it is observed in Sao Paolo, Jakarta, Abidjan, and Cairo and would need to be added to any implementation theory for it to be applicable to developing country cities with strong and established informal sector services.

Phase II of the implementation of the PSP Waste Programme, which is analysed in this Chapter, covers the period from 2004-2007 when the data was gathered. Phase II is still on-going. Several lessons were learnt from Phase I which influenced the reforms in Phase II of the PSP waste collection policy. Chapter 9 reviews the changes that were made to the PSP Waste Collection Programme, the new actors that have been included within the waste collection PSP Waste Collection Programme and the effects of these changes. This Chapter also looks at the value of implementation debates in Phase II of the Lagos state PSP waste collection programme.

9.1 Phase II (2004 and on-going)

By 2003, Lagos State as reported by the media was overrun with 'growing heaps' of refuse (News Agency of Nigeria, 2004; NTA News, 2003). In 2003, every aspiring governor and the incumbent governor used ‘waste’ under the umbrella of the environment as a political battle cry (Epia, 2003; Fashanu, 2003). This political attention was very encouraging for the MoE/LAWMA Policy Makers in regards to the waste problem within Lagos State. An evaluation of the PSP Programme was conducted by the MoEs’ Department of Sanitation at the request of the MoE Policy Makers (Dept of Sanitation, 2007). Sabatier (1993) states that a policy revaluation is essential in order to determine if policy implementation is meeting policy objectives. During the revaluation of the policy, the policy could be modified to make it more efficient in meeting policy objectives or it could be changed completely if it is
determined that objectives cannot be met or the policy is no longer relevant (Sabatier, 1996; Mazmanian and Sabatier, 1989).

An in-house unpublished evaluation of the PSP waste collection programme was undertaken in 2004. The aim of the evaluation was to ascertain whether or not the PSP Waste Collection Programme was meeting its objectives and whether it remained a viable alternative to public provision of waste collection and transfer services (P1, 2007; Dept of Sanitation, 2007). If the domestic waste collection and transfer PSP Waste Collection Programme was determined to be the most efficient option in delivering waste collection and transfer services, then how could the service be improved to become more efficient?

The decision by the Policy Makers at the MoE to evaluate the programme was informed by the State agency’s poor record in delivering waste collection and transfer services in the State and the progress made by the PSP Waste Collection Programme in delivering the service from 1996 to 2004 (P4, 2008). The monetary cost of the government providing an efficient waste collection service was weighed against the efficiency of private sector service delivery (Dept of Sanitation, 2007). As discussed in Section 6.1.1.c, Service Contract C had been adopted in Phase I which allows for the service to be provided by the private sector and funded by the End User (Li and Akintoye, 2004). This PPP partnership allows for the provision of the infrastructure to be provided by the private sector. Infrastructure maintenance as discussed throughout this thesis has been the major problem contributing to the poor service delivery by the public sector in some developing country cities including Lagos (Attahi, 1999). A key decision was made by the Policy Makers at the MoE that the Service Contract C remained a viable resource in the provision of formal collection and transfer of municipal waste (Dept of Sanitation; 2007). The Policy Makers as
recommended by Mazmanian and Sabatier (1989) suggest that a constant review of the policy was necessary for implementation to meet its objectives. This review should remove the parts of the policy which were redundant while leaving or enhancing the parts of the policy which were efficient (Bardach, 1977).

At the start of the PSP Waste Collection Programme in 1996, 1500 companies signed up to provide the service to two local government areas. This number had dwindled to 624 by 1997 (Ehigihator, 2001) and 57 Contractors by 2004 in the two local government areas (NAN, 2004). The sharp drop in number of PSP waste collection participants was due to non-profitability of the formal private waste collection sector in Lagos State and the lack of experience of the private sector leading to the closure of these companies (Ehigihator, 2001; PSP group interview, 2007). The MoE needed to restructure the Programme to make it meet implementation objectives (provide an efficient waste collection and transfer service, maintain a clean urban environment and transfer the cost of the service to the End Users) and make the private waste sector profitable to attract new PSP Participants into the formal waste services sector. To achieve these objectives, the MoE made several changes to Phase II of the PSP Programme which is discussed in the Section 9.2 below. The street level bureaucrats (PSP Contractors) as prescribed by Matland, (1995) had sufficient discretion in the provision of their contracted services but were still unable to provide an effective service. This gives credence to Sabatier (1986) who mandates that the amount of discretion street level bureaucrats have should be mitigated through the policy.
9.2 Phase II

Phase 2 of the PSP Waste Collection Programme began in the last quarter of 2004. The second phase of the PSP Waste Collection Programme was to be expanded from the two pilot local government areas to include 22 more local government areas to cover most of the urbanised parts of Lagos State. The areas covered were selected by the MoE Policy Makers and adverts were put up for PSP Contractors who were interested in covering those areas (P1, 2007; P4, 2008; Dept of Sanitation, 2004; LAWMA, 2007). The areas not included for coverage Phase II of the PSP Waste Collection Programme were mainly outlying rural areas which were thought not to have as pressing a need for waste collection management services as the urban areas (P1, 2007; P3, 2007; Department of Sanitation, 2007).

Phase II of the PSP Waste Collection Programme compared to Phase I of the PSP Waste Collection Programme had political support from the newly elected governor of the State, Governor Ahmed Tinubu and his cabinet (P1, 2007; Dept of Sanitation, 2004). During the governors’ re-election campaign, Governor Tinubu had adopted the environment as a political objective in the campaign manifesto and during election rallies, for example at the final rally held on the 20th of March at the international trade fair complex in Lagos (Olaleye, 2003). Governor Tinubu, and Environment, Commissioner Tunji Bello stated their pledge to the environment and to eradicating the waste problem in the State (Olaleye, 2003; Alliance for Democracy, 2003; Lagos State, 2007). Both were returned to office.

Once elected, Governor Tinubu and Commissioner Tunji Bello actively promoted Phase II of the PSP Programme, holding public meetings with community leaders and religious leaders (Momodu, 2004). The Advertising Department of the MoE used
newspapers, television and radio to promote Phase II of the PSP Waste Collection Programme. The aim was to raise public awareness of the policy, and the roles of the Policy Makers, PSP service providers and the End Users in implementing the PSP Waste Collection Programme. (Oduwole, 2005; Momodu, 2004, 2005; Ahiante, 2004; Ogbonnaya, Haruna and Oyekemi, 2004; Adegbiye, 2004). The support of sovereigns is a key aspect of the top-down argument for implementation (Mazmanian and Sabatier, 1989). Bardach (1977) goes further to argue that sovereigns can use their influence to ensure that blocks to implementation such as rival agencies and provision of resources are removed. The bottom-uppers admit that the support of sovereigns can have a positive or a negative impact on implementation depending on their view of the policy (Barrett and Fudge, 1980).

The MoE Policy Makers’ advertising campaign was also designed to change peoples’ attitudes towards waste. As discussed in Section 3.5, many people still considered waste management as the sole responsibility of the government. This attitude is still prevalent in some of population with over 53% of respondents to the survey undertaken for this thesis still viewing waste generated as the responsibility of the government (Structured interview survey, 2007; Dept of Sanitation, 2007). The change of attitude required from the campaign is having some effect as over 38% of people surveyed also said they took personal responsibility for waste generated (Structured interview survey, 2007).

This commitment to environmental problems, especially waste problems, from the political elite not only ensured the continuity of the PSP Waste Collection Programme for waste collection but also allowed the MoE/LAWMA Policy Makers to lobby for further changes that were made to the PSP Waste Collection Programme in 2004 (P1, 2007; P2, 2007; P4, 2008). Commitment from the political elite for policies is identified as being
important by both the top-down and the bottom-up school of thought, and seen as an essential factor in the successful implementation of policy (Sabatier, 1994; Gunn, 1994)

9.3 Expansion

Phase II of the PSP Waste Collection Programme needed to be expanded to support the major expansion proposed, to cover the 22 local government areas proposed (P1, 2007; P3, 2007; MoE, 2005; LAWMA, 2007). In order to achieve this, the Policy Makers needed to make some changes to the PSP Waste Collection Programme and incorporate some new mechanisms. The key changes are discussed below.

9.3.1. Contract:

The first change to the contract was to the entry requirements of PSP Contractors. The cost of the vehicles was a major consideration for the Policy Makers, as it had proved difficult for companies to maintain their vehicles and continue to meet the 10-truck minimum requirement (P1, 2007; P4, 2008). The new entry requirement did not specify the number of trucks, only routing schedules were demanded of the new Contractors (Dept of Sanitation, 2007). Contracts were still awarded on a non-tender basis with the Policy Makers dictating the cost of the service (Financing is discussed in Section 9.3.4 below). The Contractors were paid per tonne of the domestic waste they collected and took to the landfill sites. This change was designed to encourage any company which was interested in joining the waste service delivery PSPs to sign up to deliver the service (Dept of sanitation, 2003; P1, 2007).
The truck specification was later revised to permit only tipping trucks, as the non-tipping trucks were causing traffic at the landfill sites and reduce truck turnaround times (Dept of Sanitation, 2005). The companies were then expected to tell the MoE and LAWMA how many streets or wards or local government areas that the company considered it could cover with its collection capacity; and their capacity was also assessed by MoE (P1, 2007; P3, 2007). The PSP Waste Practitioners capacity was assessed by evaluating what type and total number of trucks the firm had and their total collection capacity and how much waste an area produced which was assessed based on the income level and predominant type of housing found in those areas (Dept of Sanitation, 2004). This second assessment by the MoE was done to ensure that the company did not over estimate its capacity to deliver the service, as some companies who submitted schedules for collecting waste for a ward could not cover more than one street efficiently (MoE, 2005). Assessment of company capacity was a lesson carried over from Phase I as discussed in Section 8.7.3, the PSP Waste Practitioners were not able to meet the capacity required to deliver an efficient service.

The PSP service provider then had to create a route plan for its designated areas to show how an effective service could be delivered on a regular basis with a minimum collection of once a week per household (P1, 2007; P2, 2007; P3, 2007; P4 2008). This change in the vehicle criteria meant that different sized companies (Large medium and small) could participate within the PSP waste collection and transfer Programme. There are currently over 200 companies (large medium and small enterprises) participating in the PSP domestic waste collection and transfer an increase from 57 companies at the start of phase two in 2004 (LAWMA, 2007; NAN,
2004). The increase was achieved by the Policy Makers taking on the financial risk of recovering service cost from the End User. The policy maker theory that if an enabling environment was created, the private sector would participate within the waste collection and transfer programme.

9.3.2. Enlightenment Programme:

The Policy Makers of the MoE also took part in the State Governor’s initiative to start a State Enlightenment Programme to promote the PSP waste collection service with the End Users (Dept of Sanitation, 2007). The aim of the policy maker involvement in promoting the PSP Waste Collection Programme was to increase public awareness of the PSP waste collection policy. Some 69% of people surveyed were not aware of Phase I of the PSP waste collection policy (structured interview, 2007).

The MoE and LAWMA also regularly have public enlightenment campaigns at markets and bus garages with staff from the MoE advertising department having talks with the market and bus garage communities. The MoE and LAWMA also reinstated monthly Environmental Sanitation Days, on the last Saturday of every month and on these days attempt to reach the public by going door to door to talk to people on a face to face basis (P1, 2007; P3, 2007).

It is unclear how effective these measures have been, as no attempt was made by the MoE to follow up the community leaders and the residents on whether or not the information was passed on. The level of public awareness of the Phase II of the
Programme it must be said is significantly higher as approximately 99% of people surveyed are aware of the new policy and over 46% of respondents surveyed had the service in their area (Structured interview, 2007).

9.3.3. Local Government Inclusion:

For the first time, Local Government were included as part of the enforcing arm of the Policy Makers. Prior to Phase II of the PSP Programme, local governments were expected to take care of the waste generated within their municipality through the Lagos State Waste Disposal Board (Aboyode, 2004; LAWMA, 2007) as discussed in Section 3.8.2. Their inability to manage waste generated within the State saw the role of waste management revert back to the central State Government in the late 1980s to the early 1990s (LAWMA, 2007). In the delivery of Phase I of the PSP Waste Collection Programme, the local governments were not given a significant role within the policy. The extent of their participation was to report non-performing PSPs (Victoria Island Local Government, 2007).

In Phase II however (with lobbying from some local governments, for example Victoria Island Local Government, and Ikeja Local Government (Victoria Island Local Government representative, 2007; Ikeja Local Government representative, 2007), the role of the local governments significantly increased. PSP Participants operating within the local government municipalities were now directly answerable to the local governments and could be sanctioned by them. The Department of the Environment in each local government office is now empowered to investigate why a PSP participant was not delivering the contracted service. Their
findings are then sent to LAWMA for further action (Victoria Island Local Government representative, 2007; Ikeja LG, 2007). The non-performing PSPs can have their contracts cancelled at the request of the Local Governments (Victoria Island LG, 2007; Ikeja LG, 2007). The Local Governments can also have representatives at the LAWMA/PSP meetings which they were not invited to participate in Phase I. The Local Governments took on a dual role as monitors and enforcers of the PSP Waste Collection Programme within their municipalities.

The inclusion of the local governments is of importance to the execution of the PSP Waste Collection Programme because they are the closest to service delivery and able to monitor what is happening on the ground; they are also the most accessible to the End Users and the first point for complaints. The MoE and LAWMA do not have local offices, the use of the Department of Environment in the local government offices made the service closer to End Users. The inclusion of the local governments within the implementation of the PSP Programme increased its accessibility of the Policy Makers to the End Users as well as increasing their monitoring capabilities. The bottom-up school of thought argues that street level bureaucrat proximity to the End Users makes implementation more effective. This is because they are able to relate information on policy directly to the End Users and deal with their complaints (Lipsky, 1980).

9.3.4 Financing:

One of the major problems identified during the policy review of Phase I of PSP waste collection Programme was the allegiance of the PSP Contractors (P1,
In Phase I, the relationship between the PSP Contractors and the End Users was linear shown in Figure 9.1 below. The highest level of interaction or relationship occurred between the PSP service providers and the End Users. This relationship is shown by a thick arrow in Figure 9.1, while the relationship between the Policy Makers and the PSP providers is shown by a thinner arrow. The Policy Makers at the time had little or no interaction with the End Users.

Figure 9.1: Phase I Relationships

The bulk of the resources in the PSP Waste Collection Programme flowed between actors with the highest amount interaction during the implementation of the Programme, which was between the PSP Contractors and the End Users (P1, 2007; Dept of Sanitation, 2004). PSP Contractors invest in manpower and infrastructure and the End Users made
payments directly to the PSP Participants for the services that they received, thereby funding the continuity of the service (P1, 2007; P3, 2007). This type of contract as discussed in Chapter 6 and Chapter 8 is Service Contract C (Li and Akintoye, 2004). The effect this relationship had on the delivery of service in Phase I was the PSP Contractors honoured their service contract by collecting the waste from the households. The second half of the contract which was to dispose of the waste at the landfill site as agreed with the MoE was often not honoured as discussed in Chapter 8, so widespread illegal deposits were common (see Section 8.5.2).

The PSP paid a flat fee of N 100,000 (at the time worth £400) to the MoE to become service providers, and the payment was effectively the main relationship between the MoE as the service monitoring body and the PSP Participants in Phase I (Dept of Sanitation, 2004; LAWMA, 2007). The arrangement effectively created a pattern of obligation which excluded the MoE and making their new role (within their limited capacity) as service regulators more difficult (P1, 2007; P2, 2007). Monitoring of public services provided by public bodies or private corporations has a history of being challenging in some developing sub-Saharan African cities (Attahi, 1996).

With the expansion proposed in Phase II, it was necessary to change the relationship between these three actors, as the evaluation of Phase I demonstrated that the financial relationship of the three main actors (MoE/LAWMA, PSP Contractors and End Users) was contributing to the lack of achievement of PSP Waste Collection Programme objectives (P3, 2007; Dept of Sanitation, 2007). The MoE required a means of making the PSP service providers comply with the terms of the signed agreements. The aim was to control the flow of resources and change the pattern from linear resource flow to cyclical one as seen in
Diagram 9.2 below (P1, 2007; P4, 2008). The solution that was adopted was to start paying the PSP service providers directly and recover the cost of the service from the End Users, a variant of Service Contract C (Oduwole, 2005; P1, 2007; P2, 2007; P3, 2007; P4, 2008). This would change the loyalties of the PSP service providers from the End Users to the Policy Makers. The change of paying the PSP directly was also intended to improve the level of service by attracting more investors to join the PSP Waste Collection Programme (P1, 2007; P3, 2007; PSP focus group, 2007). Sabatier (1993) argues that Policy Makers often control resources and are able to use these resources to influence implementation outcome (Sabatier, 1993).

Diagram 9.2: Cyclical flow of resources

The PSP service providers provide the capital and infrastructure to run the service and are reimbursed monthly by the MoE.

The MoE pay the PSPs directly and recover the cost from the clients. The MoE regulate and monitor the service.

The clients are taxed for the services received from the PSPs by the MoE.
The change in the financing of the PSP Waste Collection Programme heralded the inclusion of a new actor within the PSP Waste Collection Programme which will be discussed in more detail in Section 9.6.1 below. The change in the resource flow was also designed to increase the interaction between the Policy Makers and the End Users. This was aimed at potentially increasing the amount of monitoring that could be carried out by the MoE which is integral to the implementation of government policy (P1, 2007).

Comment box 1

P1, Policy maker with the MoE for 15 years. P1 has constantly evaluated the PSP Programme from its inception. P1 in discussing the problems experienced in Phase I noted:

'We needed to change the loyalties of the PSPs from their client to us in order to get better results with the Programme.' P1, 2007

Pongsiri, (2002) states that monitoring should be an integral part of policy implementation. Monitoring gives the Policy Makers an indication of how effectively policy implementation is being achieved (Pongsiri, 2002). The MoE developed a complaints’ procedure for the End Users if the PSP Contractors were not providing the contracted service as opposed to just withholding payment for services as in Phase I (P1, 2007).

9.3.5. Customer Complaints:

In 2004, a customer complaints procedure was introduced. This was advertised to the End Users through letters sent out with PSP waste bills (MoE, 2004). The PSP waste collection service received by the End Users had its own bill sent out every month separate from the land tax paid by householders (MoE, 2007). The MoE
introduced three methods for the public to make their complaints. These included a postal complaints service; a telephone service with numbers provided for End Users make complaints, and a complaints desk in the Department of Sanitation to receive complaints made in person at the MoE (MoE, 2004; Dept of Sanitation, 2007). The MoE received about of one hundred letters, three hundred calls and fifty verbal complaints at the start of Phase II of the PSP Waste Collection Programme (MoE, 2004; Dept of Sanitation, 2007). The volume of complaints reduced by approximately 40% by the end of 2006 as the service became more standardized (Dept of Sanitation, 2007). Approximately 10,000 complaints had been resolved by 2007 (MoE, 2007).

The complaints procedure introduced into Phase II of the PSP Waste Collection Programme assisted the MoE in further monitoring the activities of the waste collection PSP Contractors (MoE, 2004). The complaints procedure made the Policy Makers more accessible to the End Users as complaints were sent directly to their office. The Policy Makers also encourage the End Users to give their advice on how the service could be better improved and these comments were consulted during the policy review (MoE, 2007).

9.4 New Actors

In order for these changes to be effective, it was necessary to include some new actors within the PSP Waste Collection Programme to improve monitoring and financing. As discussed in Section 9.2 above, Service Contract C was still being used by the Policy Makers and this meant that even though the PSP Participants were now paid directly by the
governments, the cost was to be recovered from the End Users. A substantial increase in monitoring of the PSP Contractors was required by the MoE/LAWMA and an effective method of collecting revenue became integral to the Policy Makers. The following subsections will look at the additional actors brought in to improve the PSP service.

The introduction of new actors within the policy implementation arena is a top-down function. It is difficult to introduce new actors into policy implementation without the approval of the Policy Makers in developing country cities. This is mainly because most government structures are central in construction in developing country cities (Attahi, 1999).

9.4.1 Banks:

The Policy Makers required an effective funding flow for the project. The Policy Makers at the MoE considered the State's poor track record delayed payments and long-winded bureaucracy required for the approval of payments (P4, 2008) as a hindrance to encouraging new PSP Participants to join the Programme. So the State turned to the banks as an alternative funding mechanism. The banks would receive payments for the PSP Participants from the government and payments for the PSP service from the End Users. The banks were also included within the PSP Waste Collection Programme in order for the PSP Participants to gain easier access to credit facilities (Dept of Sanitation, 2005). The MoE/LAWMA guaranteed loan repayment of the PSP Participants by either withholding their payments or confiscating equipment from defaulting operators PSPs (Meeting LAWMA/PSP, 2007). The collection of fees from the End Users also prompted the inclusion of the banks. For End Users, it made paying the levies easier in terms of location and convenience (P1, 261
2007). Twenty banks with State-wide branches were contracted by the MoE to maintain the PSP waste collection and transfer funds (Dept of Sanitation, 2007).

9.4.2 Billing PSP:

Payments were made by households, and the cost of the service was based on the type of accommodation occupied by each household. Prices for the service ranged from N50 for single rooms in tenement buildings to N5000 (£20) per month (MoE, 2004). In order for each End User to know what was expected of them, bills were to be sent out to the End Users (MoE, 2004). The MoE and LAWMA had no prior experience in sending out bills, and it was decided that a private contractor should be included within the PSP Waste Collection Programme to perform this service (MoE, 2004). This new PSP was to liaise with the PSP waste collection practitioners to collate data on the areas being serviced and send out the bills to the recipients of the service accordingly (PSP group interview, 2007; PSP general meeting, 2007).

9.4.3 Landfill PSP:

The role of the landfill PSP was twofold. The first was to invest in equipment and maintain the landfill. The second role that this PSP was to increase the monitoring of the PSP waste collection participants (Dept of Sanitation, 2007). As discussed in Chapter 8, during Phase I of the PSP Waste Collection Programme, the PSP Participants were often not transferring the waste collected in the municipality to disposal sites (P1, 2007; LAWMA, 2005). The introduction of this PSP ensured that collected waste was brought to the landfill, as payment for the PSP waste collectors
hinged on the landfill PSP giving the waste collection PSP Contractor a receipt for the waste a duplicate of which was given to the MoE. A weigh bridge was introduced at the landfill site to give more accurate data on the amount of waste brought to the landfill. Data is also collected on the types and origins of waste brought to the landfill (P1, 2007; P2, 2007; P4, 2008; MoE, 2004).

9.4.4 Monitoring/Enforcement PSP:

Monitoring is agreed by both the top-down and bottom-up schools of thought as an essential part of implementation (Hogwood and Gunn, 1994; Sabatier, 1994; Winter, 2002). Monitoring for Phase II of the PSP Waste Collection Programme, while still a duty of the monitoring department of the MoE, was also contracted to PSP monitors, another new area of privatisation within Lagos State (LAWMA, 2005; LAWMA, 2007). Monitoring companies were contracted to monitor the PSP waste Contractors and report back to the MoE/LAWMA. The PSP monitors also served as enforcers. They were charged with investigating why bills were not paid and tasked with either getting the End Users to pay their bills, or in the case of continuous defaulters, sealing up their compounds until the payment was made (LAWMA, 2007; Meeting PSP/LAWMA, 2007).
9.5 Effects of the Restructuring on the PSP Waste Collection Programme

The effects these changes had on the PSP Waste Collection Programme at the start of the Programme were mixed. This Section will start with the positive outcomes before moving on to the negative.

9.5.1 Positive Outcomes of Phase II of the PSP Waste Collection Programme

A number of positive outcomes can be noted at the start of Phase II of the PSP Waste Collection Programme. These outcomes include;

i) Increased participation of PSP waste collectors as new participants signed up to provide waste collection and transfer services. The new participants increased the collection and transfer capacity in terms of resources, equipment and manpower within the State. The new waste collection PSP Participants within the State allowed the Policy Makers to be able to expand the PSP service to cover more areas within the State.

ii) The change in the PSP payment structure guaranteed for the first time that most of the waste would end up at the designated disposal site as proposed within the PSP Waste Collection Programme. As one policy maker remarked, in comment box 2 below.
The PSP Contractors could no longer dump their waste anywhere but the allocated sites. Even when their vehicles breakdown, they ensure it is fixed without dumping the waste and bring it to the dump if not, it is a wasted effort for them".  
(P1, 2007)

The targeted End Users were more supportive of the new PSP Waste Collection Programme because the waste did not end up within their immediate environment as previously (Structured interview, 2007). Some 43% of the interview respondents preferred the PSP waste collection service for the above reason. Some respondents from areas not serviced when the survey was undertaken wanted their areas to be included because it was seen as a more efficient service than that provided from the informal waste collectors (Structured interview, 2007).

iii) The new PSP Waste Collection Programme diversified and opened new fields within the private sector. This created both skilled and non-skilled jobs within Lagos State (MoE, 2007).

9.5.2 Negative Outcomes

A. Banks:

The Policy Makers’ objective for the inclusion of banks within the PSP Waste Collection Programme was to make it easier for the End Users to pay the new domestic waste collection bills. It would also streamline PSP
participant payments from the MoE/LAWMA (P1, 2007; P2, 2007). Two problems emerged from the banks.

i. The first problem was that allegedly some banks, on receiving waste collection payments, would put the money on temporary deposit in bank officials’ private high interest accounts for a period of approximately three months and not the MoE accounts as contracted (P1, 2007). This meant at that time there were not enough funds to pay the PSP Participants punctually. This was discovered by the MoE who would find their accounts empty or with low funds when it was time to pay the PSP Contractors. The amount recorded as being available from State government allocation and payment for services received, would not be present in their accounts. On investigating further, it was found that amounts that should have been in the account 3 months earlier were suddenly appearing (minus interest), whereas current payments were missing. Further investigation revealed some bank managers were redirecting the funds to their private high yield account for the time period the funds were missing. The threat of being reported to the Economic and Financial Crimes Commission eventually had the effect of discouraging this practice amongst bank officials (P2, 2007; P4, 2008).

ii. The second issue was that on receipt of clients’ payments, because of the temporary deposits mentioned above; banks were not informing the billing company which End Users had paid their PSP bill (P1, 2007).
This led to confusion, as the End Users who had paid complained to the MoE and LAWMA for being billed twice or having enforcement actions taken out against them (P1, 2007). The billing PSP was unable to correlate their data on paying and non-paying End Users for the waste collection service (P3, 2007). Only the threat of legal action by the MoE finally resolved the problems between the MoE and the banks (P1, 2007; P2, 2007).

B. PSP Participants:

At the start of the Programme, two things were absent (P1, 2007). The first was a weigh bridge at the landfill sites (which were later introduced, and the second was adequate monitoring of the waste taken to landfills (P1, 2007). The PSP Contractors were paid on the basis of how many trips they made to the landfill site to dump waste. Some of the PSP Contractors made fraudulent claims on the number of disposal trips their trucks actually made (P1, 2007; P2, 2007). This problem was further compounded as the MoE was in charge of the domestic PSPs waste collectors, while LAWMA was in charge of industrial PSPs waste collectors. LAWMA contracted companies that were also working for MoE, who were paid upfront for services for LAWMA, but would claim that some of waste collected from industrial sites was domestic waste, thereby double billing the government (P1, 2007; P2, 2007; P4, 2007).
To resolve these problems, a weighbridge was introduced at the landfill site and for every time waste trucks went to the landfill, they were weighed and received an electronic print out which was presented at the end of the month to the MoE for remuneration (P1, 2007; P2, 2007; P4, 2008). The MoE banned LAWMA from using the domestic PSPs for industrial waste and all the LAWMA PSPs had to paint their trucks the LAWMA trademark orange to distinguish them from the domestic PSPs (P1, 2007; Dept of Sanitation, 2007). Any domestic PSPs caught collecting industrial waste and trying to pass it off as domestic waste was banned from the Programme and fined (P2, 2007; Dept of Sanitation, 2007).

The introduction of the weighbridge created a new problem as some of the PSP Contractors allegedly started to weigh down their trucks with rocks as they are paid per tonne of waste transported to the disposal site (P1, 2007; P2, 2007). The MoE put monitoring agents at the disposal sites to monitor the waste disposed of and some of the companies who did this were banned and black listed from the PSP Waste Collection Programme (P1, 2007; P2, 2007; P4, 2008; MoE, 2005; PSP/LAWMA meeting, 2007).

C. Billing Company:

The billing company created a unique problem, which while not outright fraud, was a cost the Programme in lost revenue (P1, 2007; P4, 2008). The billing company was charged with acquiring the information on the
properties i.e. type of accommodation and location, and sending out bills, and matching the information to the areas being served by the PSPs (P1, 2007; P2, 2007; Dept of Sanitation, 2007). The company collected the required information and sent the bills to about a third of clients, but the remaining two thirds of the bills were being sent to areas not covered by the PSP Waste Collection Programme (P1, 2007; PSP/LAWMA meeting, 2007). This meant that households in some areas such as Surulere which received the service were not charged (Structured interview survey, 2007; P1, 2007) while others in areas such as Mafoluku who were not receiving the service were being billed (Structured interview survey, 2007; P1, 2007). 

Comment Box 3

Surulere is a 35 year old married professional resident. She has lived in Surulere for a few years with her husband and one child.

"Of course I prefer the free PSP service, I just don’t like that they are not reliable. They can come today and you will not see them again for two weeks."

Surulere resident (Structured interview, 2007)

The companies which dealt with enforcement were faced with trying to enforce bills at properties which had not been serviced (PSP/LAWMA meeting, 2007). The outcome was that between 2004 and 2006, the Policy Makers were footing almost 99% of the bill for the PSP service although the budgeted revenue from the End Users was approximately 20% (P1, 2007; Dept of sanitation, 2007). This created bad publicity for the Programme, with some targeted End Users looking at the Programme as fraudulent (Dept of
Sanitation, 2007). Thus while waste collection services improved, it was at considerable cost to the government.

D. Equipment:

After the widening the Programme to the main urban areas of Lagos State in Phase II, a critical problem had been the long queues to unload trucks manually at the landfill site. This had discouraged some PSP Contractors during Phase I from using the disposal sites as it increased their turnaround time (PSP focus group, 2007).

The cost of acquiring standardized equipment was problematic for some PSP Contractors. The general cost of purchasing a second-hand collection truck ranged from N2-N4 million (£8,000-£16,000) which was unaffordable for many small companies (PSP focus group, 2007). The MoE intervened in the interest of standardizing collection equipment used in the State by negotiating with local banks for equipment loan facilities for the PSP Participants equipment (P1, 2007; P3, 2007; PSP/LAWMA, meeting, 2007; Dept of Sanitation, 2007).

The MoE also aimed to regulate the choice of equipment (P1, 2007; P3, 2007). However, while the Policy Makers were keen for the PSP Participants to obtain good quality equipment, and to make informed choices, so avoiding expensive equipment that could not be adequately maintained in
Nigeria (P1, 2007). The choice of equipment could make the difference between effective service and ineffective service (Onibokun and Kumuyi, 1999). Picture 9.1 below is an example of trucks which are difficult to maintain in Lagos being used by some PSP practitioners.

The trucks in the Picture 9.1 have broken down along the Ikorodu expressway in Lagos and are awaiting repairs. Trucks such as compactor trucks which are expensive to obtain and difficult to maintain, and have very little impact on the waste collected as the waste is mainly organic and already very dense, are discouraged by the MoE (Dept of Sanitation, 2007). LAWMA continues to argue vehemently that it can maintain compactor trucks for the PSP Participants (P3, 2007) but its track record of maintaining its own equipment was dismal as discussed in 3.8.2 (P1, 2007; P4, 2008). Cointreau, (1994), argues against the use of over sophisticated equipment for some developing country cities in the collection of their waste, as the cost is often high, and maintenance is poor, limiting the benefit to a city (Cointreau, 1994).
An interesting feature in Phase II of the PSP waste collection programme is when problems have arisen during the course of implementation; the Policy Makers have been very quick to act to resolve the issue for the smooth flowing of the programme. This is interesting for two reasons; the Policy Makers and the End Users are much more informed on the progress of the PSP Contractors. The Policy Makers through increased monitoring through the monitoring department, local governments and End Users. The End Users through identification with the programme and paying for the service when they are satisfied with the service and making their complaints heard when it does not meet contracted standards. For example, if the PSP Contractor is to come once or twice weekly and he does not provide the service, using the complaints procedure to report the company. The second point of interest is the Policy Makers have shown willingness to act when problems arise during the implementation of the service.

Neither the top-down nor the bottom-up schools of thought have any provisions within them on how to deal with large scale incidences of corruption as could be witnessed at the beginning of Phase II of the PSP Programme. Pressman and Wildavsky (1984), draw attention to the possible problems of inter-agency clashes or the hi-jacking of implementation by competing agencies and how this can hinder implementation outcome. Monitoring is out forward by Hogwood and Gunn (1994) as an essential aspect of implementation to ensure implementation is hitting policy targets. And if implementation is not hitting policy targets to understand why this was. Bardach (1977), even advocates for a little strong arming by Policy Makers to create conditions which are conducive for street level bureaucrats to hot implementation objectives. However, wide spread corruption is not expected by either school of thought as a reason for poor implementation outcome. An implementation theory that is
developed for a developing country city like Lagos would require a strong anti-corruption measure for it to be applicable.

However, the top-down school of thought would be the most applicable in this situation. This is mainly because as observed above, the Policy Makers are able to make the most impact in the implementation of the PSP waste collection programme in Lagos. Policy Makers argue Sabatier (1996) are able to exert the most influence in the implementation of policy because they control scarce resources. Pressman and Wildavsky (1983) argue that Policy Makers must also be willing to take decisive steps to meet policy objectives without weighing them down with bureaucracy. From the negatives of the policy observed above, the bottom-up school of thoughts is not equipped to deal with street level bureaucrats that hinder the successful implementation of policy as observed above. The bottom-up school of thought advocate for a high level of monitoring of policy implementation (Hill, 1996), to ensure implementation is meeting policy objectives but as observed from the above, the monitoring must come from the top for it to be effective.

**9.6 Phase II implementation analyses**

The implementation of Phase II of the PSP Waste Collection Programme was carried out in phases (P1, 2007). As discussed in Chapter 8, while private waste collection was not a new concept to in Lagos State, the PSP Waste Collection Programme introduced in 1996 was a new concept to the MoE and LAWMA Policy Makers. This Section examines whether Phase II of the PSP made improvements compared to Phase I of the Programme.
9.6.1 Clear and consistent objectives and adequate resources:

The objectives of Phase II are almost identical to those of Phase I stated in Section 8.5.1, as reported by key informants, although the Phase I objectives were never clearly documented. The MoE's original objectives in Phase I of the PSP Waste Collection Programme, were for the collection and transfer of waste from the municipal areas within Lagos State to formal disposal sites, and the reduction of costs for the service (P1, 2007; P4, 2008) (see Section 8.3). This was expanded in Phase II to increase coverage of the PSP service, include a wider range of PSP actors with resultant job creation, and encouragement of direct payments for the service by the End Users (Dept of Sanitation, 2005). Owen and Merna (1997) state that the objectives of any policy must be clearly mapped out at the beginning of the policy (Owen and Merna, 1997).

While still using some market efficiencies (good service levels equals to increase in demand) to improve the level of formal services provided to the End Users (Jensen, 1978), the innovation in Phase II was the introduction of a resource loop enabling the MoE to act as financial co-ordinator (Section 9.3.4) changing the dynamic of the actors in the PSP to make the stake holders more accountable to the Policy Makers (P1, 2007; P2, 2007; Dept of Sanitation, 2007). This confirms Bardachs' (1977) theory that policy can be used to structure the path in which implementation should follow. The structure of implementation in Phase I and II of the PSP Programme it can be observed has been structured by the policy makers to take the direction that they have chosen.

The policy objectives in Phase II of the PSP Waste Collection Programme were strengthened by continued political support and resources which continued during the writing
of this thesis. Political support is seen as a critical factor in the success of PSP Waste Collection Programmes, as identified Van Horn, (1975); Sabatier,(1993); Hood,(1976). By paying the PSP Participants directly and helping this sector to access credit from the banks, the Policy Makers were able to create a more enabling environment for the PSP Participants (PI, 2007; PSP focus group interview, 2007).

The Programme was given legislation in the Lagos State Environmental sanitation law (2001) to back it up and make it legally binding on the residents where the service was provided. The Lagos State environmental Law is discussed further in Section 9.6.3 (Lagos State Gazette, 2001). The government took on the bulk of the Public Enlightenment Programme for the PSP Waste Collection Programme in 2004 to launch Phase II of the PSP Waste Collection Programme (PI, 2007). Media campaigns and public meetings were used to sensitize the End Users (Adepegba, 2004).

A difference between Phase I of the PSP waste policy and Phase II of the policy the objectives of the policy are made known to the End Users and they are also invited to participate within the policy process. The bottom-up and top-down schools of thought both prescribe the identification of a need for policy and then its implementation by one group or the other (Barrett and Fudge, 1980). In some western economies for example, the United Kingdom, there is consultation with the main actors within the policy process however; it is not a mandatory part of implementation. Phase II of the PSP Programme showed that it was necessary to engage the End User in the policy implementation process as their co-operation is required for the policy to be successful. The bottom-up school of thought argues that because it is in direct contact with the End Users, it is better place to provide an efficient service (Hill, 1991, Hill and Hupe, 1996). This might be true in situations where corruption is
at a minimum or does not exist. It might it even hold to account in situations where the End Users co-operate with Policy Makers even if they are unhappy with policy. However in the Lagos context policy implementation was hindered by the very street level bureaucrats the bottom-up wants to be in charge of policy implementation. It is not to say that there was no corruption at the policy maker level of implementation, but it took the intervention of the Policy Makers for implementation to start meeting policy objectives.

9.6.2 Cause and Effect:

Sabatier (1993) advises Policy Makers to evaluate and revise the assumptions with which they make policy after it has been implemented for a period of time. The cause and effect theories which the policies makers apply to the creation of policy can positively or negatively impact the implementation of the policy (Van Horn, 1970). The top-down school of thought therefore puts forward that there is a need to evaluate the original cause and effect theory applied to the policy and its subsequent implementation (Van Horn and Van Meter, 1975). The revision of the PSP Programme was carried out by the MoE in Lagos (P1, 2007; Dept of Sanitation, 2005). It could no longer be taken for granted that if the formal private provision offered a better level of service, it would be used and paid for by the End Users (MoE, 2007).

Two things had to be done to make the service more viable. First the Policy Makers had to earn the trust and patronage of the End Users. To achieve this, the Policy Makers launched the Clean up Lagos campaign which began at the end of 2003 (Momodu, 2003). This was done by holding a series of meetings (which are still held once a month) with the PSP Contractors and training them on how to continuously improve their service. (P1, 2007;
PSP focus group interview, 2007; PSP/LAWMA meeting, 2007). The MoE also reviewed the capacity of the PSP waste collection participants and used this to reassign streets in which they collect waste. Streets allocated maybe returned if the PSP participant is able to satisfactorily and legitimately increase its collection capacity (P1, 2007; Dept of Sanitation, 2007).

The combination of the targeted campaign and the improvement in the service was expected to increase the patronage of the PSP Waste Collection Programme. This probably accounts for why before 2004, 67% of the surveyed population were unaware of the Phase I PSP Waste Collection Programme and why approximately 99% of the surveyed population was aware of the Phase II PSP Programme post-2004.

The Policy Makers from the implementation of Phase I of the PSP Waste Collection Programme understood the inappropriateness of comparing the services of the PSP Participants to the service provided by the informal private sector. This was due to;

1) The cost of service delivery between the two groups. The informal service providers’ overhead costs are low and usually comprised of obtaining and maintaining their waste carts (focus group interview cart-pushers, 2008) as opposed to the PSP service providers which have continual running costs which include staff cost, truck acquisition and maintenance, truck garaging (focus group interview, 2007; P1, 2007).
2) The levels of service delivery between both groups were not directly comparable, mainly because much of the waste collected by cart-pushers was dumped and not transported to the landfill site, as the cart-pushers are unable to carry the waste over great distances while the mechanized service of the formal private service is able to carry waste to designated disposal sites.

One of the issues raised from the implementation of Phase I for the Policy Makers was not to assume the reaction to the policy of the End Users (P1, 2007; P2, 2007). The Policy Makers convinced the government that it was necessary for them to make initial resource allocations to the Programme and recoup the funding back from the End Users (P4, 2008; P1, 2007). It was therefore imperative that politicians (Governor, House of Representative and House of Assembly) should perceive Phase II as a viable service option.

Lagos State government is trying to practice an inclusive form of governance. In order to understand why End Users had been mainly uncooperative with the PSP Contractors and the service should be tailored to meet End Users needs, a series of meetings was held in 2004. The State Governor, Deputy Governor and technical staff from MoE/LAWMA held the meetings with the local leaders, including priests, pastors and imams, traditional leaders (a number of the old traditions still hold strongly within the State) including Obas (kings) and chiefs, (indigenous senate), grassroots politicians and ward and local government heads (P1, 2007; P2; 2007; P3, 2007; P4 2008; Ahiante, 2004). The involvement of high ranking politicians in the meetings indicates the political weight given to the programme. It is not known how many meetings were held, however, all the meetings had a common agenda at all
the meetings was waste in Lagos state, how it affected the residents of the State and the roles of the different levels of stakeholders in making Lagos State a cleaner State.

The meetings served two purposes;

1) The local heads were given vital information about the PSP Waste Collection Programme which they were expected to pass on to their constituents, allowing the government to indirectly interact with the electorates through the grass root leaders (P1, 2007; P2, 2007; P4, 2008). Lipsky, (1993) suggests that that the information passed on to End Users from the group closest to them is the most important link for implementation success. Lipskys’ (1980) argument would be valid especially in countries that have strong sense of community. When policies are passed from Policy Makers to End Users, it can mainly be impersonal. When this same piece of information is given in a community forum, for example a church gathering, the people can identify more readily with it. Possibly because if the community leaders are able to relate the policy they are promoting on behalf of Policy Makers to problems within the community, it makes it easier for the End Users to identify with the policy. The policy from the Policy Makers would need to be related to a wide range of people most with nothing more in common than they live in the same city. In a nut shell, the local leaders can personalize the policy for the End Users in a manner that Policy Makers and street level bureaucrats cannot.

2) It gave the Policy Makers an opportunity to understand why the informal private sector was still the main supplier of waste collection services within the State by
getting feedback from community leaders (PI, 2007; Dept of Sanitation, 2007; Ahianite, 2004).

The result of the consultation indicated that Users were willing to pay for efficient waste collection services, but not premium prices for a government service (Balogun, 2008). The End Users that were targeted expected the service to either be free or the formal private service to be competitive with informal sector prices especially within low income areas (Structured interview, 2007). The structured interviews carried out for this thesis indicated that, where PSPs operated, approximately 43.1% of people interviewed would choose the services of the PSP Contractors compared to the 26.9% whom preferred the cart-pushers, (structured interview, 2007).

Over 43% of respondents who used PSPs preferred their services because waste was transferred to legal dumpsites. Even though only 35% felt the PSP waste collection service was a better value service to the informal sector (Structured interviews, 2007). Over 60% of the End Users surveyed were unhappy about the irregularity of the waste collection service provided PSP Contractors. Over 64% of the End Users surveyed were unaware of collection times (as observed by the researcher during the survey) saying the PSPs rang a bell for them to bring their waste to them as opposed to collecting the waste door to door as mandated by the policy (Structured Interviews, 2007).

During the consultation meetings, the participants complained that the prices set by the MoE for the service were too high and needed to be revised (Oduwole, 2007). The consultation justified a price review in 2004 and a subsequent review due to be published in 2007. The author of this thesis was able to obtain a domestic waste PSP bill and compare the
price and found that the prices had already been reduced by approximately 20%. In 2004, houses in high income areas were to be billed N3,000 (£12) per month in the price list published by the MoE (Appendix A) at the beginning of 2004, but this was revised to N2,500 per month according to a bill received at a private residence in 2009 (appendix A) (MoE, 2007).

A second assumption in Phase I of ‘cause and effect’ which the Policy Makers had assumed that an environment which enabled the formal private sector to thrive would also support the objectives of Policy Makers. The assumption that people would pay for a good PSP service proved not to be the case, PSP Contractors who initially signed up found that their business was not viable (Focus group interview, 2007; NAN, 2004). The Policy Makers took the decision to intervene in 2004 by getting the State to pay the PSP waste collectors directly especially as it served the dual purpose of ensuring the waste reached the landfill and more PSP Participants are able to join and stay within the waste collection and transfer field (PSP focus group, 2007; P1, 2007; P2, 2007; P4, 2008; Technical committee, 2004). The restructuring of the resource flows not only gave the Policy Makers more control over the PSP service providers (as discussed in Section 9.3.4) but also helped the formal private service providers to stay within the field and to guarantee an income (P1, 2007; P4, 2008).

9.6.3 Enabling Legislation

The top-down school of thought argues that legislation is one of the most effective tools within the Policy Makers’ arsenal for the implementation of policy (Hanf and Jansen, 1998). Legislation can be used to structure implementation and gives the policy the backing of the law. Legislation can also be used to protect implementation and its agents from
encroachment by other agencies and policies (Pressman and Wildavsky, 1984). Strong legislation is therefore required to boost implementation success.

As discussed in Section 8.5.3, the Sanitation Law (2001) was not amended and no addenda or amendments were added to the law at the inception of Phase II. Sabatier (1993) prescribes for a legislative review by Policy Makers to reinforce laws. The PSP waste collection and transfer legislation is still as inadequate as it was in Phase I. The reason for not strengthening the legislation may have been that the legislation affects every household in the State, and the new civilian government did not want to alienate its new electorate (P1, 2007; P2, 2007). There was a change however to the enforcement which was minimal during Phase I; in contrast enforcement during Phase II took on four dimensions (P1, 2007; P3, 2007; P4, 2008; MoE, 2005; Dept of Sanitation, 2007):

1. Monitoring:

The Monitoring Department in the MoE undertakes periodic inspections of different parts of the State and manages the complaints desk of the PSP Waste Collection Programme (P1, 2007; P2, 2007; MD head, 2007). The Department also investigates environmental offences, and reports back to the MoE, with the authority to carry out sanctions (for instance closing down businesses, sealing compounds and levying fines) against the PSP Participants and End User offenders (MoE, 2005).
2. **Kick Against Indiscipline Brigade (KAI)**

The role of this group who are the environmental police in Lagos is to apprehend offenders as the crime is being committed (as it were). For example, they can apprehend citizens for littering or waste collectors for fly-tipping as the event is occurring (MoE, 2005). The KAI brigade goes out on daily patrols and apprehends people in the process of faulting Lagos State sanitation laws (Lagos, 2001).

3. **Local governments**

The local governments are also monitored the PSPs and have the power to investigate End Users and PSP complaints (Section 9.3.3). They have no sanction powers on the PSP Contractors but can recommend to the MoE/LAWMA that non-performing PSP should be struck off the register (LG1, 2007; LG2, 2007; MoE, 2005).

4. **Private sector monitoring/enforcement companies**

These companies were also contracted to monitor PSP participant activities, investigate disputes and administer sanctions on both the PSP practitioners and the End Users (see Section 9.4.4; PSP/LAWMA meeting, 2007).
All the above groups had the power to seize cart-pusher’s carts. Cart-pushers had their carts seized in some areas on a fairly regular basis for instance in Victoria Island (Victoria Island Local Government representative, 2007). This restricted the areas in which they could operate but the measure has not been effective enough to stop informal waste collection completely.

The enabling legislation was strengthened by more effective enforcement from the MoE/LAWMA. To make a policy well know within the State, it must either get considerable press attention like the fraud policies or have significant enforcement presence and consequences (Onwudiwe, 2004). The way in which enforcement is carried out within the Lagos State urban area was changed in four main ways:

1) New contracts were set up with private monitoring companies to monitor the activities of the PSP practitioners and they report their observation back to the MoE, increasing the latter’s monitoring capacity significantly (PSP/LAWMA meeting, 2007; P1, 2007).

2) The monitoring firms were used to collect unpaid bills for waste services. They also investigate why bills are not paid, and are empowered to impose standard sanctions depending on the situation (PSP/LAWMA meeting, 2007). For instance, if bills are not paid but the client has received no services, they investigate the problem. If the fault is with the PSP, they report back to the MoE, and if it is with the client, the client’s property may be sealed off until the bill is paid (P1, 2007; P2, 2007).
3) An advertising campaign on behalf of the MoE included radio and television advertisements highlighting the personal and environmental benefits of the service. The campaign also included a public education Programme carried out by MoE staff on National Sanitation Days in well-frequented places such as markets and motor parks. The PSP practitioners are also supposed to continuously educate the End Users (P1, 2007; P2, 2007).

4) Sanctions against cart-pushers were imposed. Local governments and KAI (Kick Against Indiscipline Agency) have been mandated to fine the informal sector waste collectors (N5000-N10,000 or £20-£40) and households who dispose of waste at illegal sites and in waterways (N5000-N10,000 or £20-£40) or 3 months in jail. They are also mandated to apprehend people who litter the streets and levy on the spot fine of N1000-N2500 (£4-£10) (P1, 2007; Ikeja LG, 2007).

These initiatives have helped to ensure in Phase II that not only is the PSP Waste Collection Programme widely known but it is more widely accepted. At the start of Phase II in 2004, approximately 2% of households receiving the waste collection service were paying their bills (P1, 2007; Dept of sanitation, 2007) and by mid of 2007 about 40% of End Users receiving the service were paying their bills (P1, 2007; P2, 2007; Dept of Sanitation, 2007).

A fundamental flaw within the PSP Waste Collection Programme remained the lack of accountability of the PSPs practitioners for non-delivery of services. According to 37.3% of respondents from the structured interview survey, the main problem with the service was its infrequency, unreliability (Structured Interview, 2007; P1, 2007). The lack of experience
of the PSP waste operators was also a problem also experienced in Phase I of the PSP Waste Collection Programme.

The challenge for the MoE and LAWMA was ensuring that enough operators remained in the field whilst maintaining service levels. The drawback of being too harsh on the practitioners could mean that some of the PSPs would leave the field. The leniency on practitioners reported during the survey period meant the government was still funding approximately two thirds of the PSP waste collection and transfer bill (P1, 2007; P2, 2007; P3, 2007, P4, 2008).

9.6.4 Committed and Skilful implementing officials

Winter (2002) considers that the street level bureaucrats' commitment to the implementation of a policy increased the chances of implementation mirroring policy objectives. Sabatier (1996) argues that the street level bureaucrats chosen by Policy Makers need to fully understand the policy have the skills to implement it and are willing to commit to its implementation. Bardach (1977) proposes the agency chosen for implementation must have the skills to deliver or a specialist agency should be created for the purposes of implementation. This implementation pre-condition is very important in the implementation of policy as the incompetence perceived from the street level bureaucrats can stop End Users engaging with the policy (Hanf, 1982).

Phase II of the PSP Waste Collection Programme had an increased skill resource compared to Phase I of the PSP Waste Collection Programme. Phase I of the PSP Waste Collection Programme provided an invaluable learning curve for the Policy Makers and the
PSP practitioners. The MoE/LAWMA gained experience as Policy Makers/guardians of the PSP Waste Collection Programme in how to deal with the different actors required for the implementation of the PSP Waste Collection Programme (MoE, 2007). The MoE has new skills which allow it not only to see the PSP Waste Collection Programme holistically, but also to improve upon Programme so that it delivers a measure of the PSP Waste Collection Programme objectives (P2, 2007; Dept of Sanitation, 2007). For example, the MoE/LAWMA had to develop expertise in contract preparation and management, enforcement.

The PSP practitioners are now developing a body of experience that enables them to improve service provision and client relationships (PSP group interview, 2007; LAWMA, 2005). New companies wanting to join the PSP Waste Collection Programme can acquire factual information from companies who have been operating over a period of years. Existing PSP companies can also offer training to new incoming companies (LAWMA, 2005; Focus group interview, 2007).

9.6.5 Support of Interest groups and politicians

Interest groups and politicians play a vital role in the implementation of policy. The political climate of a city can have a direct positive or adverse effect on policy implementation. If policy is able to generate public support, then the policy will usually get the resources that it requires for implementation (Hanf and Alf-Inge, 1998). Politicians get behind the policy and try to ensure that the policy is properly implemented. A lack of political support or public opposition to a specific policy could mean the policy sees a reduction its funds and could end the policy (Hill and Hupe, 1998). Over time, the need for a policy diminishes or ends which would also mean the end of implementation.
After the transition from military to civilian rule in 1999, the newly democratically elected civilian government showed more support for the Programme by creating the enabling law to back the Programme (Section 8.5.3) (PSP focus group, 2007). Sabatier, (1993) emphasises the importance of political support for any policy to meet implementation objectives, as decisions made by the political office holders can affect implementation because they control resources and can influence policies and laws which directly or indirectly affect implementation (Sabatier, 1993; Jordan, 1999). Phase II of the PSP waste collection policy had a much more positive political endorsement than Phase I (P1, 2007; p2, 2007; P4, 2008).

Phase II also saw an increased resource commitment in the State budget allowing the Policy Makers to pay the PSP practitioners directly, making the policy much more efficient in delivering the contracted services, and allowing the MoE Policy Makers to begin to see some real changes in the PSP Waste Collection Programme meeting policy objectives (P1, 2007; P3, 2007; P4, 2008; PSP focus group meeting, 2007).

9.6.6 Changes in the Socio-Economic conditions

Since the PSP Programme started in 1996, there have been three significant fuel price rises by the central government and numerous fuel scarcities both artificial and real, and fuel induced strikes from fuel suppliers and fuel transport workers have been reported (Mahtani, 2005; Editorial, 2008). The rise in fuel cost according to the federal government was because of the deficit in paying fuel importers which arose because all three refineries no longer function (Editorial, 2008). While the fuel price increases have affected the cost of delivering the service, it has not fundamentally undermined the service. The service is still being
delivered with more firms joining the current PSP practitioners with over 200 companies participating in 2007 (LAWMA, 2008). The change in fuel price has given rise to a call of the review of the remuneration paid to the PSP practitioners for services rendered (PSP/LAWMA meeting, 2007).

9.7 Problems experienced during the Implementation of Phase II

9.7.1 Corruption

The major problem faced by the implementation of Phase II is corruption. The presence of corrupt practices reduces the investment that can be committed to implementation thereby reducing its success rate (Fredriksson and Svensson, 2002; Waziri, 2008). In Phase II of the PSP Waste Collection Programme, the Policy Makers realized that in order to implement Phase II of the PSP Waste Collection Programme and make it run smoothly, it was imperative to include safeguards for fraud within PSP Waste Collection Programme (P1, 2007; Dept of sanitation, 2005).

Comment Box 4

Lagos state strives to be an exemplary state in terms of good governance. The state aims to develop a transparent and accessible government of the people for the people (Lagos state, 2003). ‘Lagos state pledges to promote good governance in Lagos state by running a transparent government for the people of the people.’ Gov Bola Tinubu. (Lagos state, 2003)

Governor Bola Tinubu is indicted by the EFCC for fraud and embezzlement of N9 billion of Lagos state money with other state governors. (Ujah and Ovuakporie, 2009).
Corruption has been a long standing problem, and public services in Nigeria and Lagos have struggled with this issue (Ojediran, 2009). It is unclear however if during the implementation of either phase of the PSP Waste Collection Programme whether the Policy Makers and their departments have engaged in any form of corruption. The corruption discussed in Section 9.4 was the only aspects of corruption the researcher was able to identify. For the top-down or bottom-up models of implementation to be effective in developing country cities like Lagos, it would need to include a method that would tackle the issue of corruption and inefficiency. As explained in Section 9.5.2 above, the effects of corruption can be a significant constraint on implementation.

9.7.2. Agency clashes

During the data collection period of this thesis, the MoE was in the process of handing over the PSP in its entirety to LA WMA as the implementing agency (P1, 2007; P2, 2007; P3, 2007). The transfer of the PSP Waste Collection Programme from the MoE to LA WMA is due to a condition levied by the World Bank on Lagos State for a loan/grant for the construction of a new sanitary landfill site (P1, 2007; P2, 2007). Unfortunately the World Bank condition effectively takes the domestic waste collection and transfer Programme from the agency that has been working to make the service viable, and handed it to an agency with a long track record of inefficiencies as discussed in Section 8.2 (World Bank, 1994).

The transfer of responsibility for managing the domestic waste PSP service to LA WMA introduces a conflict of policy. LA WMA actively promotes the use of communal bins to collect waste centrally as discussed in (Section 3.9.2) (P1, 2007; P3, 2007; LA WMA, 2006). While the use of communal bins in markets and commercial and industrial areas is
necessary due to the volume of waste and a need to centralize collection, in residential areas it is not so effective (P1, 2007; P2, 2007; P4, 2008) for two main reasons;

1) As LAWMA had been unable to ensure that collective bins were regularly emptied resulting in some of the illegal dumps (P1, 2007; P2, 2007; Informal sector group interview, 2008). LAWMA was unable at the time of data collection for this research to acquire the equipment for the removal and maintenance of the bins (P1, 2007) and often the bins have had to be emptied by the rubbish being tipped on to the floor and loaded manually on to a truck for the waste to be removed (Participant, structured survey, 2007; P1, 2007).

Comment box 5
Mafoluku resident, age 40, Husband and father of 2. Long time resident of Mafoluku. ‘I have always disposed of my waste myself. I just burn it in the back yard. Why do I have to pay the government?’
End User (2007)

2) The use of communal bins directly contravenes PSP waste collection and transfer principles and fundamentally undermined the policy (P1, 2007; P2, 2007; MoE, 2007). The use of communal bins means that demanding payments for door-to-door collection would not be possible in areas where bins are available, thereby reducing the funds that can be generated (P1, 2007; P2, 2007). During the data gathering process, it was found that some End Users would go to some lengths to avoid paying the PSP bill as seen in box 5 below.
9.8 Informal Sector

As discussed in previous Sections, the informal sector was the main provider of waste collection and transfer services in Lagos when there was a formal provision deficit. And they continue to be the main waste service providers in some parts of Lagos (P1, 2007; P2; 2007; Informal Sector Participants, 2007, structured survey, 2007). During the collection of the data in 2007, it was estimated that approximately 15,000 people were working in the informal waste collection sector in Lagos (Dept of Sanitation, 2007; P1, 2007; structured survey, 2007). The informal sector as discussed in Chapter 7 offers employment for some of the state’s most marginalized members (Klundert and Lardinois, 1995). Males dominate this particular field of informal waste services because of the physical requirements necessary to carry out the service on a daily basis (Informal Sector Participants, 2007; Informal Sector Participants’ group interview, 2008; Cointreau, 2000). The popularity of this sector grew as service providers because of the inefficiencies of formal waste collection and transfer services from the State (P1, 2007).

The informal waste collection sector has provided the End Users with an effective collection service for a prolonged period of time (Structured Interview, 2007), and served as a model for the creation of the PSP Waste Collection Programme Section 8.2 (P1, 2007). During Phase II of the PSP Waste Collection Programme, the sector was completely dismissed as a viable option due to the lack of waste centres within communities and the inability of the implementing agency LAWMA to collect waste from approved waste collection points (P1, 2007; P4, 2008; Dept of Sanitation, 2007).
9.8.1 Effects of the informal waste sector on the State

The informal private sector waste collection service which has provided a much needed service in the State has both advantages and disadvantages. These factors will be discussed below.

9.8.1.1 Advantages

1) The informal private sector filled the gap created by PSP Waste Collection Programme failure and provided a much needed waste collection service within the State (Structured interview participants, 2007)

2) The informal private waste collection service is the major supplier of materials for the recycling industry within Lagos State. For instance the informal private sector recover aluminium and plastics, providing secondary source materials for industry and reducing the pressure for new materials (Fahmi, 2005, informal sector group interview, 2008).

3) The service provided is tailor-made to each customer’s needs (structured interview survey, 2007; PSP group interview, 2007), particularly in low-income settlements where the use of large collection trucks is difficult.

4) The informal sector is highly effective at revenue collection from customers (P1, 2007; PSP group interview, 2007; informal waste sector participants, 2008; Fahmi, 2004)
9.8.1.2 Disadvantages

1) A disadvantage of the informal sector is the difficulty of transporting collected waste over long distances to transfer or disposal points (P1, 2007; structured interview survey participant, 2007). This led to widespread dumping on sidewalks, open plots, and waterways (Jones, 2003). Such illegally disposed waste blocks roads causing traffic as motorists swerve to avoid the waste. The waste blocks natural and artificial waterways causing floods and spreading water borne diseases and the waste remaining within communities poses health hazards (P1, 2007; P2, 2007; P4, 2005) Kromfmacher, (1997) states that illegal dumped waste in some sub-Saharan cities accounts for some of the health hazards found in those areas.

2) A second problem is the monitoring of large numbers of individual operators. Although an initiative was made 1996 by LAWMA to encourage the cart-pushers to organize into cooperatives or collectives the initiative was not welcomed by the cart-pushers (P1, 2007). The main reason was mistrust between themselves and an unwillingness to invest in a co-operative run by themselves (informal waste sector group interview 1 and 2, 2008).

The aim was that the cart-pushers themselves would act as self assigned monitors of their activities, in a sense, they would police themselves. They would monitor each other to curb disposal of waste in illegal areas (Informal sector group interview, 2008). This supervision which was claimed by the cart-pushers to be on-going was not sufficient to curb the problem of illegal dumping as evidence of illegal dumping
can still be found throughout the State (see pictures 9.2, 9.3 and 9.4 below). Formal organization of cart-pushers would aid in the monitoring of their activities and their regulation, and might give them some legitimacy (Fahmi, 2005; Klund and Lundert, 1996).

Picture 9.3: Illegal dumpsite

3) The activity of the private waste collection sector adds to the Policy Makers’ annual budget in three ways which are;

i) The bill for clearing the drains,

ii) The bill for the implementing agency to collect waste and

iii) The bill to have the waste mechanically transported from the area (P1, 2007).
The budgetary allocation for clearing away the waste from illegal dumpsites has further discouraged the MoE from allowing the informal waste collection sector to continue to operate with Lagos State (P1, 2007; P3, 2007, P4, 2005). Section 9.8. below suggests ways that it may be possible to include the informal waste sector as active participants within the waste collection and transfer sector.

A table has been created below to summarise the advantages and disadvantages of the informal waste sector operations in Lagos waste services.

<table>
<thead>
<tr>
<th>No</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Collect waste from door to door regularly</td>
<td>Waste remains largely within the community it was collected</td>
</tr>
<tr>
<td>2</td>
<td>Very adaptable to consumers needs</td>
<td>Dump waste where accessible as most legal dumpsites are a distance from their areas of operation</td>
</tr>
<tr>
<td>3</td>
<td>The equipment used is low maintenance, low cost and durable</td>
<td>Indiscriminate dumping of waste leads to flooding, polluting water ways and traffic congestion depending on where the waste is dumped</td>
</tr>
<tr>
<td>4</td>
<td>Needs very little direction</td>
<td>Difficult to organize and monitor on a large scale in Lagos</td>
</tr>
<tr>
<td>5</td>
<td>Very efficient at collecting revenue</td>
<td>Difficult to hold law breakers in this field accountable</td>
</tr>
<tr>
<td>6</td>
<td>Recover recyclates</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Employs approximately 15,000 people, many with limited education</td>
<td>Cost the government valuable resources to clear illegal dumpsites</td>
</tr>
</tbody>
</table>

The informal private waste collection sector forms the bottom of the waste hierarchy in Lagos State. This sector has a proven track record of service delivery and revenue collection. This sector’s negative effect on the Lagos State urban environment is also noted, but key problems remain poor coordination and poor integration into the wider waste
management system. The key question therefore is how to integrate the sector, to ensure accountability and address some of the problems of its operation?

For the sector to prosper there would have to be fundamental changes to the way it currently operates. Informal sector operators are unlikely, even if coordinated, to be able to buy trucks and operate contractually (Informal sector group interview, 2008), but inclusion of the informal sector in municipal services delivery can often take place through changes in how the formal and informal sector relate to each other (Fahmi, 2005).

Picture 9.2: An illegal dump set on fire on open plots of land in Lekki (2008)
9.8.2 Methods of including the informal Waste Collection Sector

During the fieldwork, the Policy Makers indicated that some methods of including the informal waste collection sector were discussed (P1, 2007). Three options were being considered as follows;

1) Co-operatives:

The informal private sector were asked by the Policy Makers to create an association which would become involved in buying vehicles for collecting waste which would allow them to become formal PSP waste collectors (P1, 2007; P2, 2007; P4, 2008; MoE, 2007). This would ease the monitoring problem of informal waste collection services as discussed in Section 9.7.1. It would also ensure the waste did not end up in illegal dumps but at formal designated disposal sites (P1, 2007). The informal sector rejected this option outright, because according to them, the issue of
who to trust with their funds was a problem (Informal group interview 1, 2008; Informal sector group interview 2; Informal sector participant 1, 2007). Furthermore, the cost of the vehicles is high and the returns from the pooled resources would be low, compared to investment per person which would include man power and finances. Also the running costs of vehicles are increasing with frequent fuel price rises and fuel scarcities (see Section 9.5.2). However, associations registered with the MoE or LAWMA could increase accountability for the operation of the informal waste collection sector.

2) Collaboration with PSPs:

The second option offered to the informal sector waste collectors by the Policy Makers was for them to work for the PSP practitioners as supervisors and loaders, with the government negotiating a pay scale on their behalf (P1, 2007; P2, 2007; Dept of Sanitation, 2007). This would ensure that the cart-pushers had a guaranteed income, and would ease the waste collection and transport (P1, 2007). The disadvantage for the cart-pushers would be the loss of their self employed status (Informal private sector group interview, 2008).

However, participants in the group interviews claimed that the Informal Sector Participants who worked for the PSP practitioners were a not paid their full wages, or not paid at all (Informal Sector Participants group interview 1 & 2, 2007). Fahmi (2005) observes that in some cases where informal sector waste collectors have gone to work for formal waste collection service providers, the informal service providers
have witnessed a significant drop in income (Fahmi, 2005). The lack of any kind of association or assistance from a formal employment tribunal has meant the Informal Sector Participants are not encouraged to join the PSPs (Informal sector group interview 1, 2008; Informal sector group interview 2, 2008).

3) *Truck hire:*

The third option given to the informal sector was for them to hire trucks on a daily basis (P1, 2007). The sector would pay the truck owner daily remuneration for the service and the truck owner would be allowed to dump the waste at the formal designated sites of disposal, without further remuneration from the government (P1, 2007; P2, 2007). This method had two advantages. First, the informal sector could continue operating in its normal fashion while ensuring the waste reaches its designated destination (P1, 2007; Dept of Sanitation, 2007). Second, the MoE would not have to fund this part of the service (P3, 2007). The main disadvantage of this proposal is there could be a repeat of the alleged illegal dumping and fly tipping observed by PSP practitioners in Phase I. The informal sector agreed to this proposal, but the proposal was not progressed as the informal sector would only agree to pay the truck owner N1000 (£4) per truck load, which was not viable for their operations (P1, 2007).
9.8.3 PSP Truckers

This thesis re-proposes the third option for including the informal private sector into the PSP Waste Collection Programme - as truckers. The idea of using designated truckers should not have been so readily dismissed. It is a viable option for the delivery of waste collection and transfer services for the State. The resources flow from this new waste sector would be still be collected by the informal waste collectors. The Policy Makers would then apply a flat tax directly to the informal waste practitioners, as with the PSP practitioners, to ensure the government recovers some of the revenue spent on this sector. The truckers should then be paid by the Policy Makers as opposed to the informal private sector for services rendered. This service would be available in designated areas, and would also allow the formal PSP Contractors to act as truckers as their remuneration would still be guaranteed. This proposal has five advantages:

- Waste would reach its designated disposal point owners would not be paid unless the vehicles reach the designated formal disposal point;

- MoE bills for collecting illegally dumped waste would be reduced;

- The Policy Makers would retain an effective waste collection operation especially in areas difficult to access by vehicle; and

- Monitoring of the sector would be more manageable than previously;
The groups could be organized in a manner that allows areas (urban and rural areas) which are most in need of informal services (i.e. for reasons of poor infrastructure like roads) to access waste collection services that removes waste from the End Users immediate environment to formal designated disposal points.

The disadvantage of this proposal is there is no guarantee the informal private sector will use this service if offered, however, it would allow the Policy Makers to enlist the help of households to monitor the service and any informal dumping of waste in their neighbourhoods. The proposal would be difficult to organize; trucks would need to have an identifier, for example, a colour code especially for the informal private sector use. Collection would also be a problem as there are currently no waste collection centres within the State and the vehicles would have to meet the informal waste practitioners at specific places and specific times to ensure a continuous service.

9.9 Change of the informal sector role

Waste management in Lagos state is changing rapidly on a daily basis. The current climate of waste collection is hostile towards the informal sector. The informal sector is a necessary part of a developing country city like Lagos with large populations of uneducated unemployed working population, but the informal waste collectors role may need to be redefined. Physical restraints stop the informal sector from providing a more efficient collection service. However, the informal sector is responsible for almost 90% of the materials recovery which takes place in Lagos. A forum could be created by the Policy Makers to aid the informal waste collectors to materials recovery. Venues across the state
could be established where members of the manufacturing industry could meet the informal materials recovery sector for trade. The waste collected by the informal sector would become too valuable to dump which would reduce the problem of monitoring for the Policy Makers and the informal sector would remain self reliant.

9.10 Conclusion

In applying implementation debates to Phase II of the PSP waste collection programme, some factors begin to emerge in regards to the application of implementation debates. It is observed that key factors which are present in some developing country cities which affect the implementation of public policy are not present in the countries where the implementation debates are formed. This presents a hindrance to the debate applicability. For the debates to be applicable, it would be necessary to make modifications to them which would contend with the factors found within developing country cities like Lagos.

The change in attitude of the Policy Makers it was observed, from elected dictators to elected officials was demonstrated by their willingness to engage with the End Users on a policy issue created a feature unseen before in the implementation of policy in Lagos. However, factors still remain within the implementation process in Lagos such as corruption on a large scale which requires proper measures to remove or mitigate them from the implementation process.

The presence of a large informal sector within the service delivery that is better known to the End Users than the formal service providers also presents an implementation
problem. This sector is not catered for either by the top-down school of thought as they are not a formal implementation agency or private sector company, or by the bottom-up debate for the same reason. But as seen in Chapter 7, 8 and 9 above, they are not only valid service providers which cater for large amounts of unskilled worker, they are in many areas of developing country cities the only service providers for waste collection.

The current democratic dispensation within cities like Lagos has also meant a more active if not necessarily vocal End User group. This group is no longer afraid of the government or Policy Makers and exercises its displeasure through non-participation with the policy. As urban public policy is usually targeted at this group, it is important that steps are taken to include them within the implementation process, as they give the implementation process a higher chance of meeting policy goals.

For implementation debates to be relevant to policy implementation in developing country cities like Lagos the theoretical framework needs to include a means of accommodating these three factors poor governance, large informal sector and corruption. Any theory which does not consider these factors will be inapplicable in developing country cities like Lagos.

Implementation of Phase II of the PSP Programme has been work in progress for MoE Policy Makers, with evolving experience of implementation increasing its effectiveness. While Phase I begun with the military era, where implementation was carried out through decrees which left no room for outside input. Phase II has been implemented with more emphasis on flexibility and inclusion in their approach to the implementation of the PSP Programme. In Phase II of the PSP Programme, the Policy Makers were open to engaging
with a wider range of participants. They showed a willingness to learn from their mistakes and took proactive steps to improve implementation.

Phase II of the PSP Waste Collection Programme was different to Phase I in one critical way which made its implementation and outcome differ from that of Phase I. A key difference was the financial organisation of the service, although this was not its only defining factor. In Phase II of the PSP Waste Collection Programme, implementation which mirrored policy objectives (cleaner urban environment) was the overriding priority for the Policy Makers. The investment of capital (manpower and resources) improved the services provided by the private formal waste collectors and allowed this section of the economy to grow. The PSP Programme while not still functioning at the standard desired by Policy Makers is beginning to improve in efficiency and reach.

Phase II of the PSP Programme was more inclusive of the different stakeholders that the policy affected, as opposed to Phase I where the policy was made by the Policy Makers to be implemented with little input from either implementing party or the End Users who were supposed to pay for the service. Phase II included all stakeholders including the informal private sector from its inception, so that all stakeholders’ identified with and took personal ownership of, Phase II of the PSP Programme.

Phase II of the PSP waste collection policy still victimizes the informal waste collectors, by excluding them from recognised involvement in service provision, with a significant potential impact on their livelihoods. This is mainly due to the alleged cost of cleaning up waste that results from their activities. Some changes to the PSP waste collection policy discussed above may enable the informal sector to continue to function as part of the
waste services sector within the State. From the evidence gathered while in Lagos, lack of investment in this sector either by the MoE or the informal sector themselves is the greatest stumbling block to any real progress in integrating the formal and informal sectors. The real problem is a lack of willpower on both sides. It is difficult to negotiate with individuals unless there is a political imperative for them to work together which in this case seems to be lacking. Investment would be needed by the MoE and a transfer infrastructure accessible to the informal waste collection sector, and from the informal operators, for example: through pooling resources to provide equipment or infrastructure. A preferential micro-finance policy would probably have to be agreed to enable this scenario.

Implementation in Phase II of the PSP Programme was better improved compared to Phase I of the programme. Some predominant issues presented themselves in governance and implementation. The first is when the targeted End Users have a profound distrust of government especially after a dictatorship; and this distrust must be addressed before implementation can occur. As observed in the implementation of Phase II, the Policy Makers and the politicians had to include the End Users before implementation could gain momentum.

A second observation is that if implementation debates are to be applicable in a setting like Lagos, they must include safeguards for corruption at all levels of implementation and engage the End Users. While an increase in resources for implementation is essential, it will be pointless if corruption is not reduced or eliminated from the implementation process.

A third observation which was observed during the collection of data on Phase II of the PSP Programme was availability of very little qualitative data. The reason for this is
unknown as it was expected that with the measures put into Phase II, this information would be more readily available. The missing data would have been able to provide a wider perspective on the progress of Phase II of the PSP Programme.

The aim of the PSP Programme is to create efficiencies in services provision to the End Users and cost to the Policy Makers. The quantitative data would give an instant idea on how much investment has been made by the PSP Contractors into the field of waste management and transfer compared to how much the Policy Makers had invested in the past into the sector. It would also give the information of how much the End Users themselves were investing in the management of their waste. Almost 25% of End Users were paying their PSP waste collection bills, the question of which 25% and how much has been invested could be answered by the data. Also, the information would help the Policy Makers to know what percentage of the End Users need to pay their PSP waste bill for the service to break even and for it to make a profit. How much the profit could be and which other sector of waste management the waste income could be invested. Finally, adequate quantitative records would also help them in better monitoring their finances and reduce the incidence of corruption within the PSP Programme.
10. Conclusions

This dissertation started with a hypothesis that public policy implementation debates in developed western countries are not applicable to some developing country cities. In order to prove or disprove this hypothesis, this thesis selected the Lagos state Private Sector Participation waste collection programme as a test case. The policy was chosen because waste management had a long history in Lagos state. This policy had been created to revolutionize the collection and transfer of waste within the State. The policy had been implemented since 1996 with a review in 2004. Considering the past failures of the State to tackle its waste collection problem, it was the ideal test case for the thesis hypothesis.

This thesis looked at the theories put forward by the top-down and bottom-up schools of thought on policy implementation. To prove or disprove the thesis hypothesis, it then looked at the core factors within the PSP waste collection programme which included governance type available in the State, the informal sector operation within the waste collection management field in developing country cities, the PPP models adopted by policy-makers, waste management history in Lagos state and waste management in general. The literature on these factors was then discussed within Chapters 3-7 to understand how they could affect implementation within Lagos state. Empirical data was then collected from different actors within waste management who are directly linked to the PSP waste collection programme. This formed the basis of the discussion within the empirical Chapters 8 and 9. The findings of this thesis are discussed within Chapter 10.

In researching this thesis, field work had to be carried out in the chosen case study area. A few problems came up as discussed in Section 2.6 in regards to access to End Users
(households), which meant the data collection process needed to be modified to accommodate this problem. This meant that the data collected from the End Users did not fully cover the demographic profile of the State, which restricted the usefulness of the End User data collected. Secondly, during the interviews with the key policy makers, there were frequent interruptions however; this did not affect the quality of the information collected from this group.

As the final Chapter of the thesis, Chapter 10 will look at all that has been learnt in the previous Chapters and evaluate how they have informed the hypothesis put forward in Section 2.11 which is current implementation debates are not applicable in developing country cities.

10.1 Implementation

The research carried out for this thesis found that there are certain characteristics within some developing country cities, as illustrated by the case study of Lagos State, which affect implementation directly or indirectly. For implementation to be effective in meeting policy objectives, these characteristics must be considered within the creation and implementation of public policy within these contexts.

In the creation of public policy implementation theory, emphasis is placed on the Policy Makers wanting to make a difference in the arena of public need that they aim to address. Pressman and Wildavsky (1984) emphasize the Policy Makers need ‘for Oakland not to riot due to rising ethnic tensions’. The case studied by Pressman and Wildavsky had all the
elements which many implementation theorists take for granted within the creation of policy and its implementation, including adequate resources, skills and capacity; adequate causal theory, effective leadership and a dedicated and capable agency to ensure that the policy is carried out and implementation can meet policy goals. While the Oakland case study failed to achieve policy goals, major lessons were learnt from the study, with Pressman and Wildavsky emerging as the founding fathers of implementation studies. In 1986, Mazmanian and Sabatier use the same principles to create an applicable framework for top-down implementation policy. The bottom-up school of thought uses the same variant but from the perspective of the street level bureaucrats to explain implementation within the public policy realm.

As implementation studies have developed over time, they have absorbed other theories such as game theory (Bardach, 1977), administrative theory (Matland, 1995) and network theory (Hjern and Hull, 1982). What is apparent however is implementation theory a currently outlined in the literature is not directly applicable to all types of policy implementation, even within the countries where the theories were developed. Whilst the overarching principles are the same, modifications in practice are required for each policy being implemented (O'Toole, 2000).

The constant that can be found within most implementation studies is the similarity of geographies and backgrounds. Most implementation studies are carried out in Western Europe and Northern America. The area for the case study which was chosen to test implementation theory is one which is not just different from it in geography but also in governance type and style.
This thesis therefore tests the implementation in the very differing context of a developing country urban area. The case study of Lagos state had two characteristics which made it very suitable for testing the theories. The first is that choosing one of the schools of thought to test would not be difficult due to the institutional structure for waste management and history of the policy within the State. The second reason was that characteristics existed within the chosen policy area and geography that would allow adequate testing of theory transfer from one geographic policy arena to another.

10.2 Character differences in chosen geographic area

The main character difference between the geographic areas where implementation is usually implemented is governance and leadership. A criticism of the top-down model is that it fails to recognize political rhetoric or ambiguity in its creation of policy and implementation (Scofield, 2001; Kendal, 2006; Harman, 2005). In the geographic area that the policy was tested in, bad governance was apparent especially in Phase I of the PSP Programme, the political rhetoric was ambiguous at best, the leadership available for the programme lacked the experience to implement the PSP Programme and while there was no actual legislation, political power was used to restrict the scale of the PSP Programme (Section 8.5.3).

A second criticism of the top-down model is its emphasis on the rational approach to policy making and implementation. When certain factors are put in place, then policy implementation should mirror policy goals (Winter, 1986). In the area chosen for the study,
rational approach to policy making is not assured from either the Policy Makers or the implementers (Chapter 8).

Thirdly, the top-down theorists are accused of not giving more of a role within the policy and implementation to the street level bureaucrats who are usually assumed to have the experience to implement policy (Lipsky, 1980). The geographic area chosen, the street level bureaucrats in Lagos – the PSP Contractors - were learning during the provision of the service. For this reason, they could not be involved within the policy creation process even if they had been invited to participate. In Phase I of the PSP Programme, they found it difficult to establish adequate working relationships with the End Users, which further contributed to the break down of the service.

Fourth, top-down theorists are accused of an over-dependence on legislation for policy implementation while the bottom-upper proponents are accused of down playing or even disregarding the role of legislation (Scofield, 2001). In the area being studied, the creation of legislation can often be ambiguous and without actually meeting policy needs and at other times, can be very difficult to enforce on a large scale especially when the End Users choose to ignore policy on a large scale.

Finally, in a developed country setting, many outside factors either at the Policy Maker level or amongst street level bureaucrats can be identified or controlled within the policy creation and implementation process. In the chosen area of study, there exists a large informal sector which had filled the gap of formal provision of waste services left by the formal provision of waste collection and transfer services. This group in the countries were implementation debates are developed would be considered illegal. However, informal sector
providers (the cart-pushers) formed the only source of waste collection and transfer services within Lagos over a prolonged period of time. This informal sector had been able to provide the End Users prior and during Phase I with a far more effective service than formal providers. They were able to set a precedent for the services which the End Users expect to receive. Implementation debates for a State like Lagos would have to consider the contribution of this sector and its potential role within implementation of public policy.

10.3 What is missing in the theory

The nature of the PSP Programme as a policy is relatively linear from its policy creation stage till the service is provided to the End User. The top-down theory of implementation should have been sufficient in solving the implementation problems which occurred because of the centralized nature of the government in Lagos state. However, for the top-down theory of implementation to be directly applicable to the policy in question, and similar policies in Lagos state, this research indicates that some additions need to be made to the top-down theory set out by Mazmanian and Sabatier (1989). These are discussed below under seven headings

1) Leadership
2) Informal sector contribution
3) Clear policy
4) Local factors
5) End User inclusion

6) Governance type

7) Corruption

10.3.1 Leadership:

Leadership is the strongest factor in the implementation of any policy. Leadership is not mentioned anywhere within the Mazmanian and Sabatier (1989) model. The role of leadership can be very complex. In the Lagos scenario, the Policy Makers were the innovators in the waste collection and transfer arena (Section 8.4). However, at the start of the pilot in Phase I of the PSP Programme, they were ill-equipped to deal with the nature of the implementation challenges. Perhaps more effective leadership on the part of the Policy Makers would have effected the provision of better resources for the implementation of Phase I of the PSP Programme.

The lack of clear leadership affected how the End Users perceived the PSP Programme, contributing further to the lack of achievement of policy goals. In the context of Lagos state, if a type of policy has not been implemented before, it could be pertinent for the leaders to receive more training in order to increase their leadership ability. It should probably be standard practice in developing country cities such as Lagos that in all areas of policy innovation, training prior to the start of implementation should be given to the Policy Makers that both equips them for the task, and also continually challenges them to be dynamic in their thought process, innovative and pragmatic.
10.3.2 Clear Policy

It is assumed that within a single institution creating a policy and implementing it, there will not be policy clashes as potential clashes are evaluated and removed or mitigated. Pressman and Wildavsky (1984) highlight policy clashes with other agencies as a hindrance of policy implementation. However, as discussed in Chapters 8 and 9, LAWMA the implementation agency of the MoE, had a conflicting policy to the PSP Programme (Section 8.5.4-3). The PSP Programme required door-to-door collection of waste, paid for monthly, while the LAWMA policy was for the provision of communal bins at central points collected weekly and provided free of charge. These two policies conflicted and hindered the progress of the PSP Programme. It is necessary for the implementation theory to address possible conflict of interest within institutions.

10.3.3 Local factors

The local factors within any city have a very strong influence on how policy is implemented and indeed received within it. Local factors are not explicitly mentioned by Mazmanian and Sabatier (1989) it is not known why they have been excluded from the conceptual framework. Perhaps it is because the authors expect that local factors will be adequately studied prior to the execution of implementation and the result of the study included within the implementation of study. As observed in the implementation of Phase I of the PSP Programme, local factors were not considered, only the specific problem the policy makers were trying to solve.
Local factors will vary from city to city, and the variance in these local factors will also affect how the End Users of policy react to policy or participate within implementation. In the Lagos state context, at the start of the policy, there was an almost complete break down of formal service provision as discussed in Chapter 8. This breakdown left a void that was filled by the informal sector. The informal sector was able to set a standard of service and a price which the End Users expected any other service provider (especially formal providers with better equipment) to be able to compete or at least provide the same level of service at the same price.

Local circumstances can have a clear effect on policy implementation. This requires the Policy Makers to be able to engage directly with the End Users as discussed in Chapter 9. This ability of the Policy Makers to engage with End Users of policy brings the policy closer to the group policy is supposed to affect and can be very effective in transcending local factors.

The ability of Policy Makers to mitigate local factors can also increase their ability to generate political support for their policy. Policies which are most likely to be popular amongst voters will get the most resources for implementation. The Policy Makers in Phase II (Section 9.3.2) of the PSP Programme were able to generate local and political support for their policy. Their increased participation (lobbying politicians and interests groups) within the implementation of the PSP Programme in Phase II from their participation in Phase I increased the public acceptability of the programme and increased participation.

The Mazmanian and Sabatier (1989), also takes for granted that if implementation is carried out directly by the public sector or indirectly through a contracted third party, the skills and man power are available for policy implementation. As seen in Chapter 8, this is
not always the case. In the formal provision of waste collection and transfer services in Lagos, existing businesses did not have the expertise to deliver waste collection and transfer services. The Policy Makers and their implementing agency did not have the expertise to implement the policy. These two factors combined to not only make the PSP Programme unworkable in many areas, but also unpopular within the areas that the service was provided. The lack of experience of the private sector meant for the most part that the service was irregular. The lack of experience of the Policy Makers meant there was no monitoring and the PSP Contractors were able to engage in fly tipping.

10.3.4 End User inclusion

The Mazmanian and Sabatier (1989) model does not include the End User within its model. However, as demonstrated in Chapters 8 and 9, in policies like the PSP Programme where End Users are expected to fund policy directly or indirectly, their inclusion in the implementation process is critical. It is possibly more important to engage this group in a city like Lagos with a weak civil society. This is mainly because their displeasure with the policy will be shown through boycotting the policy implementation. If civil society were more established, it would be easier and faster for their displeasure to be communicated to the Policy Makers who could then take steps to accommodate their complaints. However a lack of or weakened civil society or media pressure means slower response to End User complaints in regards to the policy.

10.3.5 Governance type
In researching for this thesis, it became apparent that both government structures and the wider governance context of developing country cities such as Lagos have a significant impact on the implementation of public policy. This pattern is more noticeable within some Sub-Saharan African States. Cities such as Lagos are at a developmental stage in their democratic growth (Baker, 1998) which gives them unique characteristics.

From the literature, it was found that these cities have what is known as pseudo or simulated democracies, these are democracies which are nominally freely elected by people but with strong undertones of dictatorship (Section 5.3; Section 8.5.3). The trend found within the literature was of a change from formal dictatorship governments to single party rule - rulers simply changed their titles from dictators to elected leaders – which meant that the power structures within government remained relatively unchanged. The proposed devolution which should have occurred with the change to democratically elected governments only happened on paper, with power remaining firmly with the centre. They also feature strong executive arms with weak or non-existent legislative sections (Section 5.7; Olowu and Smoke, 1992).

The form of governance practised by policy makers has a significant impact on the way in which it creates policies and how it implements its policies. It was seen within the Lagos context in Phase I of the policy that the Policy Makers attempt to lay down laws with no input from, or understanding of the needs of, End Users, and without providing End Users with any information on their intended laws which meant that the End Users did not participate and the policy was ineffective. The change however in Phase II of an open, more inclusive form of governance saw increased participation from the End Users and implementation beginning to mirror policy goals. The Policy Makers had to change the way
in which they interacted with the End Users, and also their relations with PSP Contractors to reduce/remove the incidence of corruption during Phase II of the programme.

The trend of dictatorship governments also gave rise to a weakened civil society, as a result of embezzlement of funds and legislative bullying (Bratton 1989, Kasfir 1998; Section 5.4). The weakening of the civil society has meant weakening of the voice of the End Users (Bratton 1989, Carbone 2005, Mule 2001).

Nigeria, and by extension Lagos can be classified (during the period of data gathering for this research) as a pseudo democracy based on the description in Section 5.6.1, having moved from one dictator to an elected ex-dictator. The methods of policy creation within pseudo democracies are reflected within their governance types. This usually involves the creation of policy, seldom without input from the main actors involved in the implementation or receipt of policy (Olowu, 1990; Smith, 1996; Section 5.7). There is a lack of transparency which moves from one political regime to the next and over time has built the basis for a lack of trust for the governmental by the End Users/civil society.

The implementation school of thought which best suits this form of government is the top-down school of thought. The Policy Makers can make their policy efficiently without fear of reprisal. They are also able to use their legislative powers to remove any obstacle (Section 2.3; Bardach, 1977). However, some of the characteristics of this form of government/democracy would hinder the implementation of the policy. The predominant characteristic of this form of governance is corruption. Corruption has been found to be prevalent in most pseudo democracies (Section 5.6). The second characteristic prevalent
within this form of government is a lack of skilled or committed man power. These two characteristics greatly affect the ability of street level bureaucrats to implement public policy with pseudo democratic States.

It was found in Chapters 8 and 9, that even though the End Users had no voice in the creation and implementation of policy within Lagos State, they are still able to make their displeasure felt (Section 8.5.5). It has been found that while dictatorship governments have attempted to emancipate this group, the End Users are still able to assert their influence over policy implementation. The policy implementation debates rarely include End Users within their arguments other than as a measure of implementation or how interactions with End Users can be influenced by the street level bureaucrats who interact within them directly. Within contexts like Lagos, this group needs to be considered independently as their actions can have a significant influence on the outcome of public policy.

10.3.6 Corruption

Corruption is not featured in either the top-down or bottom-up debates on policy implementation. It is however, a prevailing factor within policy creation and implementation in developing country cities like Lagos. It should be said that corruption is a variable factor that might not necessarily affect all policy spheres in a city like Lagos. However because of its prevalence within policy and implementation, it would be pertinent for the implementation schools of thought to include the issue of corruption, and consider how to combat it or reduce its occurrence in cities such as Lagos. As seen in Chapters 8 and 9, the occurrence of corruption within policy implementation costs scarce resources and hinders the progress of implementation.
10.3.7 Informal sector

Implementation debates do not mention the informal sector. This is mainly because this sector is largely illegal in developed western countries. As discussed in Chapters 7, 8 and 9, they form a significant part of services delivery in some developing country cities. The implementation debates need to include this sector of service providers within their debates in the context of developing country cities. As seen in Chapter 8, they could be the most skilled practitioners within the arena of service provision. Another reason to include them is that they also form part of the fabric of the urban society in developing country cities and their needs also need to be taken into consideration by policy makers. As seen in Section 7.5.2 when the Policy Makers included the Coopamare in their policy, they were able to empower the group and negotiate a higher level of service delivery from them. As seen in Section 7.5.3, the group can also provide a more cost effective service for the policy makers if they are given the opportunity compared to formal delivery channels. This group usually form part of the most disadvantaged members of society and should be considered during the policy making process.

10.4 Implications for the thesis hypothesis

This thesis started out with the hypothesis that:

*Current debates on implementation take insufficient account of the complexity of policy implementation in developing country cities and the complex interactions between state, society and the private sector, particularly in contexts where large informal sector service*
The hypothesis above put forward by this thesis has been largely verified. The current theories as they are formulated do not address the complexity of developing country cities. That is not to say however that they are completely inapplicable to developing country cities. As has been observed within the empirical Chapters, the top-down models of implementation are currently the most applicable debates to developing country city contexts. However, as discussed above, significant inclusions have to be made to the current theories and debates in order to make them directly applicable to developing country cities.

The case study, undertaken, has shown within the waste collection and transfer policy arena that Policy Makers are the innovators of change. The top-down model as discussed above however does not take into consideration the potential fallibility of the innovators themselves, nor the governance structures in which they operate and their skill level in implementing policies such as the PSP Programme. The top-down models also fail to allow for a possible lack of resources in implementing policies for essential public services which include and are not limited to financial, material and man power resources.

The End Users have a strong practical veto on policies implemented on their behalf, and their needs and views must be included for their participation within policy. They are currently not included within the top-down models of implementation. The End Users were largely the determining factor in how Phase II of the Programme was structured. Regardless of the type of service that PSP Contractors provided, the End Users would not have been willing to pay for the new service without their involvement in policy development, incentives and a major public awareness programme, because previous State provision had
been free and because the cost of the new service was much higher charged by the informal sector.

As observed within the case study in Lagos State, leadership is the most important factor within policy implementation. Strong leadership coupled with good governance practices will improve the ability of implementation to meet policy goals. While success is still not guaranteed within the implementation process, a better outcome of the process can be achieved compared to what was formerly available.

The implementation challenges in developing countries which are not normally found in developed countries include poor governance, inadequate leadership skills, a large informal sector, inadequate resources, skilled man power and a weakened civil society. These challenges continue to impact on the Policy Makers and street level bureaucrats' ability to effectively implement public policy. These challenges do not however mean that the implementation of policy is impossible; it does however mean that the approach to the implementation of policy will need to be modified to achieve a favourable result in the implementation of policy.

10.5 Conclusion

To finalize, this thesis has found that the integration of issues of leadership and culture within implementation debates would go further in the applicability of debates on policy implementation to developing country cities such as Lagos. Issues such as the poverty
context, leadership characteristics, End User behaviour, and types of services common in
developing country cities need to be further researched to enhance understanding of their role
in hindering effective policy implementation.

For there to be a claim of success in the case study, the policy would need to be
working efficiently in most areas designated for the policy to be implemented. A further
study is required to understand the different levels of actors who affect implementation
especially the leaders who create policy and implement it. The question of how do leaders
implement a policy on an essential public policy that they have never implemented before?
How do they know they can meet End User demands and how quickly does policy have to be
reviewed to stop it from failing?
Bibliography


Adefuye, O. A. 2005. *‘Lagos State Governors’*. Verbal to: O.A. Received 14-04005.


Ahianta, A. 2004b. Again, Lagos Restrategises for Battle Against Waste. *This day*.


Aworti, N. 2004. Getting the Fundamentals Wrong: Woes of


Baird Tom 2008. The positive and punitive power of CMAG. *Commonwealth*.


BBC News, 2007 ‘Nigerian VP 'cannot be removed’. BBC News


BBC News. 2002b. Mugabe orders white farmers to leave. BBC News

BBC News. 2007. Nigerian VP cannot be removed. BBC News


Bureau of African Affairs. 2005. *Background Note: Cote D'Ivoire* [Online]. US Department of State. Available at:

Business Conference, 2008, ‘*Breakfast with the President*’, Nigeria


Common Wealth 1996 *‘Common wealth talks with Nigeria’*


Consortium for International Activities, Inc. (MUCIA). /USAID.


Epia, O. 2003. I’ll restore lost glory to Lagos. This Day.


Fabian, M. 2004. Refuse collectors, govt disagree. *This day.*


Fashanu, D., 2003 ‘Funsho Williams and his agenda for Lagos


Furedy, C. 1990. 'Social Aspects of Solid Waste Recovery in Asian cities' Environmental sanitation review, no 30


Kaseva, M., and Mbuligwe, S. 2005 ‘Appraisal of solid waste collection following private sector involvement in Dar es Salaam city, Tanzania’ Habitat International Volume 29(2), Pg 353-366


Klundert, A., and Lardinois, I, 1995. *Community and Private (Formal and Informal) Sector in Municipal Solid Waste Management in Developing Countries,* Background paper for the UMP workshop in Inttigen


Komlos, J. 1989. Thinking about the industrial


Lagos State, 2002, *‘Lagos State Administrative Areas’* Lagos state

Lagos State, 2006, *‘Lagos State Local Government Areas’*, Lagos State


Lane, J.-E. 2001. *From Long Term to Short Term Contracts*. Public administration and development


LAWMA 2006. About LAWMA. LAWMA.


Long, E. And Franklin, A., 2004 ‘The paradox of implementing the government performance and results act: Top-down direction for bottom up implementation’, Public administration and review, vol 64(3) pg 309-19


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Implementation: How Great Expectations in Washington are Dashed in Oakland. 3 ed. 


Momodu, S. 2003. Project clean up Lagos for launch. This day.
Momodu, S. 2004. Pedro explains the environmental initiative. *This day.*


Muse, 2007, ‘Errors, miscalculations, omissions in Lagos census figures’ Nigerian muse


Nas, J. M. P., and Jaffe, R. 2004 ‘*Informal Waste Management*’ Environmental, development and sustainability, vol 6(3), pg 337-353


Nigeria, 1999 ‘Nigerian Federal constitution (1999), Section 143-144’ Nigeria


Njoku, E. 2007. Transforming Nigeria and leadership, total war on corruption.


Ogawa, H. 1995. Sustainable Solid Waste Management

Ogawa, H., 2005 ‘Sustainable Solid Waste Management in Developing Country Cities’ Unpublished

Ogbonnaya, R. Haruna, G. Oyekanmi, T., 2004, ‘Lagos: A metropolis in decay’ This day

Ogu, V. 2000 ‘Private Sector Participation in Municipal Waste Management in Benin City, Nigeria’, Environment and Urbanization vol. 12( 2) pg 103-117


Ogungbamilla, B., ‘Interview’;


Olouw, D., and Smoke, P. 2006 ‘Public Sector Reform: Capacity Challenge to Imporove Services’ Basingstoke, palgrave macmillian


Rasaki, R., 1988, 'Managing Metropolitan Lagos' Ota, Africa leadership forum


Sabatier (1975) *Social movements and regulatory agencies*, 'Policy sciences 8 : 301-342


Sahara reporters 2009, *Mohammed Buba Marwa delivered the letter bomb that Killed Dele Giwa Dr. Taiyemiwo Ogunade*. Sahara reporters


Weatherly, R., And Lipsky, M., 1977 ‘Street-level bureaucrats and institutional innovation: Implementing special education reform,’ Havard educational review vol 47 pg 170-96

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Wollam, T. 2005 'Sustainable Waste Disposal: Case Study of Cardiff', Thesis

World Bank 2009 'Nigeria: Urban Development Statistics'


Appendix 1

Questionnaire
Lagos state End User questionnaire
Rola Ekundayo

Lagos state End User questionnaire

Research Aim:
Understanding implementation in sub-Saharan African countries especially within the waste management/collection sector.

Objectives of Household questionnaires

1) Establish household types
2) Identify service suppliers to different types of households
3) Compare if possible services pre and after 1999
4) Identify different (if any) in services to different areas

Work Plan

1) Interview policy makers
2) Interview PSP participants
3) Interview monitoring institution
4) Administer questionnaire

Support needed:

1) Students to administer questionnaire
2) Tape recorders
3) Transcribers
### Household Questionnaire

**1. Household Description**

<table>
<thead>
<tr>
<th>Area</th>
<th>Household Size</th>
<th>Waste Collector</th>
<th>Disposal Taken away by collector</th>
<th>Number of containers/bags daily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Formal (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Informal (I)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self (S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(T) Buried</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(B) Burned</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(A)</td>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2. Household Profile**

<table>
<thead>
<tr>
<th>Age</th>
<th>Sex</th>
<th>Marital Status</th>
<th>Number of Children in the household</th>
<th>Nationality</th>
<th>Tribe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f/m</td>
<td>Single</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Married</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Divorced</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of household income earners</td>
<td>Room</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House Type</td>
<td>Flat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>House</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income (optional)</td>
<td>5,000,001 – Above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,000,001- 5,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>500,001- 1,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100,001- 500,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below – 100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td>Christian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Current Service Satisfaction

<table>
<thead>
<tr>
<th>Rate of collection</th>
<th>Daily</th>
<th>Bi-weekly</th>
<th>Weekly</th>
<th>Bi-monthly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of collection</td>
<td>Morning</td>
<td>Afternoon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with rate of collection</td>
<td>Excellent</td>
<td>Good</td>
<td>Average</td>
<td>Poor</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Cost of service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Pre-1999 Satisfaction (Formal/Informal)

<table>
<thead>
<tr>
<th>Rate of collection</th>
<th>Daily</th>
<th>Bi-weekly</th>
<th>Weekly</th>
<th>Bi-monthly</th>
<th>Monthly</th>
</tr>
</thead>
</table>

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6. Awareness

a) Were you aware of the new policy to charge for waste and bring in private collectors? Yes / No

b) Are you happy with the new charges? Yes / No

c) Were you aware that the policy for the collection of waste was changing? Yes / No

d) Would you have participated in the policy change were you made aware of it? Yes/No

e) Were you given written notification of the changes being made? Yes/No

f) Were you made aware of the collection times and frequencies? Yes/No

g) Did your waste collector tell you what time they are coming for your waste? Yes/No

h) Do they come at the specified time? Yes / No

i) Do you have your waste ready for the time they say they are coming? Yes / No

j) If No to question i, why do you not have it ready?

k) Have you ever had your waste collected by an informal collector? Yes / No

l) If yes to question k), how effective was the service (excellent, good, average, poor, very poor)

m) How much did it cost?

n) Was it value for money?

o) If you are now served by the government PSP, whom do you prefer?

p) Which do you feel is more value for money?
q) Who do you feel should pay for waste collection? you / government

r) How do you feel waste collection can be improved? More waste pick ups/
    More regular pick ups/ Pick up is on time/ Pay more - - - - -

7. Service Comparison

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Very poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction pre-1999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall satisfaction present service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal Sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSP provision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2

PSP price list
LAGOS STATE GOVERNMENT
MINISTRY OF THE ENVIRONMENT
APPROVED WASTE DISPOSAL SERVICE CHARGE

In realization of effective and efficient waste disposal service delivery as an indicative of good governance, the Administration after wide consultation has approved the following under listed service charges.

(i) Tenement Type

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roomy house (between 10 - 20 Rooms)</td>
<td>N500/House</td>
</tr>
<tr>
<td>Lock - up shops within tenements</td>
<td>N500/Shop</td>
</tr>
<tr>
<td>Block of 6 - 8 Flats</td>
<td>N1000/Block</td>
</tr>
<tr>
<td>Block of 8 Flats and above in all Low Cost Housing Estates</td>
<td>N3000/Block</td>
</tr>
<tr>
<td>Block of 4 - 6 Flats in all Medium Income Areas</td>
<td>N2000/Block</td>
</tr>
<tr>
<td>Block of 6 Flats and above in Medium Income Areas</td>
<td>N4000/Block</td>
</tr>
<tr>
<td>Block of Flats in High Income Estate/Area</td>
<td>N2500/Luxury Flat</td>
</tr>
<tr>
<td>Whole house in Low Income Areas</td>
<td>N1000/House</td>
</tr>
<tr>
<td>Whole house in Medium Income Areas</td>
<td>N2000/House</td>
</tr>
<tr>
<td>Whole house in High Income Areas</td>
<td>N3000/House</td>
</tr>
<tr>
<td>Block of 8 Flats and above within Armed Forces, Police, Immigration, Customs, Prisons Barracks and Government Estates</td>
<td>N4000/Block</td>
</tr>
<tr>
<td>Whole house within Armed Forces, Police, Immigration, Customs, Prisons Barracks and Government Estate</td>
<td>N1000/House</td>
</tr>
<tr>
<td>All Police Stations</td>
<td>N1000/Each</td>
</tr>
</tbody>
</table>

(ii) Commercial Type

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock - up shops off high street</td>
<td>N500/Shop</td>
</tr>
<tr>
<td>Lock - up shops - offices on high street</td>
<td>N1000/Shop</td>
</tr>
<tr>
<td>Offices, Restaurant, Club Houses</td>
<td>N30,000/Each</td>
</tr>
<tr>
<td>Type</td>
<td>Rate</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Small and Medium Hotels</td>
<td>₦20,000/Each</td>
</tr>
<tr>
<td>3 - 5 Star Hotels</td>
<td>₦250,000/Outlet</td>
</tr>
<tr>
<td>Small traditional markets</td>
<td>₦10,000/Each</td>
</tr>
<tr>
<td>Medium traditional markets</td>
<td>₦25,000/Each</td>
</tr>
<tr>
<td>Big traditional markets</td>
<td>₦45,000/Each</td>
</tr>
<tr>
<td>Extra large traditional market (Mile 12)</td>
<td>₦150,000/Each</td>
</tr>
<tr>
<td>Small modern shopping / plaza / market complex</td>
<td>₦50,000/Each</td>
</tr>
<tr>
<td>Medium modern shopping / plaza / market complex</td>
<td>₦100,000/Each</td>
</tr>
<tr>
<td>Big modern shopping / plaza / market (i.e. Alade, Tejuosho etc)</td>
<td>₦150,000/Each</td>
</tr>
<tr>
<td>Super Big Modern Shopping / plaza / market complex (ASPAMDA, Alaba International Market, Ladipo etc)</td>
<td>₦1,000,000/Each</td>
</tr>
<tr>
<td>Small motor luxurious bus parks and garages</td>
<td>₦15,000/Each</td>
</tr>
<tr>
<td>Medium motor luxurious parks and garages</td>
<td>₦35,000/Each</td>
</tr>
<tr>
<td>Big motor luxurious parks and garages</td>
<td>₦60,000/Each</td>
</tr>
<tr>
<td>Small mechanic workshops and villages</td>
<td>₦10,000/Each</td>
</tr>
<tr>
<td>Medium mechanic workshops and villages</td>
<td>₦20,000/Each</td>
</tr>
<tr>
<td>Big mechanic workshops and villages</td>
<td>₦30,000/Each</td>
</tr>
<tr>
<td><strong>Corporate Types</strong></td>
<td></td>
</tr>
<tr>
<td>Telecom facilities (MTN, Vmobile, Globacom, Mtel etc) to cover all branches</td>
<td>₦2,500,000/Each</td>
</tr>
<tr>
<td>Wireless (Multilinks, Starcomm, Reltel, GTE etc) to cover all branches</td>
<td>₦1,500,000/Each</td>
</tr>
<tr>
<td>Big Financial Institutions (First Bank, UBN, UBA, Standard Trust, Afribank, Zenith to cover all branches)</td>
<td>₦2,000,000/Each</td>
</tr>
<tr>
<td>All other Financial and Insurance Institutions</td>
<td>₦1,000,000/Each</td>
</tr>
</tbody>
</table>
(iv) Industrial / Manufacturing Types
- Small Industrial Premises: ₦25,000/Each
- Medium Industrial Premises (Cadbury, Unilever, NESTLE): ₦250,000–
  ₦500,000/Each
- Big Industrial Premises (Flower Mills, PZ): ₦1,000,000/Each
- Extra Big Industrial Premises (NBE, Nigerian Bottling Co, Guinness, Nichemtex, Churchgate etc): ₦2,500,000/Each

(v) Institutions Types
- Private Schools: ₦5000/Each
- Public Schools (by direct deduction from Ministry of Education): ₦1000/Each
- All Private Hospitals with 25 beds and below: ₦25000/Each
- All Private Hospitals with 25 beds and above: ₦250,000/Each
- All Clinics / Traditional / Maternity Homes with no admission beds: ₦5000/Each
- All Religious premises: ₦1000/Each

(vi) Public Tertiary Institution Types
- University of Lagos: ₦250,000/Each
- Yaba College of Technology: ₦250,000/Each
- Lagos State University: ₦250,000/Each
- Lagos State Polytechnics: ₦250,000/Each
- Lagos State University Teaching Hospital (LASUTH): ₦250,000/Each
- Lagos University Teaching Hospital (LUTH): ₦250,000/Each
- National Art Theatre: ₦250,000/Each
- Federal Secretariat: ₦500,000/Each
- Colleges of Education: ₦250,000/Each
<table>
<thead>
<tr>
<th></th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Government Colleges</td>
<td>₦250,000/Each</td>
</tr>
<tr>
<td>State Model Colleges</td>
<td>₦250,000/Each</td>
</tr>
<tr>
<td>National Stadium</td>
<td>₦250,000/Each</td>
</tr>
<tr>
<td>Nigeria Railway Cooperation</td>
<td>₦500,000/Each</td>
</tr>
<tr>
<td>State Stadia</td>
<td>₦250,000/Each</td>
</tr>
<tr>
<td>Nigeria Ports Authority (NPA)</td>
<td>₦5,000,000/Each</td>
</tr>
<tr>
<td>National Electric Power Authority (NEPA)</td>
<td>₦2,500,000/Each</td>
</tr>
<tr>
<td>Federal Aviation Airport Authority (FAAN)</td>
<td>₦2,500,000/Each</td>
</tr>
</tbody>
</table>

(vii) High Commission Types

<table>
<thead>
<tr>
<th></th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Embassy</td>
<td>₦2,500,000/Each</td>
</tr>
<tr>
<td>British Embassy</td>
<td>₦1,500,000/Each</td>
</tr>
<tr>
<td>All other Embassy and High Commission</td>
<td>₦500,000/Each</td>
</tr>
<tr>
<td>All others as assessed and negotiated</td>
<td>₦2,500,000/Each</td>
</tr>
</tbody>
</table>

(Initialized) Tunji Bello
Honourable Commissioner

23rd July 2004
ALBA NIGERIA LIMITED
LAGOS STATE GOVERNMENT

YOUR WASTE BILL

Code No: Res
Property No: S
Name: Please indicate your name:
Category: Housing
Group/Street: Hillary Oniwo Street
Address: Please indicate your address:

MAY 2009
Total
TWO THOUSAND FIVE HUNDRED NAIRA
Remaining Balance:

Due date: Five (5) working days, before the end of every month

MESSAGE

Please pay waste services bill on behalf of LAWMA to Alba Nig. Ltd. Acct No. 0149003001743 UBA Admiralty Way Lekki Phase I only. Thank you for your co-operation.

This bill is issued by LAWMA on behalf of the Lagos State Government by virtue of section 18 of the Lagos Waste Management Authority Law No. 27, Vol 40, Laws of Lagos State 2007, any person who fails or neglects to pay the tariffs, fees or charges prescribed by the Lagos Waste Management Authority shall be deemed to commit an offence and is liable to conviction to a fine or imprisonment.

Please pay waste services bill on behalf of LAWMA to Alba Nig. Ltd. Acct No. 0149003001743 UBA Admiralty Way Lekki Phase I only. Thank you for your co-operation.
Appendix 3
Map of Lagos showing PSP coverage areas