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THE PARTICIPATION OF INTEREST GROUPS IN POLICY DECISION-MAKING IN EMERGING ECONOMIES: A CASE STUDY OF SOLID WASTE REFORMS IN BRAZIL AND INDIA

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Abstract

This research explores the impact of formal mechanisms for public participation on policies regulating the provision of municipal solid waste management (MSWM) in two emerging economies: Brazil and India. It argues that although public participation is often interpreted as a means of enabling citizens to exert influence over government policies, for the benefit of society as a whole, it is in fact powerful interest groups that dominate the official participatory processes. Thus, in certain cases, rather than enhancing the political involvement of ordinary citizens, the mechanisms established to encourage public participation favour dominant economic and political forces.

This research, therefore, provides a critical analysis of the concept of public participation from a theoretical interest group perspective: it identifies the main participants in these political processes, and analyses not only how and why these channels of public participation are implemented, but also who benefits from their political mechanisms.

The comparative analysis of these countries is especially useful in the current context since they are both subject to immense pressure from the global market to promote economic growth, yet their ability to deal with the increasing tide of waste generated as a result, and their institutional capacity to regulate market practices, remain for the most part inadequate. Although each country has quite distinct formal decision-making processes and spaces of public participation, the research reveals remarkably similar policy outcomes in the MSWM sector – that is, powerful interest groups wield significant influence in both countries, albeit in specific ways. This investigation of the influence of interest groups on decision-making, therefore, furthers our

understanding of how public participation works in these emerging economies, and to what extent the practices it reveals affect the quality of these countries' democracy.

Resumo

Esta pesquisa explora o impacto dos mecanismos formais de participação pública nas políticas de regulação da prestação de gestão de resíduos sólido municipal em duas economias emergentes: Brasil e Índia.

A pesquisa argumenta que, embora a participação pública seja interpretada como um meio de permitir que o cidadão possa exercer influência sobre políticas do governo, em prol da sociedade como um todo, mecanismos, tais como consultas públicas, acabam sendo dominados por grupos de interesse econômico. Portanto, em determinadas circunstâncias, ao invés de reforçar a participação política do cidadão, esses mecanismos participativos acabam por favorecer interesses econômicos.

Esta pesquisa fornece uma análise crítica do conceito de participação pública pela perspectiva teórica dos grupo de interesse, a fim de identificar os principais participantes nestes processos políticos. A pesquisa analisa, não apenas como e porque os canais de participação pública são implementados, mas também quem se beneficia desses mecanismos políticos.

A análise comparativa desses países é especialmente útil no contexto atual, já que ambos estão sob forte pressão de crescimento econômico de seus mercados internos, enquanto sua capacidade de lidar com a crescente geração de resíduos sólidos urbanos e sua capacidade institucional de regular as práticas de mercado permanece, em grande parte, inadequadas. Embora esses países apresentem processos de tomada de decisão e espaços de participação pública distintos, a análise comparativa mostra resultados bastante semelhantes. Portanto, a investigação da influência de grupos de interesse na tomada de decisões contribui para promover nossa compreensão de como

a participação pública opera nessas economias emergentes e, em que medida, afetam a qualidade da democracia e do desenvolvimento humano nesses países.

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Abbreviations

3Rs	Reduce, reuse and recycle
ABES	Brazilian Association of Sanitary and Environmental Engineering
ABETRE	Brazilian Association of Solid Waste Treatment Companies
ABIHPEC	Brazilian Association of Personal Cosmetics, Toiletry and Fragrance
ABLP	Brazilian Association of Solid Waste and Public Cleaning
ABM	Brazilian Association of Municipalities
ABRE	Brazilian Packaging Association
ABRELPE	Brazilian Association of Urban Cleansing and Waste
ACP	Public Civil Action (Brazil)
AIKMM	All India Kabadi Mazdoor Mahasangh (All India Ragpickers Union)
AMC	Ahmedabad Municipal Corporation (India)
AMLURB	Municipal Authority of Urban Cleansing in São Paulo (Brazil)
ANAMMA	National Municipal Association for the Environment (Brazil)
ASMARE	Association of Collectors of Paper, Cardboard and Recyclable Material (Brazil)
ASSEMAE	Brazilian National Association of Municipal Sanitation Services
Bamcef	All India Backward and Minority Communities Employees Federation
BVRio	Green Stock Exchange Rio de Janeiro (Brazil)
C&I	Commercial and Industrial Waste
CAA	Constitutional Amendment Acts (India)
CBO	Community-based Organisation
CBO	Brazilian Occupation Classification (Brazil) (in Portuguese: *Classificação Brasileira de Ocupações*)
CCT	Conditional Cash Transfer
CENTCOOP	Centre of Co-operatives of the Federal District (*Central das Cooperativas do DF*)
CDE	Construction, demolition and excavation
CDM	Clean Development Mechanism
CEADEC	Centre of Studies and Support of Development, Employment and Citizenship (Brazil)
CEASB	Center of Education São Bartolomeu (Brazil)
CEE	Centre for Environment Education (India)
CEF	Federal Savings Bank (Brazil)
CEMPRE	Brazilian Business Commitment for Recycling
CEO	Chief Executive Officer

CETESB	State of São Paulo Environmental Agency (Brazil)
CH_4	Methane
CII	Confederation of Indian Industry (India)
CIISC	Inter-ministerial Committee for Social and Economic Inclusion of Catadores (Brazil)
CNI	National Conference of Industry (Brazil)
CNM	National Confederation of Municipalities (Brazil)
CO_2	Carbon dioxide
CONAMA	National Council on the Environment (Brazil)
COOPAMARE	Cooperative of Autonomous Collectors of Paper, Scrap and Recyclable Materials (Brazil)
COOPERCAPS	Cooperative of Catadores of the Capela do Socorro, São Paulo, Brazil (*Cooperativa de Coleta Seletiva da Capela do Socorro*)
COOPLUN	Cooperative of Catadores of Maceió (*Cooperativa de Recicladores de Lixo Urbano de Maceió*)
COOPVILA	Cooperative of Catadores of Vila Emater II (Brazil)
COP	Conference of the Parties
CORESO	Sorocaba Recycling Cooperative (Brazil)
CORI	Guidance Committee for the Implementation of Reverse Logistics Systems (Brazil)
CPCB	Central Pollution Control Board (India)
CPHEEO	Central Public Health and Environmental Engineering Organisation (India)
CSO	Civil Society Organisation
DPR	Detailed Project Report
DTDC	Door-to-door-collection
EDMC	East Delhi Municipal Corporation (India)
EPA	Indian Environmental (Protection) Act, 1986
EPR	Extended Producer Responsibility
EU	European Union
FICCI	Federation of Indian Chambers of Commerce and Industry (India)
FIESP	Federation of Industries of the State of São Paulo (Brazil)
FIMAI	International Industrial Environment and Sustainability Exhibition (Brazil)
FNP	National Front of Mayors (Brazil)
FUNASA	National Health Foundation (Brazil)
GAIA	Global Anti-Incinerator Alliance
GDP	Gross Domestic Product

GHG	Greenhouse gas
GIZ	Gesellschaft für Internationale Zusammenarbeit
GOI	Government of India
GTA	Technical Advisory Group (Sectoral Agreements of Reverse Logistics in Brazil)
GTT	Thematic Technical Groups (Sectoral Agreements of Reverse Logistics in Brazil)
GWMO	Global Waste Management Outlook
HH	Households
IBA	Indian Beverage Association
IBGE	Brazilian Institute of Geography and Statistics
ICLEI	International Council for Local Environmental Initiatives
IL&FS	Infrastructure Leasing & Financial Services Limited (India)
ILO	International Labour Organisation
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
IPEA	Institute for Applied Economic Research (Brazil)
IPTU	Urban Building and Land Tax (Brazil)
ISWA	International Solid Waste Association
ISWM	Integrate Sustainable (Solid) Waste Management
ISWMP	Integrated Solid Waste Management Plan (PGIRS in Brazil)
JNURM	Jawharlal Nehru Urban Renewal Mission (India)
KKPKP	Kagad Kach Patra Kashtakari Panchayat (India)
LS	Lok Sabha (Lower House of the Indian Parliament)
MCD	Municipal Corporation of Delhi (India)
MDIC	Ministry of Development Industry and Foreign Trade (Brazil)
MDSD	Most Different System Design
MMA	Ministry of Environment (Brazil)
MNCR	National Movement of *Catadores* of Recyclables (Brazil)
MoEF	Ministry of Environment and Forests (India)
MoEFCC	Ministry of Urban Development and Climate Change (India)
MoUD	Ministry of Urban Development (India)
MSW	Municipal Solid Waste
MSW (M&H) Rules	Municipal Solid Waste (Management & Handling) Rules, 2000 (India)
MSWM	Municipal Solid Waste Management
NCTD	National Capital Territory of Delhi (India)

MCTI	Ministry of Science, Technology and Innovation (Brazil)
NDMC	New Delhi Municipal Corporation (India)
NDMC	North Delhi Municipal Corporation (India)
NGO	Non-governmental organization
NIUA	National Institute of Urban Affairs (India)
NSWAI	National Solid Waste Association of India
NUSP	National Urban Sanitation Policy (India)
OCPF	Observatory of Public Consortia and Federalism, Brazil (*Observatório dos Consórcios Públicos e do Federalismo*)
PAC	Growth Acceleration Programme (Brazil)
PCMC	Pimpri Chinchwad Municipal Corporation (India)
PCEF	Pune Citizens Environment Forum (India)
PIL	Public Interest Litigation
PHG	Pune Housing Group
PNMC	National Climate Change Plan (Brazil)
PNRS	National Policy of Solid Waste
POPI	Positions of power and influence
PPE	Personal Protective Equipment
PPP	Public–private partnership
PTI	Press Thrust of India
PwC	Price Waterhouse and Coopers
R$	Brazilian Real (approximately USD 0.27)
RDF	Refused derived fuel
RLC	Reverse Logistics Credits (Brazil)
Rs.	Indian Ruppe (approximately USD 0.015, 10/Apr/2016)
RS	Rajya Sabha (Upper House of the Indian Parliament)
RWA	Resident Welfare Association
RWM	Resource Efficiency and Waste Management Solutions business fair
SBA	Clean Indian Mission (Swachh Bharat Mission in Hindi)
SCs	Schedule castes
SDMC	South Delhi Municipal Corporation (India)
SELUR	Union of the Urban Cleaning Companies of the State of São Paulo (Brazil)
SEMA	Secretariat of the Environment (Secretaria do Meio Ambiente)
SEWA	Self Employed Women's Association
SINIR	National Information System for Solid Waste Management (Brazil)
SISNAMA	National Environmental System (Brazil)

SJM	Swachhata Jan Model (India)
SLUM	Department of Urban Cleaning of Maceió (*Superintendência de Limpeza Urbana de Maceió*)
SMDU	Department of Urban Development of the Municipal Secretary (Brazil)
SNDT	Women's University - *Shreemati Nathibai Damodar Thackersey* Women's University (India)
SNIS	National Information System on Sanitation (Brazil)
SPCB	State Pollution Control Board (India)
STs	Schedule tribes
SWaCH	Solid Waste Collection and Handling (Seva Sahakari Sanstha Maryadit)
SWM	Solid Waste Management
SWMRT	Solid Waste Management Roundtable (India)
TERI	Energy Research Institute (India)
UBLs	Urban Local Bodies (India)
UN	United Nations
UN-Habitat	United Nations Human Settlements Programme
UNCED	United Nation Conference on Environment and Development
UNEP	United Nations Environment Programme
UT	Union Territories (India)
WDC	Ward committees (India)
WIEGO	Woman in Informal Employment: Globalisation and Organisation
WP(C)	Writ Petition (civil) (India)
WTE	Waste-to-energy
WTO	World Trade Organisation

Chapter 1 Introduction

1.1 The context and objective of the research

This research explores the impact of formal mechanisms for public participation on policies regulating the provision of municipal solid waste management (MSWM) in two emerging economies: Brazil and India. The study of these countries is especially useful in the current context since they are both subject to immense pressure from the global market to promote economic growth, while their ability to deal with the increasing tide of waste that results from this economic doctrine of elevated production and consumption, and their institutional capacity to regulate the practices of the market, remain for the most part inadequate.

In addition, these countries represent two examples of liberal democracy in the Global South: India is the first- and Brazil the fourth-largest democracy in the world, in terms of the size of their electorate. Yet, despite the fact that they have very different official mechanisms for public participation in their decision-making processes, these two democracies are rarely compared. This thesis, however, undertakes a comparative analysis of the policies of the solid waste management sector in India and Brazil, and shows that, in spite of the formal differences in organisational structures, the policy outcomes are remarkably similar – that is, powerful interest groups wield significant influence in both countries, albeit in very specific ways. Thus, although their decision-making processes – and their spaces of public participation – are not in any way similar, these very specificities appear to engender comparable results.

The fact that these similar outcomes are the result of formally contrasting decision-making proceedings helps to further our understanding of how public participation works in these emerging economies, and the way powerful interest groups are able to

take advantage of these democratic channels. Arguably, this could not be clearly perceived without a comparative analysis, since the procedures themselves appear natural to the political contexts in which they are embedded. This research, therefore, investigates not only how the activities of corporate interest groups influence government decisions, but also how this affects the quality of democracy and socioeconomic development in these countries.

Recent years have seen an increasing interest in the study of how channels of public participation are established as a means of encouraging ordinary citizens to directly engage in political decisions that affect their lives. Proponents of public participation ('popular sovereignty') argue that it has the potential to both empower citizens, allowing them to express their views, and promote inclusiveness, giving marginalised groups a voice in the political arena (Pateman, 1970; Hickey and Mohan, 2004; Cornwall and Coelho, 2007). However, contrary to this stated objective, it appears that in certain circumstances, rather than enhancing the political involvement of the ordinary citizen, the mechanisms put in place to encourage public participation favour powerful economic and political interests instead. Not only that, but the obvious disparity in power among the participants in these processes threatens to impact the functioning of the democracies in which they operate.

In such cases, powerful pressure groups, most specifically those representing corporate interests, use these participatory processes to exert a disproportionate influence over government decision-making – and this continues throughout the policymaking process. These economic and political elites can deploy vast financial resources, strategic lobbying techniques and unrivalled access to instruments that influence public opinion in order to sway government decision-makers. In this way,

they ensure that government policies privilege their interests. They are able to exploit the discourse of 'popular sovereignty' that underpins these spaces of public participation to legitimise their economic and political power.

This study, therefore, offers some important contributions to the literature on public participation. One of the key questions that emerges from a survey of the literature (Golden, 1998; Jordan and Maloney, 2007: 17) – who participates in these political processes and for what reasons – has remained for the most part unaddressed. This research specifically interrogates this issue, exploring the influential role interest groups play in these political processes: it analyses not only how and why these channels of public participation are implemented, but also who benefits from their political mechanisms.

Although there are many competing definitions of the term 'interest group', this study defines such groups as non-state organisations seeking to influence public policies on the provision of public goods (Berry, 1977; Baroni et al., 2014: 4). It investigates the activity of interest groups in the arena of government decision-making, and argues that although public participation is often interpreted as a means of enabling citizens to take advantage of political openings to exert influence over government policies, it is in fact the most powerful interest groups that dominate official participatory processes such as public consultations. Its analysis of public participation thus contributes to an understanding of the real forces influencing government policy, particularly as these mechanisms establish how and to what extent individuals and groups can participate in policy formulation, as well as legitimising the agreements reached between the state and non-state participants in these political debates.

In order to critique the theories of public participation and explore the impact of interest group activity, the research (as mentioned above) analyses two case studies of public policies relating to the distribution of a 'collective good' – in this case, solid waste management. According to Jeffrey Berry (1977: 8), the term 'collective good' means that the benefits of a public policy must be 'shared by all people, independent of their membership or support of a given group'. Solid waste management clearly matters to debates on democratic consolidation in emerging economies, as citizen interest and involvement in the issue varies greatly according to electoral cycles and local conditions. Although solid waste management is a matter that profoundly impacts the everyday conditions of the citizenry – it is fundamentally related to the daily processes of production and consumption, and the environmental quality of life of the population – few people appear to engage with the political processes that encompass it. As the welfare of the population is the responsibility of the state, a number of scholars (Laird, 1993, for example) claim that policies involving social and economic issues, particularly the delivery of essential public services, deserve public scrutiny, as ordinary citizens have a stake in the outcome and therefore have important contributions to make in the way these services are provided.

However, some researchers (Olson, 1971; Golden, 1998) argue, as does this thesis, that it is not citizens but corporate interest groups that carry the most weight in government decision-making processes. These corporate groups have neither the welfare of the population nor the aim of addressing social inequality as their objective; their goal is profit, as their survival depends primarily on competing successfully in the market and satisfying their shareholders. For example, the survey carried out by Eric Gutierrez et al. (2003) on business sector participation in the provision of water and sanitation in ten developing countries reveals that private

concerns fail to meet the needs of the poorer segments of the population – a failure that is evident in the lack of transparent practices, community mobilisation or affordable tariffs that reflect the socioeconomic conditions of the communities they are meant to serve. The authors attribute this to ineffectual government rules, low levels of community engagement, the absence of enforcement of citizens' rights and deficient market mechanisms. This study, however, develops the argument further by showing that it is also partly due to the domination by corporate interest groups of the arenas for public consultation that help shape the provision of such public goods as solid waste management services. In a context where government institutions have insufficient regulatory capacity, a political decision-making process that is dominated by corporate groups tends to be biased towards market interests, and as a consequence, its policy outcomes often end up adversely affecting the quality of public services.

Comparative analysis

In the previous research that I undertook in 2010 for my Masters degree, I analysed the formulation of Brazil's national policy on solid waste. My research looked at the challenges inherent in implementing this policy across such a vast country, with its diverse geographies, climates, populations and cultures, and unequal socioeconomic conditions. As a result, when I began my doctoral research, my initial aim was to explore how another developing country, facing similar challenges, dealt with the same problem. The choice of India was due to the fact that although well over a decade has passed since its Solid Waste (Management & Handling) Rules were published in 2000, few of its towns have fully implemented the national guidelines, and a sanitation crisis still haunts the country (Kaushal et al., 2012). A comparative

analysis of Brazil and India presents two contrasting cases that provide a good opportunity to understand how the experience of one country might contribute to debates on the implementation of a similar policy in the other. During the fieldwork in India, which investigated the implementation of waste policies, it was clear that – in comparison to Brazil – participatory debates on policy formulation were almost non-existent. This motivated me to investigate why, when the policy decision-making process varies so greatly between these two emerging economies, the extent of the influence of powerful interest groups over policymaking is markedly similar, despite their differing roles in these processes. The specific characteristics of policymaking, which are crucial to our understanding of how democracy works in these countries, cannot be captured and measured without a thorough investigation of the democratic structures in which they are embedded.

In 2014, the Indian prime minister, Narendra Modi, launched his 'Clean India Mission',[1] calling on the whole population to participate in a national effort to clear the country of waste. According to the programme's official documents (QCI, 2016: 7), the active participation of citizens and the private sector is regarded as crucial to its success. This followed the failure of the existing Municipal Solid Waste (MSW) Rules 2000, published after minimal public consultation, to contribute to improving the provision of solid waste management services in the country, as witnessed by the fact that few cities have implemented the guidelines in their totality (LS, 2008: 3). Meanwhile, in Brazil, the National Policy on Solid Waste (PNRS) was enacted in 2010, after twenty years of intense participatory debates and congressional

[1] Swachh Bharat Abhiyan (SBA) (in Hindi)

[2] For example, the fundamental rights of citizens are set out in Article 5 of the Brazilian Federal Constitution of

proceedings. Thereafter, the procedures for implementing the recycling system throughout the whole country were discussed, resulting in a series of sectoral agreements between the responsible government agency and the most powerful of the interest groups involved in the debates.

In both Brazil and India public participation is described as an important pillar of municipal waste management services. In the case of the Brazilian legislative framework (Law 12,305/2010, Art.6, X), public participation is conceived of as 'social control'; that is, there are a series of mechanisms that guarantee public participation in the formulation, implementation and evaluation of waste policies. In India, in the recently amended MSW Rules 2016, Article 6b establishes that the ministry in charge must establish 'consultation with stakeholders' when formulating national and state policies (MoEFCC, 2016). Although the term 'stakeholders' is not defined, the document mentions some of the players involved in the process: government agencies, urban local bodies (ULBs), private sector and business associations, non-governmental organisations (NGOs), residents' welfare associations (RWAs), waste pickers and individual residents. In the case of the rule-making processes, Frank Laird (1993: 352) explains that the government employs this term instructively to announce to the general public that the invitation to participate is extended to all 'people who care about the issue'.

However, these two countries have distinct decision-making proceedings. Brazil is a presidential democracy, and the Brazilian PNRS is a national law that was enacted in Congress by the country's legislature. India, meanwhile, is a parliamentary democracy, and its series of waste rules were established by ministerial decree and published by the Ministry of the Environment, part of the executive branch of

government. These policy frameworks – the law and the regulations – were both decided on at federal level and follow a democratic process (Carey and Shugart, 1998: 12; Golden, 1998); however, they affect how the public participate in the decision-making process in different ways. This research investigates the role of interest groups in these two, disparate democratic decision-making processes.

Democracy theories generally focus on the legislative decision-making process, the actors involved and the outcomes. The Brazilian case exemplifies this: in its legislative process, the formal democratic characteristics of the decision-making process are guaranteed as the decisions are formulated by elected parliamentary representatives. However, few authors have paid attention to the example of the rule-making process (Golden, 1998: 246), such as that exemplified by the Indian Waste Rules. Regulatory agencies are part of the executive branch of government, and therefore those taking the decisions are unelected civil servants. To ensure that decisions are not made according to a purely technocratic procedure, and to guarantee the legitimacy of the democratic system, this sort of executive process needs a level of democratic scrutiny, usually a period of public notice or a public consultation (Furlong and Kerwin, 2004: 354). Interestingly, however, Marissa Golden (1998: 255), exploring similar rule-making processes in the US, discovered a complete absence of participation by ordinary citizens. Golden (1998: 252) claims that, in the US case, decision-making processes formally designed to encourage public participation are in fact dominated by corporate interest groups. What the present research reveals is that powerful interest groups are equally predominant in the participatory debates in the legislative process in Brazil.

MSWM, democracy and development

These problems are most evident in decisions concerning the provision of public services. The management of municipal solid waste – the provision of urban waste collection services, the treatment and disposal of the collected waste, and the public and private institutions involved – has a significant impact in emerging economies (UN-Habitat, 2010: 6). Over the last decades, Brazil and India have faced a mounting increase in the generation of waste, a result of the fact that rapid economic growth and urbanisation have led to the spread of new patterns of consumption among their burgeoning populations (ABRELPE, 2014; Annepu, 2013). Inadequate waste management produces harmful social and environmental consequences at both the local level (degrading the quality of life and exposing the population to pollution and disease) and the global (climate change) (UN-Habitat, 2010: 14).

However, the often-overlooked factor in the debate on the politics of waste management in emerging economies is the amount of influence interest groups have on government decisions. Emerging economies such as Brazil and India, despite enjoying high levels of economic growth, still have persistent domestic problems linked to inequality and underdevelopment. On the one hand, there is fierce competition for contracts for the provision of waste management services. This basic public service consumes a large part of municipal budgets, which, in the majority of cities, are funded by federal financial transfers. The provision of efficient waste management services in large cities demands infrastructure, technology and capital investment; hence, a few large corporate groups tend to dominate the contracts. On the other hand, waste management in developing countries faces serious constraints in terms of inefficiency, the patchy coverage of public services and the marginalisation of the poorest parts of the population (Asnani, 2006). As Kaveri Gill (2010: 9)

stresses, due to the budget limitations of local authorities and their inability to provide public services to the entire population, the poorer regions of the cities, such as the peripheral areas and the slums, receive less attention and are generally left without basic services. Another significant sign of underdevelopment in these countries is the large number of the poorer members of the population who still make their living collecting waste from the streets and dumpsites to sell in the informal market in recyclables (Scheinberg et al., 2011). These 'waste pickers' comprise a singular interest group in this political process: it is only in the spaces set aside for public participation that their political organisations are able to argue for their labour rights, yet they are forced to compete in these spaces with far more powerful political and economic interests.

In relation to this, it is important to note that some academics (O'Donnell, 1996; Jayal, 2001) have called attention to what they term the 'uneven' democratic systems in countries such as Brazil and India, with their persistent particularisms, deficient institutionalisation and highly inequitable socioeconomic conditions. These characteristics are apparent in the solid waste management sector, which often presents a picture of public and private players colluding over irregularities in the contracts for service provision, which are clearly linked to the financing of electoral campaigns (Janaagraha, 2012).

This study of waste reforms in Brazil and India, therefore, provides a fresh perspective on how the political activities of interest groups, particularly corporate interest groups, influence the provision of this public good to the population, defining those who have access to these services and those who are in charge of their provision. Grant Jordan and William Maloney (2009: 1) stress that it is impossible to

imagine democracy without the participation of associations or organisations of individuals, stating that the activity of such interest groups is intrinsic to the liberal democratic process. However, in his research into why democracies in the Global South have struggled to tackle poverty alleviation, Ashutosh Varshney (1999: 32) claims that market-oriented economic reforms are instituted from above by national and international economic elites, never from below. In this context, the statement by Harold Lasswell (1936) that the decision-making process defines 'who gets what, when and how', thus determining who participates in the process and enjoys the benefits of its social policies, and who is excluded, takes on added importance.

1.2 The research question

The main question this thesis explores is: how does interest group participation in the decision-making process shape solid waste policies in Brazil and India, what forms does it take and why?

In order to answer this question, the study investigates how public participation is conceived of in these countries' policies; how interest group activities have shaped their policy formulation; their main participatory spaces of state-interest group interactions; and the influential groups involved in policy decisions on waste management in each country. The research, therefore, analyses the impact on government institutions and political procedures when interest groups are included in government policymaking.

1.3 The main contributions of the research

The central argument of this thesis is that, despite the varying approaches to participation and citizen consultation evident in these two cases, market interests

consistently prevent more democratic and accountable forms of solid waste management from emerging. Furthermore, while changes can be noted in both Brazil and India during recent years, aimed at including waste pickers in the decision-making process, the active promotion of policies targeted at the wider public good remains distinctly limited, and is subordinated to the interests of more powerful groups.

In the course of determining the validity of this argument, this research makes two contributions to the field of policy analysis. Firstly, it brings together two distinct lines of thought that have emerged from the study of democracy: theories of public participation and pressure group theories. Although they are usually treated in the literature as distinct, each with its specific theoretical approach, they overlap in this thesis, since both are crucial to an understanding of the forces operating in the decision-making processes of a democratic state. Thus, this research provides a critical analysis of the concept of public participation from a theoretical interest group perspective, in order to identify the main participants in these political processes.

Secondly, the research provides a unique opportunity to compare how interest groups participate in two distinct democratic proceedings: policymaking by the legislative branch of government (in Brazil) and rule-making by government decree (in India). To this end, the study investigates the influence of interest groups on decision-making in the same policy sector in each of these different procedural contexts. It thus contributes to an understanding of how these groups operate in each type of political process, and to what extent they affect the quality of democracy in these countries.

Beyond solid waste management, there are clear similarities to be drawn with other sectoral policies like air pollution, urban mobility or food security. The research also

contributes to a wider understanding of the behaviour of democratic states and their relationship to decision-making in crucial issues that affect the environment.

1.4 The limitations of the research

The research uses as a case study the municipal solid waste management sector, which has its own specific characteristics. Businesses and corporate concerns, as well as public administrators, play a distinctive role in the political processes of this sector, and the policy debates involve a plethora of technical discussions on environmental licensing, public tenders, MSWM methods and cost-benefit analyses. Running in parallel to these debates, especially in developing countries, are the activist operations of social movements and NGOs, who champion the rights of informal groups of workers such as waste pickers. Added to this, the two chosen countries have large, diverse populations and complex regional characteristics, in terms of governance, demography and history. For all of the above reasons, therefore, this research limited its analysis to the policy context of national reforms in the management of solid waste.

1.5 Research timeframe

The timeframe of this research begins in the mid-1990s, which coincidently marks the beginning of the current tranche of waste reforms in Brazil and India, and extends to the most recent significant events to happen before the end of the research process: the signing of the Sectoral Agreement on Packaging in Brazil in late 2015 and the publication of the Swachh Bharat Survekshan (the first evaluation of the implementation of the Clean India Mission) in early 2016. The significance of these documents is discussed in detail throughout the thesis. Nevertheless, it is worth

mentioning that the historical analysis also includes events that took place before this timeframe, due to their influence on the way solid waste management is currently understood and practiced in both countries.

1.6 Thesis structure

The following chapter (Chapter 2) discusses two distinct theoretical strands that have emerged from the literature on democracy: theories of public participation and interest group theories. In its reflection on the implications of these theories for developing countries, the chapter's first section explores how the literature analyses public participation, addressing the concepts of power, citizenship and political spaces of participation. This section also discusses the role of the state, the capacity of the individual (voter) to influence public policies through the channels of political representation, and the role of political parties in policy decisions. The second section explores a number of distinct pressure group theories – group theory, pluralism, elite group theory, neo-pluralism and corporatism – in order to understand how different scholars in the field apply these concepts to an explanation of the forces shaping government decisions. The third section discusses the challenge of applying these theories to emerging economies, exploring the debates of Guillermo O'Donnell (1996) and Gopal Jayal (2001) about the characteristics of democracy in these countries, which are marked by issues relating to inequality, political patron-client relationships and the rise of social movements.

Chapter 3 then outlines the design of the research, detailing its methodology, which is based on the triangulation of three qualitative methods (document analysis, interviews and observation). The chapter also discusses the choices made during the research in the field and the methods of data collection and analysis.

The comparative analysis of the two case studies (in Brazil and India) is divided between four empirical chapters: Chapter 4 on how the institutional systems of municipal solid waste management are organised in these countries; Chapter 5 on how public participation is perceived in law; Chapter 6 on institutional spaces of participation; and Chapter 7 on the key interest groups involved in these political processes. In this way, Chapter 4 first contextualises and provides background knowledge of the evolution of the issue in each country, while the subsequent chapters (Chapters 5, 6 and 7) develop the analytical engagement with the empirical research, exploring how interest groups and public participation influence the legal frameworks, the participatory spaces in which the state and interest groups are able to interact, and the main interest groups involved in these political processes.

In order to analyse the same sectoral policy in both countries, Chapter 4 begins with a detailed comparative analysis on the current waste management situation in Brazil and India, discussing their key socioeconomic characteristics and infrastructural constraints. Section 4.2 reviews how waste was treated in the past in these two countries, analysing the early practices of waste management, the introduction of the service as a public health issue, and more recently, its development as a result of international agreements on the environment. This historical overview aims to shed light on the origins of many of the policies and practices now in place in these countries in order to further the understanding of how interest groups have become involved in their political structures. The third section discusses the key institutional mechanisms (legislative frameworks and government bodies) established for the provision of this public service in Brazil and India. Overall, the chapter provides the background knowledge for the subsequent chapters by describing both the legal and

informal channels through which interest groups operate, and reflecting on why they take the forms they do in each country.

Chapter 5 investigates the formulation of national policy in Brazil and India from the perspective of interest group engagement in the political process. These two case studies show how decision-making in the same policy sector (at least from the late 1980s on) varies, revealing two different political realms: more technocratic in India, with decisions taken by a group of 'technical experts' within the government; more participatory in Brazil, the result of an extensive consultation process. This chapter analyses how these two different models of public participation emerged, and their consequences, in terms of both solid waste management policy and the inclusion or exclusion of certain actors in its provision. The Swachh Bharat Abhiyan (SBA), mentioned above, represents a shift in this historical process in India, as this nationwide campaign has public participation at its heart; nevertheless, the citizens do not decide its policies. More recently, due to the pressure of its implementation deadline, interest groups have been invited to discuss viable solutions to the problems of implementing it across the country.

The thesis then turns to address the way the participatory and technocratic models accommodate divergent economic and political interests in the political process. Chapter 6 explores four institutional forms of state-interest group interaction in these two political realms, employing the concept of participatory spaces proposed by John Gaventa (2005). In Brazil, the 4th National Conference on the Environment and the Sectoral Agreements on Reverse Logistics are two nationwide institutional participatory spaces, designed to encourage interest groups to discuss, negotiate and search for solutions to the problems of implementing waste management policies. In

India, meanwhile, the judiciary has become an institutional space of contestation, as well as a significant actor, shaping the country's waste reforms over the last two decades. Finally, the last section of this chapter investigates accusations – which surfaced frequently in the interviews in both countries – of corruption, collusion and other abuses, which help distort the political process of waste reform and have a negative impact on the provision of public services and the relationship between public and private interests.

Chapter 7 looks at the main groups involved in solid waste management in each country. It investigates the specific ways in which their competing interests operate in these divergent democratic systems, and analyses their capacity to shape policymaking. In Brazil, representative associations of the waste management industry, other corporate interests and local governments have exerted their influence on the decision-making process through their command of capital and of the services of legal and industry experts. In India, the decisions taken by consultants working within central government fail to reflect the reality of the problems of nation-wide implementation. This gap between policy and implementation has opened up a space for a diversity of informal practices at the local level; however, the actors involved do not have a voice in the political decisions taken at the national level. In addition to all these competing domestic interests, emerging economies represent a huge market for the global corporations operating in this sector. Transnational private sector concerns involved in waste management, global industries from other sectors, specialised chambers of commerce, international research centres and NGOs have all actively participated, providing information, promoting their interests and influencing the domestic debates in both countries. In the midst of this competitive market, dominated by politicians, technocrats and consultants, waste pickers struggle to gain

recognition of their rights. The different levels of participation achieved by this singular interest group in the decision-making processes of Brazil and India is the result of the different trajectories taken by their social movements. This section explores the differing capacity of these various interest groups to participate in decision-making in both political realms, and how their activities have shaped these countries' waste policies.

Finally, the last chapter summarises the main points of the research, which explores interest group activities in Brazil and India, providing a critical analysis of the theories of interest groups and public participation, and reflecting on the impact of the disproportionate power and influence of corporate interest groups on democracy and development in these countries.

Chapter 2 Literature Review

2.1 Introduction

This thesis primarily focuses on the participation of interest groups in government decisions; it argues that pressure groups, not citizens, dominate the politics of the provision of public services (specifically waste management), affecting how the forces of democracy and development operate in emerging economies. This chapter sets out to explore the literature of political participation in preparation for an analysis of how the actors involved are organised and how their activity shapes policymaking in the MSWM sector.

Most studies in the field of participatory democracy focus on the roles and relative influence of the ordinary citizen and government institutions, although they pay recognition to the fact that the political processes in which these actors participate are also influenced by other powerful forces and manipulative discourses. In general, however, the literature of public participation either places the ordinary citizen, characterised as an agent of transformation, at the centre of the political process, empowered to shape political decisions and improve the quality of governance and the provision of public services (Brodie et al., 2009; Cornwall and Coelho, 2007), or it argues that political and economic elites take advantage of the political discourse of public participation and use it to advance their own particular interests (Cooke and Kothari, 2001). However, although this literature sometimes mentions the participation of interest groups, it fails to recognise that political processes and participatory debates are quite often dominated by such pressure groups.

The analysis of interest group participation differs from that of the political participation of ordinary citizens, albeit few studies appear to take account of these

differences. The proponents of participatory and direct democracy argue, for the most part, that individuals are empowered to change government decisions, while studies of pressure groups focus on the necessity for individuals to act collectively to advance their common interests (Olson, 1971). Interest group theories, therefore, emphasise that pressure groups rather than individuals are the key agents influencing policy decisions. Although these theories offer distinct explanations of the decision-making process, they are equally crucial to an understanding of the forces impacting political processes. However, the general assumption of both that political participation influences government decisions raises some important questions: who participates in these political processes, to what end and for whose benefit, and what sort of influence do they have on the decisions of governments?

In order to clarify the debate on the relative influence of ordinary citizens and interest groups, the literature review is divided into three main sections. It begins by exploring the literature of public participation, which analyses the main channels of democratic interaction between the state and society, as well as the decision-making process and its principal actors. The first section looks at the concept of public participation (how the public is involved in policymaking) and the meaning of these participatory processes for policy decisions. The lack of a clear definition of the terms 'citizens' and 'interest groups' is evident in the fact that, in many cases, participatory spaces in a particular sector are often designed or promoted in the name of the 'public' – that is, in the name of the ordinary citizen or the community – but are dominated by powerful groups with specific interests. The second section investigates how different schools of thought in interest group studies understand the role of such groups and the strategies they use to influence government decisions. The third section then considers how these debates are applied to the analysis of the nature of democracy in

emerging economies such as Brazil and India, that are subject to both internal and external pressures to advance the development of their markets while continuing to face problems associated with chronic underdevelopment.

The chapter's main contribution lies in bringing these two theories together to enable a discussion of the implications of this debate for emerging economies. In the following empirical chapters, these theories will be revisited to explore, firstly, how decision-making operates in the waste management sector in Brazil and India. This entails investigating how the distinct structure of the decision-making proceedings in each country affects the relationship between the state and interest groups, and how the activities of interest groups shape policy outcomes in this sector. Secondly, these theories will be applied to an analysis of why these political processes take their specific forms, exploring the institutional spaces for political participation and the informal practices in the MSWM sector in these countries, which are characterised by weak institutionalisation and particularism. Finally, the research will use its theoretical underpinning to look at the main groups involved in these political processes, investigating their activities and their capacity to influence government decisions. By taking into account these three dimensions – the laws, the institutional spaces of political action and the key actors involved – this research aims to compare how these interests not only shape policy in the waste management sector, but also democratic practices in these countries.

2.2 Why study public participation?

Political participation is understood as the personal engagement of citizens in activities intended to influence government decisions. Bill Cooke and Uma Kothari (2001: 5) explain that public participation encompasses the variety of ways in which

people play a direct role in governance and the policy decisions that affect their lives. Among the most common participatory activities are public hearings and the direct engagement of citizens in public institutions or local organisations established to improve the provision of services to communities (Brodie et al., 2009: 16). This section explores how scholars understand the capacity of the ordinary citizen to influence government decisions, the role of democratic institutions and the definition of the people involved in these political processes.

The idea that citizens are empowered to take the lead in influencing and, if necessary, changing government decisions that directly impact their lives, and the assumption that bringing the state closer to citizens improves transparency, accountability and social justice, hold great appeal for academics, politicians, social movements and investors. Scholars studying this area (Cooke and Kothari, 2001, Gaventa, 2004, Hickey and Mohan, 2004, Cornwall and Coelho, 2007) have explored the potential for citizen participation in government reforms and developmental planning in order to discover whether the voices of the poor and those lacking representation are included in the planning process, whether this engagement strengthens the responsiveness and accountability of the government and the institutions involved in policymaking, and whether it improves the quality and equality of public service provision. Participatory democratic debate is meant to provide an opportunity for different actors to discuss and criticise policy proposals both before and after the decision-making process (Dryzek and Niemeyer, 2008: 482). Despite the fact that proponents argue that participation and open deliberation is central to the democratic process, sceptics express concern over the legitimacy of the authority of those directly involved in such deliberations (Dryzek, 2009: 1380). For example, John Dryzek and Simon Niemeyer (2008: 491) query who elects the non-governmental organisations (NGOs) claiming

to represent certain social groups, and how these organisations are held accountable. Critics further argue that the participatory process is time-consuming and, even worse, that some deliberative processes are a mere formality that governments carry out to meet official requirements for public consultation (Dryzek, 2009: 1398).

As public participation is promoted as a way of engaging citizens in decision-making, the first question that arises is: exactly how does the ordinary citizen participate in government decisions and to what extent are they able to affect the political process and improve governance and the provision of public services? In order to analyse the capacity of citizens and groups to influence decision-making, we need to explore the main channels of state-citizen interaction and the role of state and non-state actors in these processes. It is essential to first analyse the capacity of the ordinary citizen to influence government decisions.

Democratic systems provide three main channels of state-society interaction in decision-making: namely, representative, participatory and deliberative systems. These provide different levels of interaction and opportunities for individuals and groups to influence decision-making. Basically, in the representative model, citizens elect representatives to govern and take decisions on their behalf, whereas in the participatory and deliberative models, the political process is open to any citizen to become directly involved in the decision-making. In the participatory system, citizens and groups are informed and consulted during the decision-making process; while in the deliberative system, citizens interact with each other, debating the choices and then voting on the decisions (Dryzek, 2009). There are other models of democratic decision-making, such as referenda, which involve a nation-wide decision-making process, whereby the government solicits the opinion of the whole population on a

major subject of public interest (Sartori, 1987: 111). However, this model is beyond of the scope of this research, which is focused on policy decision-making in a particular sector. The following subsections analyse these processes in more depth.

Representative democracy

When speaking of democracy, the first actors that come to mind are citizens, political parties and elected representatives. The key aspect that differentiates democratic from non-democratic regimes is the possibility they offer citizens to elect the members of their government, while the electoral process itself provides a mechanism for popular control of these elected officials once they are in power by holding them to account in the next election (Przeworski et al., 1993: 4). Citizens, therefore, elect representatives to formulate policies, while the implementation of these decisions is delegated to appointed officials in charge of the functions of government; the ordinary citizen, in practice, does not have any influence on policymaking. Adam Przeworski et al. (1999: 3) explain that the structure of representative democracy is based on the fact that those who govern are chosen during elections and their official mandates are conditioned by periodic elections; although citizens have the right to give their opinions and disagree with official decisions, they are not legally entitled to instruct the government. The elected representatives define citizens' social duties and responsibilities, and all members of society are obliged to follow these rules. Representation in politics means acting on behalf the electorate in the public interest (Dahl, 1989: 209); however, it is often not clear whether these elected officials represent the people who elected them or their own political parties.

Joseph Schumpeter (1985) and Adam Przeworski et al. (1999) are sceptical about the representative nature of democratic governments. First of all, who is being

represented? The democratic system does not represent the individual but the majority of the electorate, or it employs some variant of this method. This leads to the problem of the 'tyranny of the majority', which is especially prevalent in countries such as India, where society is marked by cultural and social cleavages, and majority rule significantly disadvantages minority groups who are marginalised by ethnicity, caste or religious differences (Nayyar, 2001: 363). Schumpeter (1985) also claims that representative democracy is reduced to a competition between political parties; democracy in fact only exists during elections. Political parties are theoretically separate from both state and society, and their role is to provide the link between the two, but Schumpeter (2010: 251) claims that, rather than a means for participatory action, they are the mechanisms by which political elites legitimise their power in society: 'a party is a group whose members propose to act in concert in the competitive struggle for political power'.

During elections themselves, images, beliefs and identities are forged by competing claims to power in the attempt to impose particular visions of society on the mass of citizens (Przeworski, 1985: 99). Such differing views are not spontaneous; they are products of the conflicts and confrontations between divergent interests. Political parties take advantage of these differences to create specific identities in order to promote their campaigns amongst the electorate (Przeworski, 1985: 101). Przeworski et al. (1999: 29) explain that candidates focus everything on winning elections; once they assume public office, however, their own private interests, which often differ from those of the electorate, come to the fore. Even if a political representative genuinely wants to serve the public, their actions in office will be conditioned by the need to satisfy the powerful interests that assisted their campaign.

Thus, the representative model is an indirect system, where citizens do not make policies but, rather, vote for candidates who propose the policies they believe will render them electable to public office. Przeworski (1985: 14) stresses, therefore, that citizens delegate policy decisions to representatives, and these representatives are individuals who have their own particular, narrow interests.

Participatory and deliberative democracy

The arguments between advocates of indirect and direct democracy lie in the origin of modern democratic theory (Pateman, 1970: 17). In the nineteenth century, Jeremy Bentham and James Mill argued that representative democracy, with universal suffrage and the election of accountable representatives, protects citizens' interests from government excesses, while Jean-Jacques Rousseau and John Stuart Mill contended that the direct participation of citizens is crucial to maintaining the democratic polity. In contrast to theorists of representative democracy, who study political parties, electoral processes and conflicts among the electorate, participationists explore different forms of popular participation in policymaking – particularly the direct engagement of individuals and groups with governance – and the many channels of non-electoral decision-making.

Social scientists have endeavoured to discover different ways of deepening democracy in order to bring citizens closer to the governmental decision-making process. Carole Pateman (2012: 10) explains that political participation is concerned with 'democratising democracy', bringing the social and political realms closer to the ordinary citizen – in other words, changing the way in which citizens are engaged in government decisions that affect their lives. Despite the fact that proponents of participation argue that deliberation is central to the democratic process, Giovanni

Sartori (1987: 114) questions the premise of 'participatory democracy', claiming that the term 'participation' means 'taking part in person'; in his view, self-government is only possible for small-scale group democracy. Sartori (1987: 111) and Dahl (1989: 12) advise us to bear in mind the scale of modern nation-states when considering the roots of the term 'democracy', which lie in the ancient Greek *polis* (a small city-state, governed by the collective decisions of the community) and the pre-industrial cities of the modern enlightenment theorists. Due to the fact that participation means active personal engagement in decision-making and governance, Sartori (1987) claims that political debates necessarily involve only small groups of participants in making collective decisions that may affect large parts of the population. In his view, participatory democracy should not replace electoral, representative democracy, since decisions are only made by those who have the opportunity to participate, and this can lead to elitism.

In line with Sartori's critique, and despite some successful cases of participatory democracy that are analysed below, Dryzek and Dunleavy (2009: 212) agree that participatory democracy works only in small-scale communities such as workplaces, trade union branches, neighbourhood assemblies and community service programmes, where interaction and communication between the participants is feasible; its application to complex issues in large-scale societies and national participatory processes raises concerns. Rod Hague and Martin Harrop (2010: 163) criticise, for instance, the social bias of participatory processes. These authors explain that, in general, participatory processes benefit the wealthiest groups in a society, who, due to their economic status, have access to education, knowledge and communication skills. These groups possess the political resources that enable their involvement in decision-making; those in the lower ranks of society, meanwhile, are excluded from collective

decisions as they lack the economic and political resources needed to partake in the political process.

Theories of participatory development emerged in the 1980s as an alternative to mainstream, centralised planning; they advocated the incorporation of local, often marginalised people in the decision-making process of development projects and programmes (Pateman, 2012: 7). This process of decentralisation (initiated in the 1990s with the publication of Agenda 21, a UN 'action plan' for sustainable development) focused on local governance, with the aim of bringing government closer to the citizen, and placed the idea of citizen participation at the centre of the political debate. Subsequently, however, academics such as Cooke and Khotari (2001) began to view the concept of participatory development with a certain degree of cynicism. A trenchant critique emerged, focused on the professionalisation of these mainstream processes and their manipulation by the numberless NGOs and donor agencies seeking to profit from the pro-poor discourses advocating the empowerment of local peoples and communities. As a consequence, John Gaventa (2007: 1) comments that 'participation' is now part of the daily jargon of bureaucrats, politicians, decision-makers, activists, NGOs, donor agencies and academics, and is routinely employed by the mass media, politicians and government programmes.

However, despite these – often justified – criticisms, participatory processes have sometimes achieved significant changes in governance, giving a voice to actors who would otherwise be excluded from society. James Holston (2009: 245) claim that contemporary urbanisation, especially in the large metropolises of the Global South, has exacerbated the inequalities between the city centres, which are well-served by urban infrastructure, and their peripheries, which are largely deficient in both

infrastructure and services. Impoverished residents living on the outskirts of cities are forced to organise amongst themselves in order to confront the 'entrenched systems of inequalities' that maintain their social exclusion and contest their right to live in the city (Holston, 2009: 257). Holston's research in the Brazilian city of São Paulo describes alternative forms of public participation, where the leaders of poor communities have organised grassroots mobilisations of residents' associations, and in the process, gained a greater knowledge of their rights. These mobilisations have in some cases succeeded in changing the decision-making practices of government institutions and forced the state to improve public services. Holston highlights the fact that this 'insurgent citizenship' differs in form from the labour and social class struggles that emerged in Europeans cities in the twentieth century. Nowadays, residents living in precarious and illegal spaces mobilise around issues such as the right to housing, basic infrastructure and security (Holston, 2009: 247).

In their survey of participatory governance in São Paulo, Peter Houtzager and Adrian Lavalle (2009) show that the majority of the claims of the urban poor are presented to the state by leaders of civil organisations. These individuals and their forms of direct participation in governance and decision-making do not constitute an alternative to the conventional representative party system; instead, they act as new mediators in the relationship between the state and particular unrepresented social groups. However, the 'mediators' involved in this form of participatory system possess neither a clear structure of accountability nor any criteria by which to measure their legitimacy (Houtzager and Lavalle, 2009: 26). Although these empirical cases show a certain level of successful engagement in politics by the urban poor, such examples of popular mobilisation cannot be generalised to all policy areas. The argument this thesis puts forward is that, in certain policy areas involving decisions on the provision

of public services, corporate interests prevail. Nevertheless, as Pateman (2012: 10) points out, participation is a learning process that requires structural changes, as it demands different levels of interaction between citizens and political authority.

Ellie Brodie et al. (2009: 14) separate public or political participation from other associational activities such as social and individual participation. 'Public participation' means the direct engagement of the individual in political decision-making through activities such as citizens' panels; public consultations; consensus conferences; deliberative mapping; deliberative polling; deliberative meetings of citizens; electronic processes; participatory appraisal; and participatory strategic planning (Brodie et al., 2009: 15). 'Social participation', on the other hand, describes individuals' engagement in collective activities as part of their daily lives (for example, belonging to a community group or volunteering), while 'individual participation' comprises the daily routines in which individuals, through their actions and choices, express their principles and worldviews (for example, participating in campaigns for sustainable consumption or choosing green products). Social and individual participation do not have a political impact on government decisions.

Participationists call the sphere of interaction between the state and society 'participatory spaces' (Cornwall and Coelho, 2007: 1). Gaventa (2005: 11) defines the term 'space' in this context as 'opportunities, moments and channels where citizens can act to potentially affect policies, discourses, decisions and relationships which affect their lives and interests'. Chapters 6 of this thesis analyse key examples of both institutional and informal participatory spaces in the reform of waste management in Brazil and India (such as nation-wide consultation meetings, sectoral agreements and public litigation to halt government decisions), and the role of the main actors

involved in these political processes. The chapter investigates the power relations present in these processes, the potential for these spaces and the activities they encompass to influence political processes, and their impact on the outcome of reforms. These spaces are not impartial; rather, they are socially constructed and controlled, and they shape the structure and discourse of power. In general, whoever proposes a participatory space does so in pursuit of their own objectives. Gaventa (2005: 12) divides participatory spaces into three main forms: closed, invited and claimed.

- 'Invited spaces' are institutional spaces promoted by government bodies and other institutions to encourage citizens to participate in or deliberate on different stages of the policy-making process. Chapter 6 returns to this issue in section 6.2 when it debates the 4th National Conference on the Environment (CNMA).
- 'Closed spaces' are exclusive to elite groups of decision-makers and do not involve procedures for public engagement or consultation. Bureaucrats, elected officials and invited experts are in charge of the decision-making. The majority of social norms are formulated on a daily basis by a myriad of government bodies, without public scrutiny – if every government action necessitated a public consultation, it would be impossible to govern. However, certain policy reforms demand public consultation, although access to this is often controlled, with the inclusion of some specialist groups and exclusion of others (section 5.2 discusses this form of process in the context of the formulation of the Indian Waste Rules).
- 'Claimed' or 'created spaces' are the result of popular mobilisations against opponents, powerful groups and statutory authorities. Some of these participatory

spaces are created outside of the institutional arena, when people join together to discuss their common concerns and mobilise for a common purpose.

Gaventa (2005: 12) explains that all these spaces are dynamic, changing their configurations over time according to their members' interests. Invited spaces can be implemented to legitimise closed-door decision-making processes, while grassroots mobilisations can become institutionalised and incorporated into the political discussions or government proceedings.

However, the main question is, who participates in these forums and political processes? In discussions about public participation and democracy, the term 'the public' is sometimes used interchangeably with 'the people', 'citizens', and more recently, 'stakeholders'. Although the concept is often taken for granted by those studying social science or working in the field, it is important to clarify exactly who 'the public' involved in these processes is.

The origin of the term 'the people' lies in the ancient Greek word, *demos,* from *demokratia*, which means 'the rule of the people' (Dahl, 1998: 11; Sartori, 1987: 21). The *demos* were the people of the *polis* (Sartori, 1987: 25). Sartori (1987: 21) explains that the definition of 'the people' may vary, and can mean the entire population, the majority of the electorate or the poorer members of the population. In terms of representative processes, 'the public' refers to the electorate of citizens, as defined by universal suffrage, but it does not include everybody – it generally excludes, for instance, children, those with severe mental disabilities, prisoners and transient inhabitants. George Frederickson (1991: 396) suggests that the term 'the public' can assume different meanings according to the question posed and the particular field in which it arises. For instance, from the perspective of market

theories and public choice analysis, the public is conceived of as consumers, while from the perspective of service provision, it comprises clients.

The term ‘stakeholder’ also appears in discussions about public participation. This is a recent expression largely employed in the management sector, particularly in the sphere of Corporate Social Responsibility (CSR) (corporate self-evaluation whose purpose is to provide information for the market). It encompasses the totality of actors affected by the activities of a business concern, or when applied to the public sector, by public policy and services. In many cases, ‘stakeholders’ are confused with ‘interest groups’, because some authors describe stakeholders as all the ‘interested’ individuals, both organised and unorganised, affected by the organisation or the service. The scope of this term seems too loose to define the actors participating in decision-making, involving as it does not only legislators, but also the providers and users of public services – a whole universe of populations potentially affected by the provision of public services, as well as the lack of it. Most of these actors have little influence on or interest in participating in decision-making. Nevertheless, the term stakeholder has been widely employed in several official documents – for example, in the Indian *Manual on Municipal Solid Waste Management* (MoUD, 2014b) and the Solid Waste Management (MSW) Rules, 2016 (MoEFCC, 2016), which designate public consultation. Thus, it appears that all of the above terms have become too nebulous to use in an analytical study. It seems appropriate, instead, to find a more precise definition of the groups of individuals involved in policy-making.

Brodie et al. (2009: 21), in their research into the processes of participation in community development in the UK, present a survey of the actors engaged in public participation, defined by class, gender and professional activity. Despite the presence

of some community group organisations, bureaucrats and activists, there is hardly any mention of interest groups. 'Interested', unorganised individuals are not interest groups. The unorganised ordinary citizen hardly ever has the power to change decisions unless they join forces to engage politically in the institutional process. Nowadays, there are generally open microphones in public consultations for individuals to voice their opinions. For example, the Environmental Impact Assessment (EIA) – proceedings that are implemented to measure the effects of a large urban project – have specific rules mandating the consultation of affected communities during the planning application stage. In addition, due to the advances of the internet, almost every official body now has a link on their webpage to enable some sort of interaction with the public, and an increasing number of public consultations are carried out online. While attending a public hearing in the legislative assembly of the state of São Paulo as part of my fieldwork, for example, I noted that individuals were able to voice their concerns and make suggestions to the local councillors in periodic public assemblies concerning the introduction of bills. There was an interesting moment in one of these consultations when a man came to the microphone to express a somewhat confused claim – I had previously noticed him in other public hearings – and the convener of the debate called him by his name and kindly asked him to be concise, giving the impression that he was known to speak in every session. However, this type of participation has little, if any, influence on the decision-making process.

In contrast to political engagement in the public arena of debates, the advent of the internet, social media and other technologies appears to have encouraged many individuals to take isolated actions against government decisions. There are also very extreme cases where marginalised individuals have self-immolated in protest at the

imposition of certain policies. Such individual actions are beyond the scope of this research, since they do not help us discover the identity of the key actors influencing government decisions. Mancur Olson (1997: 1) differentiates self-interested individuals from interest groups, explaining that such individuals do not engage in common concerns; in fact, he suggests that private, individual interests can be more effectively achieved without collective action (Olson, 1997: 7). Unorganised citizens, however, have little chance to partake in policymaking unless they organise with other individuals to advance their common interests in the public arena.

The fact is that the participation of citizens in politics decreases considerably when it comes to the electoral process. John Dryzek and Patrick Dunleavy (2009: 208) suggest that one of the many reasons explaining this apathy is a lack of interest in or knowledge about politics and public affairs, coupled with the assumption that political processes are manipulated by political and economic elites, which means that many citizens have little faith in the success of individual efforts to change political outcomes. Those who do participate usually have a specific interest in a particular policy area. Thus, the participatory processes are legitimised by relatively small groups of participants – 'small' here does not mean a few people, but a smaller number than the whole society.

Deliberative democracy is a category of public participation where the participants come together to reflect on, debate and exchange their views about a political matter before expressing their decision (Pateman, 2012: 8). Sartori (1987: 112) emphasises that such debate aims to improve the quality of decisions. The concept of deliberative democracy, therefore, describes the direct deliberation of decision-making by non-elected actors, which means individuals self-governing their public affairs. This

model differs from the legislative processes and partisan systems of representative democracy, where elected officials are entitled to represent the interests of the majority of the population. Public hearings, forums and deliberative polling are some of the institutional spaces of deliberative decision-making. In general, these work best at the local level, where the number of participants is measurable. Innovative examples of successful deliberative schemes involving communities have been reported by a number of academics (Dryzek and Niemeyer, 2008: 489, Pateman, 2012: 12, Cornwall and Coelho, 2007, Spiller and Liao, 2006); these include participatory budgets in the city of Porto Alegre and the Health Council in Brazil, and the role of the *panshayat* (assemblies of elders) in the Indian state of Kerala, which has created new opportunities for public participation in town planning. There are many examples of citizen-based forums and institutional spaces with a certain level of deliberative practices, designed to accommodate a mix of public and private actors. Some of these will be explored in Chapters 6 and 7 in the discussion on the 4th CNMA (section 6.2), the sectoral agreements on reverse logistics in Brazil (section 6.3) and the provision of public services in India (section 7.3).

The democratic models discussed above illustrate a variety of channels through which individuals and groups can interact with each other and with government officials, and exercise some level of participation in public affairs.

Public participation, interest groups and the policy cycle

This subsection analyses how public participation is understood within government policy proceedings. Forums for public participation such as public hearings can be implemented in specific stages of the decision-making process, and the involvement of different actors varies along the policy cycle according to the political processes

and legislation of the specific country. Thomas Birkland (2011: 241) divides these actors into two categories: official and unofficial. The officials, who are obliged to participate, comprise both elected representatives and members of the bureaucracy, including members of the legislative (senators, deputies), the executive (the personnel of ministries, agencies, government bodies and the state or municipal secretariat) and the judiciary (magistrates and public prosecutors). Despite lacking legal powers or duties, the unofficial actors in the proceedings (individual citizens, interest groups, think tanks, lawyers and the mass media, among others) have the right to express their interests and concerns. Thomas Dye (1998: 26) explains that the study of 'how policies are made' takes into account the fact that policymaking is a political process, divided into a series of consecutive stages. The number and the nomenclatures of these stages vary according to different theorists. Dye divides the process into six stages – problem identification, agenda-setting, formulation, legitimation, implementation and evaluation – with different actors involved in each stage. The stage of problem identification, policy formulation and legitimation tends to be open to numerous actors (including ordinary citizens and interest groups), but, in practice, only those with a particular interest in the sector involved usually attend. During the decision-making and implementation processes, generally only official actors have the authority to debate the issue and vote on it. However, even during this stage, interest groups are often engaged in lobbying the decision-makers to adopt certain policies.

The definition of public policy varies according to the theorist who proposes it. The following are just two examples. Probably the most comprehensive definition is the well-known one proposed by Dye (1998: 1), who describes public policy simply as 'whatever governments choose to do or not to do'. This definition states explicitly

that the government is the primary actor, since it has the authority to legislate on behalf of society, drawing up public policies that order or ban certain behaviours; coordinating the bureaucracy; allocating goods and resources; and establishing taxes and sanctions (Dye, 1998: 2). In addition to such actions, Dye also emphasises that even the *in*action of government can be considered as policy. However, this definition seems somewhat simplistic; Michael Howlett at al. (2009: 5), for example, contend that it is so broad that it encompasses everything that involves the government, from the ordering of office supplies to the purchase of nuclear weapons. In addition, it is based on the idea that all government choices and actions are deliberate and target-oriented, while, in reality, many are contradictory, while others may produce unexpected outcomes.

William Jenkins expands Dye's definition by proposing a more thorough and nuanced description of public policies, describing them as:

> *[A] set of interrelated decisions taken by a political actor or groups concerning the selection of goals and the means of achieving them within a specified situation where these decisions should, in principle, be within the power of those actors to achieve. (William Jenkins, 1978: 15)*

Howlett at al. (2009: 6) claim that, in addition to the fact that policies are often made through a process that includes a selection of the decisions resulting from the interaction between official agencies and other actors, Jenkins' definition also takes into account the limits to a government's capacity to implement these policies.

Policymaking is thus defined as a process of actions that the state adopts, in agreement with interest groups, when ruling on a specific public concern. In this case,

Howlett et al. (2009: 4) explain, public policy is conceptualised as a 'techno-political' exercise. The technical part aims to identify the best options available to address the problems; meanwhile, the political sphere takes into account the union of the different actors involved in the political process, as different groups might disagree on the formulation of the problem and the solutions proposed. In contrast to this picture of a rational process, based on problem-solving and susceptive analysis, Charles Lindblom (1959) suggests that much government planning comes down to 'muddling through'. In other words, instead of a scientific analysis of the alternatives, with a risk analysis and a thorough calculation of the possible outcomes, policies are in fact the result of 'disjointed incrementalism' (Lindblom, 1959: 519). Rather than take the risk of implementing carefully planned improvements that might produce radical changes, bureaucrats in general opt for small, incremental steps, following accepted practices. Therefore, public participation can be implemented as part of this political process, but what is the basis for this public engagement in government decisions?

Democracy and liberalism

In order to understand how (and why) individuals and groups are involved in policy decision-making, we need to also understand how democracy works and the role of the democratic state in the political process.

As discussed above, democracy is a political regime in which the majority of the population select their representatives to govern the country and make decisions on their behalf (Schmitter and Karl, 1991: 80; Beetham, 1997: 79). It is based on the 'rule of law', meaning that those with political power cannot impose authoritarian measures and their power is limited by the same laws that apply to any other citizen. As the term democracy has been widely employed in reference to different forms of

government, Robert Dahl (1989) introduces the concept of 'polyarchy', suggesting a minimal procedure by which to define and separate democracy from other political regimes. According to Dahl (1989: 221), a polyarchy is a polity where elected officials are chosen in fair, competitive and periodic elections and entrusted to govern under the constitutional law; almost all adult citizens have the right to vote for their representatives and to be elected to public office, and they also have the right to information, freedom of expression and the autonomy to form political parties, associations and interest groups. As such, voting equality, participation, enlightened understanding, control of the agenda and inclusion are essential preconditions for the democratic process (Dahl 1989: 108). David Beetham (1997: 42) further defines democracy as the institutional separation of powers into the executive, legislative and judiciary; the separation between the public and private realms, where the private realm (civil society, the market, individuals) is autonomous from that of the state; the power of a representative parliament; and the pluralism of ideas. These tenets mean that political institutions are delimited by a constitution, which protects the individual from arbitrary state power and ensures no ruler or group can usurp the central power of the state. In addition to these basic attributes, there are other components that vary among the different forms of democracy, such as the government's federal arrangements, the number of parties involved in the electoral process, and the checks and balances between the branches of government (Schmitter and Karl, 1991: 83). The democratic system thus provides a series of structural arrangements whereby individual citizens and groups of citizens are allowed to participate in government decisions. These differences are essential to explore how the characteristics of each political context determine the participation of interest groups in government decisions.

Liberal democracy is also based on a set of fundamental individual rights, such as freedom of association, press and religion, which are usually included in a written constitution.[2] One of the fundamental features that differentiates the democratic system from other political regimes is freedom of association (Tocqueville, 1835). Bobbio et al. (1998: 687) explain that part of the challenge of separating the concept of liberalism from that of democracy, however, is the fact that liberalism is what distinguishes democracy from authoritarian and totalitarian regimes. Only democracy allows pressure groups to disagree with centrally made decisions. Whereas non-democratic regimes also have groups that form within the military or the party bureaucracy, these are generally informal groups seeking to gain political power, and their autonomy is limited (Gandhi and Przeworski, 2007). By contrast, in the democratic system, the law guarantees freedom of association and allows the formal activity of civil society, whereby interest groups can seek to influence decision-making. Thus, liberalism provides democracies with the legal mechanisms that enable individuals to come together to defend their common interests in the public arena.

However, political liberalism and economic liberalism are two different concepts. Jürgen Habermas and William Rehg (2001) divide the idea of liberty into two forms of individual autonomy: the private and the political. The right of the individual to participate in government decisions is different from their freedom to compete in the market, although these authors claim that these rights complement each other in a democratic system (Habermas and Rehg, 2001: 780). They explain that private autonomy is guaranteed by the impersonal rule of law, and differs from civic

[2] For example, the fundamental rights of citizens are set out in Article 5 of the Brazilian Federal Constitution of 1988 and in Part III of the Constitution of India.

autonomy, where the individual is empowered to determine their own laws in participatory and deliberative political systems. In modern democracies, the classical idea of the 'rule of law' is manifested in the concept of 'human rights' and is attached to the idea of 'popular sovereignty', which legitimises the political process (Habermas and Rehg, 2001: 767). However, Deepak Nayyar (2001) has a different perspective. He claims that liberalism is often misunderstood: the liberal orthodoxy is that democratic principles protect the political freedom of individuals, while market principles protect their economic freedom, and together these guarantee that people can pursue their interests in the political arena. The problem is that democracy is based on the political equality of adult suffrage, while the market is based on the unequal distribution of income and property. Markets exclude people who do not produce, consume or sell their labour, especially the poor; without purchasing power, people cannot buy the goods and services offered in the market (Nayyar, 2001: 363). Therefore, there is a contradiction between the principle of inclusive political participation and the exclusion of the poor from economic markets, which reinforces inequality. This has significant implications for the application of democratic models of participation in developing countries (as discussed later in section 2.4).

Although, Dahl (1998: 45) provides some significant justifications for the preference of democracy over other regimes, such as the protection of individuals against the arbitrary cruelty of an autocrat, the freedom of individuals to pursue their own fundamental interests and the promotion of human development, he attests that democracy is not a synonym for development, nor a promise of future solutions. Philippe Schmitter and Terry Karl (1991: 76) claim that there is a temptation to imagine that the democratic system will resolve all the irregularities in society; in fact, they suggest that democracy does not necessarily produce good governance and

more efficient administrative systems. They demystify four common assumptions about this type of regime (Schmitter and Karl, 1991: 85). Firstly, democracy does not mean more open economies; instead, some democratic countries have implemented protectionist policies and austerity measures in a bid to promote economic development, mainly in periods of political and economic transition. Secondly, their economies are not more efficient than non-democratic regimes – in older and long-enduring democracies, political and economic institutions work together, reinforcing each other, but 'uneven democracies' still need to deal with the problems of inequality and particularism (the concept of 'uneven democracies' is discussed later in section 2.4). Thirdly, democracies can be more difficult to administer and their decision-making processes slower than in autocratic regimes, since they are obliged to consult more actors before reaching a decision. Also, not only can the amount of bargaining widen the opportunities for corruption in the decision-making process, but the level of disagreement can be higher as the losers in political disputes have the right to complain. Finally, democracies can be more unstable and less orderly, since freedom of expression allows oppositional forces and social movements to protest government decisions (Schmitter and Karl, 1991: 85). Recently, non-democratic countries, such as China and Singapore, have demonstrated steady economic growth, while a large number of newly democratised countries in Latin America, Africa and Asia still suffer from problems of underdevelopment, including poverty and high levels of inequality. In addition to all these limitations, the electoral process appears to have neither improved politics nor changed politicians' conduct; in fact, the opposite can be true: corrupt politicians are quite often re-elected.

Liberalism and democracy, however, guarantee individuals the right of association – that is, the right to form groups to express their claims in the public arena, where the

state becomes the space in which these claims are contested and negotiated. It is, therefore, necessary to analyse the role of the democratic state as the mediator of different interests in society. Niraja Jayal (2001: 44) claims that only the state can create the conditions for citizens and groups to exercise democratic participation by respecting differences and mediating between disputes; nevertheless, due to the state's inherent authoritarian tendencies, a strong civil society is the only guarantee against the centralisation of power.

According to Dahl (1998: 41), the state is often treated as if it were a unitary system, with government institutions establishing the norms of social conduct and their enforcement. The famous notion of Thomas Hobbes (1651: 125) that the state is a superior entity, with the coercive power to enforce impersonal rules which all citizens are compelled to obey, is a generally accepted formulation. The state does indeed possess the power to enforce the law in its territory – in the most extreme cases, employing the police or military; however, it is important to differentiate between the authority of the state and the use of force. Dahl (1989: 244) explains that the authority of the democratic state is based on the legitimacy of the law, and Bobbio et al. (1998: 675) add that this legitimacy lies in the consensus of a significant part of the population, which means the state is generally capable of ensuring compliance to the rules without recourse to force. The idea of public participation as a mechanism for the legitimation of government interests is explored in the case of the Indian SBA (section 5.2) and the Sectoral Agreements in Brazil (section 6.3).

The authority of the state is generally based in its bureaucracy, where the actions of the government are coordinated (Weber, 1947). The state itself is organised as a set of connected governing institutions which implement the law and obtain compliance

with it. The state, then, is not a unitary system; rather, it comprises a myriad of government institutions, organised to provide services, which sometimes work in contradiction to one another. Institutions are commonly described in social science as 'the rules of the game', which means that they regulate behaviours and impose structures on human relationships (North, 1993: 2). Some government institutions are highly formalised, with a constitution, laws, regulations, and dedicated buildings and officials, while others have informally accepted values and rituals (O'Donnell, 1996: 3). The study of institutions also has to take into account the hierarchy of laws and public bodies operating in the governance of a nation. Douglass North (1993:1) states that institutions determine the incentives that induce the choices and behaviours of individuals and organisations affecting its economy and the lives of its citizens.

The majority of political conflicts and different interests are negotiated in this public realm. Thus, the state is both the supreme entity that regulates the practices of individuals or groups and the public sphere where these actors negotiate policy alternatives. The institutional approach to the study of the decision-making process attributes the outcomes of policy decisions exclusively to government institutions, with institutional arrangements determining the behaviour of individuals and groups in society. However, although government institutions dictate the rules of the game, there are other forces influencing government decisions. As Peter Dicken (2011: 178) emphasises, every country has a particular set of structures and practices determining how its society and economy operate. An understanding of the role of the state in the organisation of society and the economy, therefore, is fundamental to an analysis of the involvement of interest groups in policymaking.

Orthodox theories of the role of the state

In order to understand the forces influencing interest groups' relationships with and impact on government decisions, this subsection explores two opposing orthodox theories of the state: Marxism and market liberalism. The analysis of the role of the state in liberal democracies takes two main ideological positions: on the one hand, neoliberals aim to narrow the power of the public realm to render it as minimal as possible, retaining only its remit to promote economic growth and regulate and protect property rights against state interference or collective interests; on the other hand, proponents of social democracy advocate an extensive role for the state, in terms of regulation, taxation and progressive policies that address inequalities by providing basic services, income security and social programmes for universal education and healthcare (Schmitter and Karl, 1991: 77).

Liberalism's main tenet is protection of the individual's freedom to pursue their particular interests (Howlett et al., 2009: 55), and this reasoning establishes practices and beliefs that help promote the capitalist mode of production, which Beetham (1997: 42) defines as a market-oriented organisation of society based on production and exchange. According to Przeworski (1985: 11), the market economy is a system grounded in competition and the free exchange of products and services, where property rights are guaranteed by law. Market liberals believe that the role of the government should be reduced in favour of market mechanisms; they advocate both economic freedom and freedom for the individual to make rational choices. Dicken (2011: 177) explains that, in the now-pervasive neoliberal model, the system is dominated by the concept of 'individualism' and the maximisation of 'short-term business profitability'. Apart from producing measures that promote these outcomes, everything that involves the government (bureaucrats, politicians, voters) is thought to

produce ‘bad’ results, and only the market produces ‘good’ results (Dryzek and Dunleavy, 2009: 33). Neoliberalism advocates economic freedom, unhindered by the coercive power of the state (Dryzek and Dunleavy, 2009: 100).

In contrast, Karl Marx provided a theory of capitalism and the evolution of society, according to which, capitalist society is divided into two main social classes, the bourgeoisie and the proletariat (Marx and Engels, 2005: 98). A small number of property owners, the bourgeoisie, hold property rights and own the means of production. They employ the proletariat, who own nothing but their labour power (Marx and Engels, 2005), their employment guaranteed only by their capacity to generate profits for the capitalist owners. Mancur Olson (1971: 103) explains that these classes are divided by antagonistic economic interests and, in this relationship, the members of each group have opposing collective interests. According to John Dryzek and Patrick Dunleavy (2009: 92), the state-society relationship can be analysed in three different ways: as an instrument of the ruling class, the arbiter of the conflict between the classes, or the maintainer of the capitalist system’s stability. From a Marxist viewpoint, the welfare state can mitigate the harmful consequences of capitalism, but even ‘social policies of redistribution do not represent [the] political influence of ordinary people, merely stabilising society in the interests of the elite’ (Dryzek and Dunleavy, 2009: 77, 97).

Przeworski (1985: 77) disagrees with the Marxist theory that the relationship between democracy and capitalism generates social instability; in fact, he claims the opposite – democracy perpetuates capitalism, since the systems of production and ‘exploitation can be maintained with the consent of the exploited’. The democratic institutions of the state become the tools of the dominant classes, balancing the conflicts in society.

Since, in capitalist societies, politics is reduced to material interests, interest groups participate in politics in order to realise their specific material needs (Przeworski, 1985: 134). In his view, democracy provides opportunities for any group to satisfy their material needs, and the future of the system (and the realisation of the various interests within it) depends on decisions on the allocation of resources. The survival of the economic system and capitalist society, however, relies primarily on the profitability of business and the accumulation of capital: without investment, the economy cannot support itself, consumption decreases and living standards decline. The state, therefore, needs to provide the means to maintain and expand investments. As Lindblom (in Howlett et al., 2009: 57) explains, due to 'the reliance of states in capitalist societies on business revenues for the overall levels of social well-being', business concerns have unparalleled capacity to influence decision-makers.

In a democratic state, civil society occupies an intermediate position between the state and society. The public realm is separated from the private sector, and it determines how society and the market operate. However, social scientists appear ambivalent about the relationship between the democratic polity and the market economy: some theorists argue that market forces harm the democratic process, while others claim they benefit democratic institutions. Beetham (1997: 76) states that this disagreement depends on how theorists conceptualise the role of the market economy and civil society in the political process. If the market is conceived of as exclusive of civil society, theorists tend to treat the economic domain as self-interested, pursuing only the maximisation of profits, while theorists who include the market as part of civil society understand the polity in a broader sense, perceiving civil society as a space of democratic manifestation. The former separate this conflict into three main forces: the state bureaucracy, the market and civil society; in the latter, civil society is defined as

an intermediary sphere between the state and the individual, operating autonomously and independently, and counterbalancing the authority of the state (Beetham, 1997: 76). As such, civil society becomes an arena of intense political contestation.

Authority and power

Dahl explains that, in order to have 'effective participation', all citizens must have equal opportunity to discuss and raise concerns about the government's political agenda:

> *Throughout the process of making bidding decisions, citizens ought to have an adequate opportunity, and an equal opportunity, for expressing their preferences as to the final outcomes. They must have adequate and equal opportunities for placing questions on the agenda and for expressing reasons for endorsing one outcome rather than another. (Dahl, 1989: 109)*

However, the study of politics is the study of the exercise of power and how power shapes these political processes. Within this sphere of political competition between conflicting interests, some actors are more powerful than others. The concept of power is central to understanding the capacity of actors to influence policy decisions and the decision-making processes, as well as the relationships between interest groups. Power favours the development of some groups and restricts others. Michel Foucault (1991) defines 'power' as action that influences others' behaviour. As Bobbio et al. (1998: 940) explain, power is thus part of every social relationship in which the behaviour of individual/group A (government body, political party, interest group) impacts the behaviour of individual/group B. Therefore, power implies a causal relationship between A and B: the exercise of power in the political context

demands an A who exerts power and an opposing B who is affected by this action. Hence, according to Foucault (1991), power is a relationship rather than the imposition of force or violence; it comes from below, from the individual's acceptance of their social position. As Mark Kelly (2013: 65) explains, 'power comes from occupying a position in a complex social network that endows a person with power'. The power of the state lies in its institutions (its laws and values), rather than the use of force.

In the context of public participation, Gaventa (2005: 15) describes three conceptualisations of power: the 'visible power' involved in decision-making, the 'hidden power' that sets the political agenda, and the 'invisible power' shaping meanings and values within the participatory processes. Political power is visible when it is impersonally defined through legislation, institutions and the procedures of policymaking. Some groups and institutions are able to exert influence over the determination of who participates in policy decision-making and who is excluded, as well as the agenda. Some actors also shape the beliefs and values of those participating – Gaventa (2005: 15) explains that 'processes of socialisation, culture and ideology perpetuate exclusion and inequality by defining what is normal, acceptable and safe'. Therefore, far from being politically neutral, participatory processes are permeated by power relations.

The study of interest groups also involves an understanding of the different ways that power is conceptualised. For example, 'elite theory' is the study of the structures of power and wealth in terms of the relationship between those at the top of the pyramid and the rest of the population at its base; pluralists, on the other hand, claim that

power is dispersed among a variety of groups, preventing its concentration. These ideas will be studied in detail in section 2.3.

However, the main question here is: what is the power of the ordinary citizen to influence policy decisions, and are citizens competent to decide on policies?

Experts, science and decision-making

Before addressing interest group theories, it is important to highlight the position of certain influential individuals in participatory forums and other government proceedings. Among all the actors involved in decision-making, public policy experts hold a distinctive position in government decisions as they offer technical solutions to social problems. They comprise academics, researchers, politicians, members of associations, lawyers, leaders of social movements and NGOs, chief executive officers of corporations (CEOs), directors of government bodies – in sum, they are the leading specialists in their fields. They play an opinion-forming role in government committees and think tanks, and participate in public debates and academic forums, producing and managing information, and influencing public opinion (Dahl, 1989: 335). These experts occupy an ambiguous position, as individuals and as members of interest groups; some may appear as individuals but, in fact, represent specific groups and promote ideologies that benefit particular group interests.

The debate on the role of experts in decision-making is crucial to this research. Their importance in politics is based on the power of knowledge and science, which Daniel Kleinman (2000: 11) divides into three spheres: structures, resources and discourses. Structural power defines the boundaries of action in a particular issue, and provides the financial resources and knowledge, as well as the discourses, that shape social

values and behaviour. The majority of the events that I attended on the policies of solid waste management in the course of my fieldwork, including public hearings, business fairs and academic discussions, were populated by experts. Atul Kohli (1993: 683) calls attention to the 1990s and the beginnings of neoliberalism in India, when, in the name of efficiency and pragmatism, technocratic decisions were conducted by public policy specialists behind closed doors, without any vestige of popular control. This is still a current feature of Indian politics: decisions on the Indian waste reforms (discussed in Chapter 5 and 6), for example, were taken by a few bureaucrats and some invited experts, with little space for public consultation. Harry Eckstein (cited in Maloney et al., 1994: 22) claims that some restricted consultations are not necessarily undemocratic since certain technical issues demand professional expertise and few people have the interest or knowledge to take such decisions. However, this means there is a risk that important issues become 'depoliticised' and controlled by a small number of interest groups with access to government officials.

Dahl (1989: 338) contends that because a knowledge gap separates the political elite from the ordinary citizen, the role of the expert is to render knowledge accessible to citizens and to clarify issues to help them decide the best way to advance the public interest. William McDonough and Michael Braungart (2002: 12), however, argue that although it is almost universally recognised that decisions on environmental issues, for example, should be discussed democratically, complex issues cannot rely on democratic consultation alone, as the layperson does not have the necessary specialist knowledge. Proponents of the essential role of expertise claim that in post-industrial societies technical knowledge is key to decision-making. J. K. Galbraith (cited in Parsons, 1995: 266) claims that policy-making is a collective decision, in which

experts play a decisive role: politicians are obliged to choose between rational policy alternatives, and these choices must be supported by technical arguments. The legitimacy of the decision-making process is thus guaranteed by technical expertise and scientific rationality. The authority of science, according to this argument, always underpins political authority (Bocking, 2004: 3).

However, the predominant role of experts raises concerns when their authority is translated into political power (Bocking, 2004: 21). Scientific authority is based on its 'credibility', which Steven Epstein (2000: 16) defines as the capacity to aggregate the support of a sufficient number of people to back a claim. Dahl (1998: 72), however, argues that government decisions are not scientific experiments, where solutions are based on empirical evidence; rather, they involve negotiating the uncertainties and conflicts in society, and demand ethical judgements, based on principles such as justice, equity and morality. Sheila Jasanoff (2003) states that there are two key problems in science: the first is fallibility and the second is a 'pro-business bias.' She explains that all predictive techniques, designed to minimise uncertainty and risk, and promote good management, suffer from 'overconfidence in the accuracy and completeness of the picture they produce' (Jasanoff, 2003: 239). These methods tend to provide false confidence in the security – that is, the comprehensive coverage of all potential risks – provided by expert analysis. Experts downplay scenarios 'outside their field of vision'. Jasanoff (2003: 223) gives several examples of the failure of scientific control – including climate change and the disasters of Chernobyl, in the former USSR, and Bhopal, in India – that clearly expose human pretensions to technological domination. As these instances show, scientific knowledge is in fact limited, vulnerable and uncertain.

The second problem concerns the accountability and impartiality of experts, and the integrity of their research. Scientific and technical knowledge, when used in the service of politics, becomes a sociopolitical issue. The idea of the authority of science raises the question of the relationship between expert knowledge, power and democratic decision-making, particularly as political elites are willing to manipulate information to reinforce their power (Dahl, 1989: 338). David Kleinman (2000: 11) shows how the authority vested in scientific knowledge can be used to impose dominant discourses that shape values and opinions, giving those who hold this expertise a sort of 'cultural authority'. This authority is based on the assumption that scientists' findings are impartial and exempt from political influence (Kleinman, 2000: 4). Science has indeed been responsible for significant developments that have helped solve social problems and further an understanding of the world we live in, but there is a danger that science is regarded as value-neutral and free of bias, particularly when scientific knowledge is used to support political decisions (Bocking, 2004: 17).

Richard Sclove (1995) claims that, in democratic systems, citizens should have the option to influence decisions that affect their lives, but reliance on technocratic decision-making creates conflicting private interests in the political process. Jasanoff (2003) adds that even in political processes involving consensus and deliberative forums, designed to include both citizens and experts, the expert realm excludes laypersons from the review and critique of its evidence, as they do not possess enough expert knowledge. In addition, some participatory processes are implemented too late in the policy cycle, after the major decisions have already been taken. This was the experience of the 4th CNMA in Brazil (section 6.2), where, despite the engagement of the population across the country, it was not clear whether the outcome of these debates would be incorporated into the political decisions.

As an academic, however, I am aware that I am also a specialist. Although my capacity to influence policies is limited as I am not formally engaged with any group or active in any political process, my text presents my interpretation of these political processes and debates, bringing the voices of certain actors to the fore. When I present a paper in conferences or academic journals, for example, I am part of a group of academics that is, in turn, part of a wider body of intellectual experts. If I participate in conferences organised by international organisations involved in the waste management sector, my work contributes to these organisations. If my paper is included in a panel focused on developing countries, it contributes to the reinforcement of the ideology of a North-South divide. Therefore, as a researcher working as part of the scientific community, I have some sort of influence on the production of the information that affects the political realm – the object of my critique.

Experts, therefore, cannot be impartial; they play a distinctive role in forums for public participation, guiding debates and influencing the values of the participants. The reason for holding an open debate is to give a plurality of actors the opportunity to raise their ideas or concerns in a public arena; however, some elite groups, by virtue of their claim to expertise, are able to take a leading position in these debates and thus their organisations possess significant influence over policy-making.

Although there are examples of successful participatory processes where excluded social groups have gained some sort of access to the decision-making process, and of participatory forums that have fostered interaction and the exchange of knowledge between government bodies and interest groups across different levels of governance, participation generally allows a small group of actors to define the limits of public

access to government resources. These political processes are legitimised by their dominant participants.

2.3 Interest group theory

The previous section focused on public participation, questioning the role of the ordinary citizen in these political processes. This section explores the influence of pressure groups on government decisions from the perspective of interest group theory. Despite the extensive literature on public participation, there has been less focus on the role of interest groups within these political decision-making processes. Public participation involves a series of activities and spaces where the public (individuals and groups) can engage in government decisions. This section, therefore, explores how different schools of thoughts interpret the role of the state and that of interest groups in government decisions. Although the public is sometimes able to participate in certain processes, such as public hearings, at specific moments of decision-making, interest groups are able to exert a major influence on the entire political process. In addition to public hearings and participatory forums, Scott Furlong and Cornelius Kerwin (2004: 363) describe a number of methods of interest-group participation, such as submitting written documents (research, analysis or proposals) to government bodies; forming coalitions with other groups to support or halt bills; holding informal face-to-face meetings with government officials both before and after consultations; and filing petitions in the courts to prevent the implementation of government decisions. Even in technocratic decision-making processes, which are generally closed to the public, experts and members of interest groups participate in the government committees that invariably define whether and how the public will be involved in the making and implementation of policies.

A few authors have explored participation from the perspective of interest groups. William Maloney et al. (1994) investigate the role of interest groups in consultations in the UK, discussing the unequal capacity privileged groups have to influence the political process, as well as analysing their strategies. Pablo Spiller and Sanny Lao (2006) explore the way interest groups purchase influence, lobby the legislative and executive branches of government, and promote lawsuits through the judiciary. Meanwhile, Marissa Golden (1998) and Scott Furlong (1997) look specifically at the role of interest groups in federal policymaking in the US. Golden (1998) explains that the US Congress has delegated the design of certain policies to the executive. This transfer of rule-making powers from elected representatives to unelected bureaucrats should involve public oversight to ensure the protection of the democratic process; instead, Congress has legitimated interest-group participation in the decision-making, and as a result, the process is dominated by big business, and the voices of ordinary citizens are virtually absent. Golden's analysis contributes to an understanding of the activity of interest groups in the drawing up of the Indian MSW Rules – the result of an executive decree. The main question the majority of these scholars pose is: who participates in government decisions and what influence do they wield? The activities of interest groups in decision-making must be defined in terms of the mechanisms they use and the actions they take in order to influence government decisions.

Few academics have focused on the role of interest groups in Brazil and India. Amongst those who do, some give cultural explanations for their political influence in these countries. Andréa Gozetto and Clive Thomas (2014: 3), for example, provide an historical, sociopolitical context for interest group activities in Brazil. They attribute the system of interest groups that operates in the country to its particular political culture, which is based on close private-public relationships (the inheritance of a

Portuguese hierarchical family tradition); a strong presidential system; and the evolution of the economy and the expansion of democratic pluralism after 1988 (Gozetto and Thomas, 2014: 3). They argue that Brazilian politics up to the present day has always been linked to the distribution of power between political elites and powerful interest groups. In the case of India, S. A. Palekar (2014) and Sandeep Gulabsingh (2015) explain that although business groups are also the most organised and powerful groups in the country's politics, groups representing racial, linguistic, religious and regional claims also exert a strong influence on government decisions. Legislators have a close relationship with religious sectors, and the 'caste lobby' (from the dominant down to the minority and so-called 'backward' castes) has an increasingly strong influence on politics. Thus, Indian political institutions and its socioeconomic development are shaped by interest group participation in decision-making (Palekar, 2014: 339).

Although religious and other social groups may seek to participate in politics, the most influential group (in the case of public service provision) is the special-interest group of business and commercial organisations. Associations of industries, chambers of commerce, law firms and lobbyists are the most organised and powerful groups influencing the governmental agenda (Olson, 1971: 141). In addition to the methods mentioned above, Thomas Dye (1998: 35) explains that interest groups are involved in a variety of other interactions with decision-makers and civil servants, such as providing information and research; helping draft legislation; contributing to campaigns and financing government programmes, political parties and officials; cementing relationships between politicians and businessmen by providing dinners, parties and travel opportunities; exchanging staff with government bodies (the

'revolving door'); pursuing lawsuits to stop or change legislation; and instigating grassroots mobilisation to support their interests.

Jordan and Maloney (2007: 2) even claim that interest groups are more representative of citizens' preferences than political parties. Although this literature focuses on pressure groups, it is important to bear in mind that political parties are also, in a sense, interest groups. Andrew McFarland (1987: 12) contends that the study of interest groups and political parties varies according to the particular theoretical position adopted by the social scientist. On the one hand, Bobbio et al (1998: 564) state that political parties and pressure groups represent specific interests in society; they both participate in politics and mediate the interaction between the state and society. However, the democratic party system has its own mechanisms through which it participates in electoral competition, and elected representatives are directly in charge of policy decision-making and public administration. Although pressure groups do not participate directly in elections, and their members do not have institutional decision-making powers, they can influence political decisions. Pressure groups act independently of partisan associations and exert significant control over political parties: while political parties are at the centre of the decision-making process, pressure groups seek, either through incentives or coercive actions, to ensure that their interests are guaranteed (Bobbio et al., 1998: 564). Although deemed illegal in some democratic systems, interest groups frequently finance the electoral campaigns of political parties, recruit members to take official positions and determine policy alternatives by lobbying politicians. The 'lobby' is literally a corridor in the office buildings and hotels where parliamentarians routinely work and live (Bobbio et al., 1998: 563), and the term 'lobbying' is used to describe the activities of professional intermediaries employed by interest groups to interact with

government officials in the attempt to convince them to facilitate policies that promote their client's interests. Spiller and Liao (2006: 5) describe lobbying as 'the transferring of resources' (money, contacts and information) to government officials in order to affect their decisions. Although these practices are part of politics, there is a common feeling that lobbying is an undemocratic, even dirty practice, usually conducted behind closed doors.

On the other hand, Grant Jordan and William Maloney (1994: 1) claim that associations of individuals are intrinsic to the democratic system, and their participation represents a valuable contribution to public policy. These authors argue that they provide opportunities for individuals to interact with, learn from and make pluralist contributions to the decision-making process. However, the term 'interest group' lacks precision (Jordan et al., 2004: 207), as many scholars have a different conceptualisation of its definition. Interest groups are usually differentiated from government institutions, and include business organisations, non-government and trade associations, but exclude social movements and public interest groups. Jeffrey Berry (1977: 7) defines a public interest group as 'one that seeks a collective good, the achievement of which will not selectively and materially benefit the membership of activists of the organisation'. According to this definition, interest groups are organised groups which seek to influence policies for the good of their members (Jordan et al., 2004); this definition by default excludes unorganised and latent groups. Laura Baroni et al. (2014) explain that differentiations of classification or definition in the literature are driven by different research focuses, with the two main distinctions based on behaviour and organisation. The first approach observes the groups' activities in relation to their influence on policy outcomes, while the latter explores their organisational characteristics in terms of their capacity to engage and

mobilise their membership. Taking a behavioural approach, Jordan et al. (2004: 28) also suggest a differentiation between 'pressure participants', organisations in a potential position to influence public policies, and 'policy participants', 'organisations not primarily dedicated to political activity'. They suggest that corporate groups can be labelled either as 'interest groups', when they combine in trade associations and are not directly engaged in changing policy, or as 'pressure participants', when the company attempts to intervene in the political process (Jordan et al., 2004: 208).

However, interest groups theories provide different perspectives on the capacity of influence of these groups. These theories have evolved into four main analytical models: group theory, pluralism, elite group theory and neo-pluralism. These are further (roughly) divided into two main schools of thought: one more pluralist, which sees the existence of such groups as essential to diluting the centralisation of state power, and the other more elitist, which believes that power is concentrated in a minority of dominant groups. In addition to these key theories, this literature also explores the theory of corporatism, which evolved in Europe in parallel with the discussion of interest groups.

Initially, interest group theory emerged from the study of the American political system, but it has since been applied to many other political contexts across the world. For example, authors such as Jayal (2001), Nayyar (2001), Alston et al. (2016) and Gozetto and Thomas (2014), among others, employ these theories to explain the decision-making processes in Brazil and India. The following section is an overview of these theories and a reflection on their contribution to the present research.

2.3.1 Group theory

Group theory has its origins in a work by Arthur Bentley (1908), *The Process of Government*, which discusses the dominant role of interest groups in politics; his theories gained prominence in the 1950s with David Truman's (1951) *The Government Process*. According to these authors, politics can be reduced to the struggle between different groups of people, each pursuing their own economic interests. Groups, rather than individuals, are the key forces behind political and economic developments in society; Truman (1951: 246) claims that isolated individuals acting independently are rare in politics. In this context, the term 'group' means 'a number of individuals with a common interest' (Olson, 1971: 8): group members share common behaviours and act together to achieve their mutual goals.

Raymond Castell and Arthur Bentley (cited in Olson, 1997: 9) both assert that 'every group has an interest'. According to Olson (1971: 120), the discourse of 'individual interests' versus 'the national interest' is a sham. Society and politics are the result of many conflicting pressures, and political debate is used to openly discuss problems and thus reach a consensual solution. Olson (1971: 10) gives an example of an industrial sector that wishes to change a tariff system: in order to change policy or to obtain government assistance, interest groups in this sector will organise themselves as a pressure group to lobby for the change. If their action faces resistance, they will invest resources in influencing public opinion and negotiating agreements with competing groups. John Commons (cited in Olson, 1971: 116), writing in the 1950s, claims that pressure groups based on economic interests are more influential in the US than the legislature, which is based on geographical representation. He believes such groups represent freedom of voluntary association, and are the most vital organisation in a democratic society.

Bentley (cited in Olson, 1971: 119) states that the term 'pressure' (as in 'pressure groups') refers to influence on policy-making, where the government is the space of accommodation for many competing interests. Even self-interested economic groups are important for the political process, precisely because they have antagonistic interests which balance those of other competing powers. The government, in fact, is created by interest groups; it is the space of interaction for these interests, and its political institutions are put in place to support them. In addition, William Maloney et al. (1994: 21) claim that government officials cultivate relationships with pressure groups as their bills rely on engaging such interests, and a policy that does not receive the attention of society will hardly ever be enacted in law. Interest groups, therefore, work through the government, and their particular interests have meaning when they are interpreted and referenced to other pressures as part of the governmental process (Bentley, 1908: 271). Although sometimes there is a risk that the government works as the tool of certain private interests (Bentley, 1908: 270), Olson (1971: 124) explains that both Bentley and Truman interpret pressure group activity in government affairs as generally beneficial for society as it helps balance the multiplicity of interests involved in a public issue.

Opponents of this view claim that the activity of interest groups in the decision-making process is costly in terms of time and the complexity of consultations. Bobbio et al. (1998: 564) emphasise that it could be even more expensive in terms of the acquisition of information and knowledge, and the resistance of opposing groups left out of consultations. However, as pressure groups play a dominant role in policy-making, their activities should at least be better regulated and more transparent. Bobbio et al. (1998: 570), therefore, claim that a democracy requires mechanisms in place to avoid the perpetuation of oligarchies.

2.3.2 Pluralism

The term ‘pluralism’ here refers to the inclusion of diverse ideas and views within the political process. Dahl (1989: 291) explains that the concept of ‘polyarchy’ recognises that the political process is the result of conflicts between a multitude of groups and organisations working independently of the state and of one another. In this case, decision-making is not a ‘black box’, limited to politicians and bureaucrats (Dryzek and Dunleavy, 2009: 253). Pluralists believe that power-sharing between various groups disperses the central authority of the state, as the policy outcome is a result of the action of multiple centres of power. Thus, the competition between conflicting interests produces fair and balanced decisions. According to this view, the government is an autonomous entity, negotiating with these interest groups.

Pluralism developed in American social sciences in the 1950s and 1960s as an explanation of the emergence of civil rights movements (Black Power groups, anti-Vietnam War campaigners and environmentalists) in the political arena (Parsons, 1995: 253). However, in the 1970s, theorists also started to recognise that policy-making is primarily influenced by powerful business interests. According to McFarland (1987: 138), the concept of pluralism evolved out of a combination of Dahl’s work on power, Truman’s and Bentley’s group theory and Lindbolm’s incrementalism. The theoretical framework is built on the premise that policymaking is an incremental process, in which the government and its agencies are autonomous entities and its decision-makers are influenced by a variety of organisations seeking to advance their independent interests. The amalgamation of these conflicts leads to a balanced policy outcome (McFarland, 1987: 139).

For example, in the case of the waste policies analysed in this research, the pluralist model would describe the difference between the Brazilian and the Indian decision-making processes as simply a result of the former government incorporating more actors into the political process than the latter. This being the case, it would appear that the federations of industries, mayors, labour unions and NGOs involved in the solid waste management sector, all lobbying for their specific interests, would encounter a more pluralist political system in Brazil than in India, where the system is deemed more technocratic. Thus, research in this area would no doubt conclude that the pluralist model generates more representative and balanced policies. However, this analysis would be simplistic, failing to take into account the disparity of power between these groups. Other theories discussed below address this theme.

Pluralist theory has been widely criticised, mainly due to the fact that it assumes that all claims are equally well organised and actively represented in the policymaking process. It lacks a clear explanation of the unequal power relations involved in politics, failing to recognise that some groups are more organised, more economically and politically powerful, and more capable of influencing policy decisions than others (Howlett et al., 2009: 40). Critics of the theory also claim that the role of the government is vague. Howlett et al. (2009: 39) criticise Dahl's (1976) assumption that the government can be conceptualised not as an 'entity' but as an 'arena', where interest groups compete and bargain, ignoring the fact that government authorities also have private interests and special relationships with specific pressure groups.

In *The Logic of Collective Action*, Olson (1971: 127) argues against the pluralistic assumption that the counterbalance of the political actions of different pressure groups will result in fair and satisfactory outcomes for the rest of society. He bases his

criticism on a distinction between the size of groups. Olson (1971: 21) contends that their organisational capacity is disproportionate: small groups, which he defines as 'privileged' and 'intermediate' groups, are more efficient in promoting the common interests of their members, while large groups, which he calls 'latent groups' (such as ordinary citizens) are generally unorganised and inactive. The centripetal force of smaller groups strengthens the voluntary actions of their members, because they are closer to the issue, while members of larger groups lack this cohesive power, as their members are dispersed and free to advance their individual interests (Olson, 1971: 50). The power of such groups in the political arena is uneven.

This logic helps us to understand the actions of ordinary citizens and interest groups in participatory processes. For example, business associations are very efficient when promoting their demands in debates, while large groups of unorganised consumers or residents find it difficult to organise their claims in this manner – although, in some cases, a community affected by a specific problem is motivated to organise their demands effectively in order to press for government action. Olson (1971: 128) suggests that privileged groups generally defeat large groups, contradicting the democratic principle of the rule of the majority. Chapters 6 and 7 discuss the organisational capacity and actions of some specific interest groups in the waste management sector in Brazil and India, specifically business associations (section 7.2) and the social movements of waste pickers (section 7.5). Section 6.3 also discusses the Sectoral Agreement of Reverse Logistics in Brazil, which is a deliberative forum designed to implement waste recycling across the country. After years of intense negotiations, the proposal put forward by a cohesive group of industrialists was accepted over the proposals of other influential groups; meanwhile, those who are the main users of this public good and who will have to pay for its implementation

(Brazilian householders) had little representation. This exemplifies Olson's (1971: 132) critique of pluralist theory, which he claims does not work for latent groups as, although they have potential power, they lack organisation and coordination.

2.3.3 Elite theory

In contrast to the pluralists' optimism, elite group theorists claim that only a minority, oligarchic group, representative of the concentration of political power, controls the state and society. These theorists reject the idea that democracy is the 'government of the people, by the people'; democracy, they believe, is the result of the actions of the economic and governing elites who have access to decision-making. Research by Wrights Mills (cited in McFarland, 2010: 3) in the 1950s showed that the power elite in the US comprises an allied group of large corporations, military officers and members of Congress, and this group controls the country's finances, federal government and means of force. Elite theorists contend that the ordinary citizen does not have the necessary knowledge or access to information to shape policymaking, and the elite are therefore generally able to influence their opinions, rather than the other way around (Dye, 1998: 18).

Elite theorists also divide society into two classes: the ruling elite (owners of economic and political power) and the masses (ordinary citizens, excluded from the decision-making processes). The difference between this division of social classes to that of Marxist theory is the fact that, in Marx, the proletariat struggles to change this situation, and through these struggles arrives at the conclusion that the only solution is revolutionary systemic change. The masses in elite theory, by contrast, are powerless, under the control of the elite; in fact, the democratic model legitimises the power of the elite (Dryzek and Dunleavy, 2009). Business groups, bureaucrats and technocrats

use their assets, such as control of the means of communication and technical knowledge, to manipulate public opinion. Elite power is, therefore, based on the construction of social beliefs, values and behaviours, and control over the access to decision-making. It aims to restrain its opponents' capacity for mobilisation and prevent any consideration of alternatives to elite goals (Parsons, 1995: 253). For example, Dye (2001: 16) explains that the institutional structure of society will determine which issues are placed on the government agenda, and which will escape notice. He claims that 'non-decisions' are also part of the structure of power that limits public concerns and mobilisation. Sartori (1987: 16) gives the example of the structural concentration of economic power in the US: wealthy organisations, such as industrialists and their business associations, financial institutions (investment banks and insurance companies), large media groups and corporate lawyers, decide on the issues to be considered by government – issues that impact the whole society. Some issues will never receive government attention, because they are deemed to be 'private' concerns.

According to elite theory, therefore, the state becomes the elite's instrument and it is used to serve their interests (Domhoff, 1978a: 15 cited in Dryzek and Dunleavy, 2009: 75). Schumpeter (2003: 269) criticises the political process, which only serves to legitimise elite power. He defines the democratic method as a competition for leadership, where everyone is theoretically free to compete but, in practice, it is the political elites who compete for the popular vote. In this way, elections are reduced to a form of market competition, where rival elites (through their political parties) propose programmes, and citizens only participate in policymaking insofar as they choose between them.

Although it is easy to identify the power of elites to influence political debates, participatory forums can provide opportunities for some underprivileged social groups to raise their voices and promote their claims in the political arena. Despite these theorists' pessimism about elite dominance in politics, I observed during my fieldwork many civil servants, both in Brazil and India, who were committed to improving the quality of public services, as well as participatory forums which cemented relationships and improved the exchange of information between the authorities, social groups and local communities. Therefore, although elite dominance is a reality, its theorists do not pay enough attention to movements at the base of the pyramid; public participation has in fact provided an opening to some of these groups to change policies and challenge the status quo.

2.3.4 Neo-pluralism

Some scholars working in the pluralist tradition have incorporated the critiques and contributions of other theories, such as multiple-elite, social movements and coalition network theories, to formulate a neo-pluralist theory (McFarland, 2010: 8). This new theory explicitly recognises that policymaking is not neutral and, in reality, favours business and economic groups. In addition, the fact that a multitude of diverse groups are involved in policymaking does not necessarily entail more just or representative decision-making (McFarland, 2007: 46) since some important interests are not represented. Some groups are more powerful than others, and this disparity has a decisive influence on policy outcomes (Howlett et al., 2009: 39).

Business groups always exert the most powerful influence in liberal democracies. Lindbom (1977 cited in Howlett et al., 2009: 39) explains that policymaking is restrained by capitalism (business interests and the market), partly because

governments rely on positive economic results for the tax revenues needed to advance their programmes. Furthermore, economic growth and employment rely on financial investment. For these reasons, big business and financial concerns are able to exert pressure on the state to pursue their interests. However, the intersection of theories of social movements, advocacy coalition and political process with neo-pluralist theory has contributed to its further development.

Social movements theory

The study of social movements differs from that of interest groups and political parties; nevertheless, some social movements develop into interest groups and, as such, participate in policymaking. A social movement is defined as the mobilisation of individuals and groups – many of them without formal political affiliations – in order to achieve a particular political outcome (Birkland, 2011: 136). Sidney Tarrow (1998: 5) argues that such collective action differs from the politics of democratic representation, markets or lobby groups as it allows the disadvantaged to access the institutional system; a social movement is often the only alternative open to people struggling against unacceptable conditions to engage in the political realm (Tarrow, 1998: 4). They gain the strength (often through alliances with prominent citizens) to challenge elites, other interest groups and official institutions. In general, they mobilise around an issue of high visibility; when the target is achieved, the movement loses energy (Birkland, 2011: 137).

In contrast to political parties and interest groups, the organisers of social movements lack financial resources, organisational structure or access to the state (Tarrow, 1998: 6). Instead, they employ a wide repertoire of activities that challenge the political system, and they take advantage of 'political opportunities and constraints' to

construct common identities and mobilising ideologies (Tarrow, 1998: 3). The engagement of people who self-identify with these collective struggles empowers the movement and enables it to take action. Some leaders of social movements become skilled in combining extra-parliamentary action with institutional participation. Indeed, some successful movements become well-structured organisations, their leaders are co-opted by the political system, and they turn to lobbying and bargaining with other interest groups and politicians (Tarrow, 1998: 6).

In the case of solid waste management, the social movement of waste pickers has emerged as a remarkable worldwide phenomenon. Poor people working informally in this sector have organised together to fight for employment rights and improved working conditions, challenging government institutions and large corporations; some of these movements have gone on to develop into labour unions or cooperatives. Section 7.5 discusses the achievements of such social movements in Brazil and India. In addition, section 6.5 describes other, less-structured protests by residents of areas affected by dumpsites and incineration plants.

Dominant networks

Neo-pluralists also emphasise the role of 'advocacy coalitions', which establish alliances between interest groups within the policy network (McFarland, 2007: 58). These networks facilitate coalitions of lobbyists and the exchange of information between government agencies and interest groups (McFarland, 2007: 56). Some of these networks will be discussed in Chapters 5 and 7, which look at the decision-making process in waste reforms in Brazil and India.

John Wallis (2015) proposes an alternative model, which interprets the relationship among different organisations and the state as based on the dynamics of dominant networks. Dominant networks are the result of coalitions between powerful elite organisations, which enable them to enforce their interests in the political system. Wallis claims that this theory challenges the Hobbesian notion of the power of the state: in his famous work, *Leviathan*, Thomas Hobbes (1651) conceptualised the state as a supreme institution with the coercive powers to enforce its impersonal rules. However, Wallis (2015: 3) claims that society cannot be organised through violence; rather, it relies on incentives and agreements. The government's capacity for coordination ensures the creation of a system of rules that are credible and enforceable, due to the economic benefits of coalitions (Wallis, 2015: 69). Dominant networks minimise the use of force, since the peaceful extraction of rents and other economic benefits accommodates the interests of both the networks and society.

Governments 'publicly signify agreements' with these powerful networks in the interests of social consensus (Wallis, 2015: 7). Thus, these networks do not formally hold power; instead, power is organised impersonally through their relationship with the state (Wallis, 2015: 43). The 'essential and defining characteristic of government is not the ability to use violence to enforce rules, but the ability to coordinate forces within society in such a way that rules and rule enforcement are credible' (Wallis, 2015: 4). Rather than using coercion, the state employs its capacity to organise and enforce coordination between these powerful organisations. Chapter 6 returns to this model when discussing the 4th CNMA and the Sectoral Agreements on Reverse Logistics in Brazil in sections 6.2 and 6.3. These participatory forums and deliberative processes provide institutional spaces in which some powerful groups form coalitions, expressing common interests and laying out their conditions. The most successful,

who act with the endorsement of the government, are legitimised by the participatory process, consolidating their interests.

However, one criticism of this version of the neo-pluralist theory is the lack of recognition of the influence of international organisations. Globalisation has increased the interdependence of domestic and international actors and nation-states. Dryzek and Dunleavy (2009: 309) argue that the analyses of the state put forward by globalisation theory and environmentalism changes the way the classic theories of democracy (such as pluralism, elite theory and Marxism) address domestic issues. These theories tend to explore political systems within a national frame, while globalisation theory places domestic political forces and institutions within a larger international context. The most important actors in this context are the multinational corporations involved in the global production network (the offshoring of production, trade and consumption) and international organisations supporting global systems of information and investment (Dicken, 2011: 430). Global elites, represented by chambers of commerce, multinational corporations, international investors and charities, among others, coordinate actions with national and local elites to reinforce their mutual interests. NGOs and social movements have also created international alliances in order to exchange information, and increase membership and cooperation on a global scale. Section 7.4 discusses the role of international organisations in shaping policymaking and the market in Brazil and India. Many of the participatory processes in these countries that are related to environmental issues have been promoted and supported by international organisations.

2.3.5 Corporatism

In contrast to the models analysed above, which focused on the North American liberal democratic regime, the theory of corporatism evolved to explain the activity of interest groups in social democratic regimes in Europe and Latin America. Dicken (2011: 177) explains that, in a corporate state, the government plays a central role in the organisation of society and the economy, supporting business networks and industrial strategies. Public policy is, therefore, the result of institutional interaction between the state and interest groups (Howlett et al., 2009: 42). In Brazil, for example, this model is a product of a political culture of 'tripartism', where the economy is organised according to a contract between the state, business interests and labour unions. Wayne Parsons (1995: 258) explains that corporate states operate in the capitalist mode, but they seek to control economic interests; promoting cooperation between the different actors in order to avoid the negative consequences of conflicts and competition, and prevent or manage economic crises.

Schmitter (1974: 86), however, argues that the term 'corporatism' can have pejorative connotations, as it is often associated with clientelism, where the government is primarily interested in bargaining over public policies with powerful economic interests. In some cases, these practices are labelled 'participatory processes', 'collaborative planning' or 'permanent consultation', due to the interaction of these actors in decision-making processes.

Gozetto and Thomas (2014: 96) explain that corporatist theory shares some similarities with pluralism, since both models are based on the growing formalisation of associations of interest groups as part of the political process, and the fact that their political outcomes are the result of diversification and conflicts of interests. Experts

also play an important role in this system, as does the exchange of information during negotiations, leading to the diminished importance of territorial and partisan representation in policy-making. However, these models have distinct understandings of the institutional organisation of the state. While pluralism is based on the autonomous competition and interaction between interest groups, in the corporate system, this competition is organised and incentivised by the state, and operates interdependently with it. In the pluralist model, the policy outcome is the balance of the intersection of the forces involved; in the corporate model, it is the result of complementary interaction between the state and interest groups. Corporatism proposes a distinct structure of power, whereby institutional arrangements exert influence by advancing specific public policies, sectoral areas and interest groups. The state, therefore, plays a prominent role in organising, regulating and stimulating the association of interest groups within the policymaking process.

Although other models have made significant contributions to the understanding of the way interest groups participate in government decisions, the corporatist model offers a better explanation of the political processes of waste management reform in Brazil and India. In these countries, interest groups rely on central government's regulatory measures and transfer of resources. Without government initiatives and incentives, local government and the markets cannot evolve or overcome the system's dysfunctional irregularities. However, it is worth noting that the state does not act independently – its activities are a result of interest group pressure. The policies are, in essence, written documents that regulate the needs of some of the interest groups involved. As such, the participatory process, which engages decision-makers and practitioners in negotiations, provides an opportunity for the exchange of information between these parties. As the discussions in this thesis show, the governments in

countries such as Brazil and India play a central role in the organisation of sectoral policies. State intervention is crucial for the sustainable functioning of the market economy, and both the government and interest groups legitimise their activities through participatory processes.

2.4 Interest groups' participation in decision-making in emerging economies

The participation of interest groups helps us understand how the democratic state in these countries defines the solutions to social problems. As mentioned above, although many scholars have employed interest group theories to investigate the behaviour of interest groups in other political contexts, it is important to bear in mind that some of these theories emerged in the American and European political contexts. Given this, what can the Brazilian and the Indian contexts contribute to this debate, and what do they tell us about the nature of democracy? Despite their rapid economic growth during the first fifteen years of the twenty-first century, these emerging economies still have fragile democratic and economic institutions. According to Anders Åslund (2013: 10), their financial systems are weak, with reasonably high inflation and government debt, and there are serious problems of governance, such as a weak rule of law and oversized government institutions. In addition, their policymakers still maintain 'oligarchical practices' – they concentrate more on their own benefits than on the economy as a whole – leading to a poor business environment and widespread allegations of corruption. These are structural problems that demand decades of reforms. Advanced economies faced several crises before their political and economic systems matured; emerging economies, by contrast, are under pressure to overcome their deficiencies in a very limited space of time.

Guillermo O'Donnell (1996) proposes using new, alternative concepts to describe such countries. In his view, many of the democracies of emerging economies should be classified as 'uneven', when compared with the long-enduring democracies of the Global North. Democracy in Brazil and India has, in fact, a relatively long history and quite a high level of institutionalisation, but informal rules and particularism are pervasive (O'Donnell, 1996: 6). Particularism means that patronage and nepotism flourish in the gaps between formal rules and the behaviours of political elites, leading to clientelism. High levels of socioeconomic inequality are closely related to informal institutionalisation and particularism. Therefore, it is necessary to revise the model of comparative politics to avoid the illusion of consolidation, since informal particularities in these countries undermine their capacity to ensure that all citizens are equally entitled to participate in decisions that affect their lives; business interests have far greater representation than underprivileged groups in these democracies. Atul Kholi (1993: 671) points out that the new middle-class elites in developing countries promote their own market-oriented political agenda, distancing themselves from the poor, and this aggravates inequality.

Non-participation and social exclusion

The decisions relating to the provision of waste management services touch on several dimensions of exclusion. Policies and institutional arrangements are crucial to mitigating inequalities and mediating economic and social development in industrial and commercial sectors, and in the governance of local economies. Policies and political processes define the political and economic inclusion/exclusion of those involved in the waste management sector, as well as its labour market and the provision of financial resources for waste authorities to enable them to provide a

service to all of the population under their jurisdiction. This sort of basic service has a major impact on the poorest populations, who are most exposed to pollution and the risk of disease; it also provides a means of subsistence, dignity and security for those working in this sector.

In his research about the relationship between democracy and poverty alleviation, Ashutosh Varshney (1999) argues that when political and economic reforms come from above, they are intended to attract private investment (national and foreign) and satisfy the bureaucracy; while poverty is a secondary issue. Varshney (1999: 3) claims that policies are formulated primarily according to elite interests. The concept of social exclusion is thus crucial to understanding the structural inequalities of developing countries. This is evident in the issue of solid waste management. One of the key characteristics of this sector in developing countries is the presence of a large number of waste pickers working in the informal market. Section 7.5 discusses the organisation and political actions of this social group in Brazil and India.

However, as Olson (1971: 166) emphasises, unorganised groups do not have a voice in the political process because they cannot afford to lobby or partake in policymaking. This is the case for some of the larger unorganised groups in society, such as migrants, waste pickers and residents of poor communities, whose common interests are clear, but whose capacity for organisation is limited. According to Olson (1971: 165), in many cases, any common gains that disadvantaged groups might acquire by engaging in policy decisions do not cover the high individual costs (loss of working hours and the cost of transport and food) of participating in politics.

Unequal development policies undermine the capacity of excluded groups to participate in society and benefit those already included. Nayyar (2001: 367) defines

social exclusion as the denial of the right to well-being and enjoyment of social and economic benefits, which consequently deprives individuals and groups of the opportunity to compete politically and economically in defence of their interests. Exclusionary practices are also regulated by state institutions, the market and society. The process of exclusion is, therefore, the result of social and economic structural forces that reproduce and accentuate exclusion over time.

Gerry Rodgers et al. (1995: 3) explain that social exclusion can be analysed as a situation or as a process. When exclusion is persistent or permanent it resembles poverty, and this deprivation means that the individual cannot secure access to sufficient food, housing or services, further undermining their capacity to participate in society (Townsend, cited in Rodgers et al., 1995: 6). Room (cited in Rodgers et al., 1995: 2) says that 'when citizens are unable to secure their social rights, they will tend to suffer processes of generalised and persisting disadvantage and their social and occupational participation will be undermined'. Nayyar (2001: 367) lists the different forms that such exclusion can take, including exclusion from the labour market, ownership of land and security. Exclusion from the labour market leads to rising unemployment and the search for precarious jobs (low-skilled, ill-paid and without security); even within the labour market, there are different levels of exclusion: Rodgers et al. (1995: 44) explain that there are the 'good' jobs (secure, with acceptable working conditions), which are restricted to certain social groups, and 'bad' ones, characterised by the concentration of poverty, where cultural values replicate processes of discrimination based on social identity, be it caste, race, gender, ethnicity, religion or geographical origin. When the poor are excluded from the formal economy, highly exploitative informal contracts and labour markets become

their only recourse (Rodgers et al., 1995: 46). Chapter 7 returns to this issue in its discussion of waste pickers.

In the majority of households, especially poorer ones, a daily wage is the only family income. Unemployment and precarious jobs affect livelihoods and exclude people from consumer society and access to basic essentials. The unequal distribution of public goods and services, such as sanitation, water and electricity, degrades the environment of low-income localities, exposing people to violence, insecurity and frequent displacement. Lack of these basic services compromises children's development in terms of health, security and education, affecting their future as citizens, and in the worst cases, leading to child labour.

Some scholars claim that these are not problems of the market, but of the state. However, the state cannot address these problems if their actions are dictated by business interests. The question that arises, then, is how does the participation of interest groups in government decisions impact democracy and development in these countries? How can participatory processes address the problems of inequality and exclusion when government and pro-business interest groups are only interested in economic development?

Brazil and India

Recognition of socioeconomic inequalities and political exclusion are crucial to an analysis of democracy and development in emerging economies such as Brazil and India. India's economic growth has increased rapidly over recent years, mainly in the technology and telecommunication sectors; however, this development has not been translated into other areas of society. Jayal (2001) claims that the normative

definitions of democracy (for example, Dahl's definition mentioned above in section 2.2) and procedural analysis do not fit Indian democracy. She suggests that while some scholars argue that India is the largest democracy in the world, based on numbers of voters, they fail to mention that the inequalities that result from caste hierarchies, the dominance of landlords and gender disparities, among other issues, prevent the effective exercise of the franchise (Jayal, 2001: 3). Legal and political equality do not ensure that poorer citizens overcome the social and economic inequalities that undermine their capacity to influence decisions that affect their lives. The fact that, in this culturally diverse, hierarchical and still predominantly agrarian society, many lack access to appropriate information and the power to decide their own affairs, raises concerns about its democratic principles. Although Indian democracy has given the poor a voice in the electoral process, the concentration of power privileges the coalition of political and economic elites (Jayal, 2001: 42). In addition, laws in favour of the majority undermine religious and ethnic minorities, and other underprivileged social groups. Jayal (2001: 44) explains that the ideology of *Hindutva*, establishing the hegemony of Hinduism, ignores the claims of Muslims and other minorities, and compromises the project of a more egalitarian society. Indian democracy represents a space for political mobilisation, and political parties have taken advantage of ethnic identities in an attempt to expand the inclusion of marginalised groups in politics. But although certain policies have tried to compensate for historical distortions caused by the caste system by guaranteeing quotas in education and public sector employment for 'scheduled castes' and 'scheduled tribes', politicians have instead used these policies to reinforce caste identities (Jayal, 2001: 28).

Brazil also has its own complicated history of class, race and regional inequalities. Recently, the country has experienced one of the worst economic and political crises in its history, leading to the impeachment of the president and exposing the fragility of its democratic system. Although there are positive figures for the reduction of poverty and inequality,[3] the country has a disappointing development index, despite the optimistic forecasts of the early 2000s, and its economy is still recovering from two consecutive years of negative economic growth rates.[4] However, taking into account these constraints, a recent study carried out by Alston et al. (2016) provides a different perspective on the trajectory of Brazil's development. These researchers explain that the country is experiencing a period of critical transition, and instead of a short-term analysis based on economic indices, they propose a framework that involves in-depth analysis based on 'windows of opportunity', beliefs, leadership and dominant networks. In this framework, the consolidation of institutions plays a central role in the country's long-term, sustainable development. These authors claim that although politicians and voters matter, it is the dominant networks that constrain and shape belief in society and its formal institutions (Alston et al., 2016: 3 and 171).

The concept of dominant networks is crucial to shedding light on how the elites and the state operate in the political realm. Dominant networks are coalitions of elites (national and international business sectors, industrialists and banks, the bureaucracy, trade unions and agribusiness), who have the political power to influence or change the formal rules (Alston et al., 2016: 25). These authors explore the behaviour of such

[3] The World Bank's poverty index shows a significant reduction from 24.7% of the population in 2001 to 7.4% in 2014 (http://data.worldbank.org/indicator/SI.POV.NAHC?locations=BR&view=chart).
[4] Annual GDP growth of -3.8% in 2015 and -3.4% in 2016, according to the World Bank (http://data.worldbank.org/country/brazil?view=chart).

dominant networks during 'windows of opportunity' – moments that initiate a process of institutional transformation. Their analysis covers the key sequential periods of Brazilian development over the last fifty years (the military regime, the period of democratisation, and the mandates of Presidents Cardoso, Lula and Dilma). They show that dominant networks have had a significant impact during these periods, defining the values and institutions that promote and accommodate processes of change (Alston et al., 2016: 19 and 24). This transition has led to dramatic changes in Brazilian society, and its current sustainable development is the result of a shared belief in 'fiscally sound social inclusion' among these elite groups, the population and the government. This belief guides the institutional choices and policy alternatives chosen to achieve the desired outcomes of the dominant networks, since decision-making relies on the bargaining power of these organisations and the 'side payments that they make among the networks' (Alston et al., 2016: 25). The concept of dominant networks helps us to interpret how the dynamics between elite groups and the state operates, especially in the Brazilian case.

2.5 Chapter summary

The main conclusion this chapter draws is that interest groups and their policy experts (scientists, lawyers, industry spokespersons) have a far greater capacity to exert influence on policymakers than does the unorganised individual. Government decisions are not impartial participatory spaces, and certain sectoral niches tend to be dominated by pressure groups and their coalitions. This characteristic will be perceived throughout the following chapters which discuss the legislation, the institutional spaces of state-society integration and debates over government

decisions, and the main interest groups operating in the waste management policy sector.

The chapter has shown that although democracy theories treat citizen participation and pressure group influence on government decisions as separate concerns, these concepts often overlap in the debate on the forces involved in the political decision-making process. However, very few researchers have taken the further step of analysing these theories together. In his article on democratic participation in technical policy decisions, Frank Laird (1993: 356) points out the divergences between theories of citizen participation and interest group theories, emphasising that while the former stress individual political empowerment and the educational benefits of political engagement, the latter advocate group representation, where the benefits are seen in terms of pluralist competition and policy outcomes. Thus, both are needed to create a full picture of political participation.

Although interest groups employ a variety of strategies to influence and potentially control policymakers (Dye, 1998; 35), legislation establishes the official limits of their engagement in the political discussions. The following chapters show how public participation provides not only the institutional space for collective action in politics, but also a way for the government to legitimise agreed policies. The analysis of the political influence of public participation versus that of interest groups, therefore, contributes to a better understanding of the rationale behind the democratic decision-making process, the forces operating in this process and the public legitimation of the final decisions.

The first section of this chapter explored the main democratic channels open to individuals to participate in policy decisions, shedding light on how these processes

operate in the democratic state. Public participation, theoretically, gives citizens the opportunity to exercise their political rights – for example, Holston's (2009) research on 'insurgent citizenship' provides evidence of how public participation has provided disenfranchised groups with alternative ways of claiming their civil rights, while Varshney (1999: 4) states that political mobilisation and voting power enable the poor to exercise their political will and influence the government agenda. However, this section has noted how some scholars (Sartori, 1987; Dryzek and Dunleavy, 2009) have questioned the participationist idealisation of the politically active and engaged individual, capable of changing the political system. Gaventa (2005) warns that 'public participation' is also a political discourse, and as such, it is important to recognise that arguments for participation often validate specific political interests.

Mancur Olson's (1971) study of collective action shows that interest groups, rather than unorganised individual or voters, have a greater chance of influencing government decisions. The second section of the chapter, therefore, discussed the different perspectives taken by interest group theories, and showed how all of these theories contribute to a reflection on the role of interest groups in decision-making. However, in developing countries, it appears that the corporate state plays a significant role in directing the activities of such groups towards stimulating specific sectoral niches of development (Dicken, 2011). Thus, business interest groups have a prominent position in the state's corporatist strategy, establishing coalitions and interdependent relationships with the state. This section showed how some scholars (McFarland, 2007; Wallis, 2015) have attempted to explain the activities of and connections between interest groups and government agencies using the concept of dominant networks or coalitions. These networks attempt to control the exchange of information and staff in specific policy areas in order to obtain the policy outcomes

most beneficial to their members. Applying these concepts to the countries under review, Pranab Bardhan (1998) claims that the presence of dominant coalitions are an obstacle to India's economic growth; in contrast, Alston et al. (2016) state that dominant networks have helped to maintain the stability of Brazilian democracy in periods of political and economic transition, safeguarding the interests of political and economic elites.

The third section of the chapter revealed how theories designed to explain political phenomena in so-called 'uneven democracies', such as India and Brazil, must address pervasive levels of particularism, deficient institutionalisation and social, economic and regional inequalities (O'Donnell, 1996; Jayal, 2001). In the case of the provision of public services, the more affluent groups in society demand resources from and actions by the state that will foster their own economic development (Hague and Harrop, 2010). Major decisions are influenced by these economic interests, which tend to exacerbate the uneven socioeconomic conditions suffered by the majority of the population (Nayyar, 2001). Liberalism (as in 'liberal democracy') is famously based on the principle of freedom for all citizens to pursue their aspirations, but as this section showed, a fundamental question is whether the policies analysed in this research assist all the people of Brazil and India, including the most disadvantaged social groups, or in fact primarily benefit business interests. In essence, how does democracy operate in these emerging economies?

The next chapter describes the way this research has been designed to enable an analysis of the relative influence of these groups in Brazil and India in the context of the urgent problem of delivering basic waste management services on a national scale.

Chapter 3 Methodology

3.1 Introduction

The following chapter introduces the design of this research and discusses the key methodological choices underlying the research process. In light of the research question (see section 3.2, below), the investigation focuses on the influence interest groups have on government policy-making in the waste management sector, conducting a comparative analysis of their activities in two countries (India and Brazil). The research, therefore, is designed to reveal the extent to which powerful interest groups, in particular corporate groups, participate in government decisions, what forms this participation takes and why they exert such influence. This chapter argues that interest group participation in policy decisions is embedded in the structural relationship between public and private actors in these countries. This being the case, it is necessary to gain a direct understanding of the way these processes unfold, and how they regulate the politics in the sector, from the participants involved. This has involved a triangulation of qualitative methods to enable the investigation into how policies addressing a particular issue that concerns the interests of certain powerful interest groups are agreed on at a national level.

The chapter is divided into four main parts. The first debates the research question and gives an overview of the analysis; the second provides a justification for employing a comparative analysis; the third elucidates the research design and provides a thorough explanation of the research process, the fieldwork, and the validity and reliability of the data; and the fourth part (the chapter overview) discusses some final considerations before moving on to the research findings in the next chapters.

3.2 Research question and analysis overview

Research question

The question this research sets out to answer is: how does interest group participation in political decision-making shape solid waste management policies in Brazil and India, what forms does it take, and why?

The question emerged from my desire to understand the capacity of a country to implement national policies to resolve the increasingly urgent issue of waste management, focusing on emerging economies such as Brazil, and the role citizens play in these government decisions. My first hypothesis, before embarking on the fieldwork, was based on a belief that governments in these countries lack the necessary institutional capacity to deal with their waste management problem; this was related to the quality of the policies produced and the capacity of local government to implement policies agreed at a central level. During the research for my Masters degree, I studied the decision-making process of the National Policy on Solid Waste (PNRS) in Brazil, and I was motivated to explore in greater depth how the country as a whole puts that legislation into practice, and whether the ordinary citizen is involved in this political process. For this reason, when I began my doctoral research, I travelled to the field to test this hypothesis, comparing the implementation of waste management policies in Brazil with those in India, a similar emerging economy.

Waste management was a current topic of debate around that time (2011), as the Brazilian government had recently enacted its waste policy, and the implementation of the Indian Waste (MSW) Rules, after more than a decade on the statute books, was still far from providing a solution for that country. During my interviews, I would

start by asking interviewees about their knowledge of the national policy and their personal participation (or the participation of their organisation) in the political process. I perceived that political decision-making in the two countries was quite different. In Brazil, the political process was the result of rounds of interest group consultation, followed by large, participatory, deliberative processes (the 4th National Conference on the Environment (CNMA) and the Sectoral Agreements, reviewed in sections 6.2 and 6.3, respectively), where the majority of interviewees seemed engaged in the political discussions. In contrast, the Indian MSW Rules were formulated by a close-knit group of experts, with very limited mechanisms for public consultation, and promulgated by ministerial decree. One of the interviewees in India, who had participated in one of the advisory committees in charge of policy formulation, thought my questions strange: "The ministry invites whomever they want and they do not need to give an account of that.' This perspective, confirmed later when perusing policy documents (for example, the Indian Environmental Protection Act, 1986: Articles 23, 25 and 26) and discussing the issue with other informants, was quite different from decision-making in the same sectoral policy area in Brazil.

After an extensive investigation of these differences, my explorations led to the question of whether public participation in these different political processes has any influence either on decision-making or policy outcomes. However, the idea of public participation conceals something more significant: it is only one proceeding in the midst of many during the policy-making process. I took the opportunity to reformulate the research question (see above). This research, therefore, investigates the relationships and conflicts between various interest groups (including those with disproportionate economic and political resources) and the state, and how these shape

the organisation of power within a sector (such as waste management) that has a profound impact on society.

Analysis overview

This study bases its investigation on a structuralist approach, and uses this theoretical framework to define the research issue and research practices, which comprise a comparative analysis. As Rod Hague and Martin Harrop (2010: 31) explain, groups seeking to protect and further their interests – and maintain their sociopolitical power – are crucial elements in a political structure that is formed by a diversity of actors, including interest groups, political and economic elites, politicians and government bodies. Structuralists explain the individuals and groups' practices as a reflection of macro-structures (the state, networks, organisations), where the political outcomes are the result of their interdependent interactions (Landman, 2000: 33). Therefore, the behaviour of individuals and groups must be analysed in a wider social, political and economic context, and also viewed as part of a historical process. As Todd Landman (2000: 292) states, 'individuals are embedded in relational structures that shape human identities, interests, and interaction'. The analysis of this political configuration from a structuralist position differs from that of other theoretical approaches. Institutional theories, for example, argue that politics and government policies, and the political consequences of individual attitudes and choices, are shaped by the formal arrangements of government institutions. Meanwhile, behavioural and rational choice approaches ground their explanations in the individual, assuming that individual actions are the result of rational reasoning, whereby individuals always seek to maximise their achievements (Hague and Harrop, 2010: 25). By contrast, instead of concentrating on the actions of a particular actor or a specific organisation,

structuralists focus on a macro-social explanation, in which the individual or the internal members of organisations are of secondary importance. In this approach, individual values, attitudes and behaviours are products of the structural realm, which is determined by social relations, political and economic interests, and historical forces.

Thomas Dye (1998: 4) defines policy analysis as the study of the actions of government and 'the causes and consequences of these actions'. The study of interest group participation is embedded within these political processes; it seeks to understand the strategic forces that motivate government activities and determine policy outcomes. This research argues that the influence of interest groups on government decisions determines all aspects of government regulation. In the case of waste management, government policies include decisions as to which service providers will deliver the services; how they will be paid; the financial resources available to them; the technologies they will be allowed to implement; the level of environmental standards required for their operation; the type and quality of services the population will receive and how they will pay for those services; and the legality of other (often informal) groups providing similar services. All these features are the result of negotiations between decision-makers and interest groups, and their decisions have a significant impact on a society's development.

The analysis proceeds by means of a case study. Giampietro Gobo (2010) defines this as the examination of a phenomenon in a physical, social and cultural context, delimited by a period of time. In order to answer the research question, the research explores the decision-making processes in the same policy area in two different democracies, Brazil and India. The comparative analysis of national reform of solid

waste management in these countries, therefore, is used as a case study to investigate how interest group participation shapes these processes.

3.3 Comparative analysis

The study of interest group participation in decision-making broadens our understanding of how policies are formulated and why they appear to follow particular characteristic paths. However, this begs the question of whether this phenomenon is defined by its specific political context or whether it also applies to other (democratic) contexts. In this case, comparing decision-making in emerging economies may help researchers to identify the main internal and external forces that influence political decisions and the relationship of these forces with the democratic institutions that affect economic development and either address or perpetuate inequalities in these countries. The research aims to understand whether democracy creates favourable conditions for development. The comparison of the same phenomenon in two different political contexts may shed light on their singular characteristics – as well as revealing similar features – that affect the political processes. In addition, a comparative analysis that aims to understand the nature of democracy in these countries may help predict the patterns of decision-making and development in other countries. As Hague and Harrop (2010: 48) emphasise, countries' development paths are not independent of one other as they are embedded in a globalisation process, in which governments learn, copy from and interact with each other. They are, therefore, open to the influence of external factors, such as the activities of transnational organisations, international agreements and global economic and political conjunctures.

It is worth noting that the focus of the comparative analysis is not on the country's performance in the management of solid waste, but on the influence of actors that affect the decisions that regulate this sector. It is an exercise in the interpretation of ideas participants hold about politics (Hague and Harrop, 2010: 38). In contrast to the positivist approach of hard science, where knowledge is based on the observation of natural phenomena, social phenomena are investigated by analysing opinions, experiences and identities, as knowledge in this field is both socially and individually mediated and constructed (Trent and Cho, 2014: 639). Although Chapter 4 provides an overview of the solid waste management situation and its historical evolution in Brazil and India, this information provides the basis for a wider understanding of the extent to which interest group participation influences, and even guides, the policy decisions and socioeconomic development of these countries. Thus, the theoretical goal is to establish the role of interest groups in government decisions and how this influence affects the solution of issues of public concern in emerging economies.

The question arises of why these specific countries are critical to this analysis, and how it can avoid selection bias – the intentional choice of case studies – which could compromise the credibility of the research (Landman, 2000: 36). This problem affects mainly small-N comparative analysis, albeit the selection of countries is key for the comparative analysis, while the randomness of large-N studies dilutes this problem (Landman, 2000: 36). From the start, the aim of this research was to compare the problems facing emerging economies in the Global South. The cases of Brazil and India are salient here, since these economies are under pressure to sustain economic growth, yet features of underdevelopment, such as poverty and the unequal distribution of basic infrastructure, still persist. Other large emerging economies, such as Mexico or South Africa, could be used as alternative comparators. Mexico, which

has a presidential system, enacted a General Law on the Prevention and Comprehensive Management of Waste in 2003; South Africa, a parliamentary democracy, launched its Waste Act in 2008. However, Brazil and India offer some revelatory or unusual cases for analysis. In addition to the historical, cultural and socioeconomic differences separating these countries, the Brazilian waste reform is a national law enacted under a presidential system, while the Indian MSW Rules were promulgated by ministerial decree under a parliamentary system. These pieces of legislation, therefore, were formulated using different political procedures. As a result, this research offers a unique opportunity to investigate the extent to which interest groups have influenced these distinct political processes, and how these processes have affected democracy and development in these emerging economies. The examples of other emerging economies, such as Turkey and Russia, were discarded from the outset: in addition to the problem of language, their democratic systems are questionable and they have recently been destabilised by autocratic measures, which would add an unwanted degree of complexity to the research.

The idea of exploring the influence of interest group participation in government decisions using a comparative perspective is a novel one. Other researchers have employed different methods to explore the role of such actors in government decision-making processes. For example, Scott Furlong (1997: 331) email survey of organisations that lobby US government agencies presents a sample of interest groups and their activities. The author was interested in their methods and the effectiveness of their activities, which included lobbying, mobilising members of grassroots organisations, litigation and financial contributions. Scott Furlong and Cornelius Kerwin (2004: 361) repeated the research process a decade later in order to analyse the evolution of these activities. According to their findings, there had been an

increase in the diversity of these groups' strategies, including the use of online communication, to influence government decision-makers. In the case of the US, for example, Marissa Golden (1998) explores the influence of interest groups, selecting eleven regulations at random in three different government agencies. Her research was based on written comments received from the public and those made available by government bodies in order to discover the characteristics of the participants and the influence of interest groups on the outcome of these rules. Golden's findings show that, although policies were designed to promote public participation in decision-making, at least in the areas of her investigation, the participatory processes were dominated by business interests.

In Brazil, Andréa Oliveira (2004: 54) has carried out a series of interviews with lobbyists to create a profile of the profession and its activities in the country. Meanwhile, Andréa Gozetto and Thomas Clive (2014) have applied a neo-institutional analytical approach to explore interest group influence on Brazil's Biosafety Law (2005), which regulates the genetically modified foods (GMF) market. They expose the dynamics between two major conflicting groups involved in the decision-making process: those pressing for minimal regulation (corporate groups, agribusiness and industrialists) and those advocating stricter rules (the Ministry of the Environment and other government bodies, consumer protection organisations and environmentalists). In the end, the coalition for minimal regulation won the political battle, but the producers were required to add a GMF label to their products (Gozetto and Thomas, 2014: 22).

In relation to the specific issue of public participation in Brazil and India, many scholars have analysed the participatory budget in the city of Porto Alegre and local

governance in the state of Kerala, both successful examples of public participatory programmes (Cornwall and Coelho, 2007, Heller, 2001). It is also worth mentioning the work of Alexandre Barbosa et al. (2014) on labour markets in Brazil and India; Sonia Dias (2009) and the work carried out by the NGO, Women in Informal Employment: Globalizing and Organizing (WIEGO), on the conditions of waste pickers in both countries; and the comparative analysis carried out by Jérémie Cavé (2012) of municipal solid waste management in two cities in these countries: Vitória, the capital of Espírito Santo, Brazil, and Coimbatore in the state of Tamil Nadu, India.

However, there is little statistical data on these political processes in their totality, encompassing the complexity of factors involved, that would enable the formulation of a theoretical explanation of public participation in these two political contexts. There are several statistical studies correlating, for example, the impact of political corruption on other indices such as the level of democracy or quality of governance. Organisations, such as the Swedish research centre, the Quality of Governance Institute (QOG),[5] Transparency International (Corruption Perception Index)[6] and the World Bank (Control of Corruption Index), provide useful tools with which to measure and compare the impact of these irregularities on governance. However, these statistics are based on secondary data and do not detail how and why these irregularities occur. Also, there are no specific indicators with which to measure public participation and the impact of these relationships on policy formulation and implementation. Even the Institute for Applied Economic Research (IPEA), one of the main government-led research centres in Brazil with responsibility for supporting

[5] The Quality of Governance Institute (QoG): http://qog.pol.gu.se/data/datavisualizationtool
[6] Corruption Perception Index: http://cpi.transparency.org

government planning and activity, which has a dedicated research group evaluating the impact of national conferences in Brazil (explored in section 6.2), does not yet have specific indices to measure such political processes.

Global indices are valuable tools for large-N comparative analysis. However, comparing different political regimes through global indices and statistical data has its challenges. Michael Coppedge et al. (2011: 247) claim that although democracy is probably the most debated concept in social sciences, there is no single, universally accepted model of how to compare different regimes. Despite their value for decision-makers and academics, the authors claim that global indices are inadequate for comparing the quality of and relationship between the operational features of democracies (Coppedge et al., 2011: 252). All indices have their strengths and weaknesses. They give researchers a crude sense of major attributes and overall characteristics, but they suffer from serious problems of 'conceptualisation and measurement' intrinsic to 'the highly abstract and contested nature of democracy' (Coppedge et al., 2011: 258). Instead, these authors suggest that researchers should take into account historical, multidimensional, disaggregated and transparent approaches.

In a small-N comparative design involving two countries, however, qualitative methods can be used to produce an in-depth investigation into the characteristics of a common political phenomenon. Such methods can draw on a historical framework in order to reflect on the origin of some characteristic aspects of the practices of the government and other actors in the political process under investigation (see section 4.3 and Chapter 5 for examples).

3.4 Research design

3.4.1 Data collection and methods of analysis

In order to answer the question as to the degree of power interest groups wield over waste management policy in Brazil and India (see section 3.2), the research has been designed to identify the main participants in the political decision-making process, the spaces of state-interest group interaction and the policy outcomes. This should advance its aim to discover the nexus between interest group participation and government decisions in these countries.

In its investigation of the data generated by the political processes of waste management policy creation and implementation, the research employs a combination of three qualitative research methods: interviews, non-participatory observation and document analysis. The combination of multiple perspectives and methods of data collection allows for crosschecking the findings from different angles, helping increase the study's reliability and credibility (Halperin and Health, 2012: 283; Saldaña, 2014: 604). The triangulation of these data sources and methods, therefore, enhances the research procedure's objectivity. This is crucial because, as Gobo (2010: 38) explains, ethnography is a 'highly subjective method', being very sensitive to the researcher's perspective and preconceptions. Eliot Eisner (1992: 10) defines the pursuit of research objectivity as seeking to explore accurately all the perspectives and theoretical arguments concerning the data, in order to neutralise the risk of subjectivity. Although he claims that complete objectivity is impossible, he proposes that by employing methods that minimise personal judgment, the researcher can interpret the facts and build his or her argument with a degree of confidence that it is, as far as possible, free from bias. The multiple sources of primary data and evidence

used in this research should help reduce bias and enhance the credibility of its findings (Bowen, 2009: 28).

The next subsection provides a brief explanation of the three methods of data collection (document analysis, interviews and observation) and how they were triangulated to answer the research question, followed by a thorough explanation of the employment of these methods in the research process in the field.

Documentary evidence

The primary source of information concerning the actions of governments and individuals, as well as the operation of organisations, is the documentation produced by public and private bodies involved in the political process. Paul Atkinson and Amanda Coffey (2010: 83) argue that textual documents can provide the information needed to understand how people and their organisations work, and how practices and knowledge are communicated among their members and with other organisations. The textual information analysed in this study comprises a series of government official records, such as laws, transcripts of parliamentary debates, registers of attendance at meetings, reports and statistics produced by government bodies involved in the waste management sector; it also includes non-governmental documents, such as conference programmes, institutional reports and digital documents. In addition, this investigation takes into account the work of other researchers, such as articles in academic journals, public reports and newspaper articles, which often present alternative views of the same political phenomenon (Coffey, 2013: 369).

The research also explores some secondary data based on descriptions of important participatory events that happened outside of the fieldwork period, such as the Indian cycle of 'national consultation programmes'. Document analysis is not only about texts, but also images, and must take into account the increasing role of the internet in government communication. Section 5.2 explores the Clean India Mission, which extensively employs social media to spread the government's campaign.

All such documents are crucial to gaining an understanding of the decisions and practices of government institutions (Coffey, 2013: 367). However, as Paul Atkinson and Amanda Coffey (2010: 83) also state, they do not tell the whole history or daily reality of these institutions. Coffey (2013: 368) claims that documents generally do not mention the context in which they were produced and consumed. They present 'a version of the reality', since they are the result of social construction and are produced with a particular purpose, employing specific narrative conventions (Coffey, 2013: 368). Therefore, the classification of a document demands careful attention to its function and 'authorship' (who wrote the document and with what intentions) and 'readership' (the public who will consume it) (Coffey, 2013: 379).

In the case of the analysis of interest group participation, the written documents need to be complemented by other, potentially contradictory, oral and observational narratives. Also, as Glenn Bowen (2009: 30) explains, documents provide support for interviews by raising questions that need to be clarified with the interviewees, or help confirm information gathered from practitioners and observations in the field. Written documents were crucial to this research for the preparation of the interviews and validation of the interview findings.

Interviews

The interviews seek to develop a thorough description of the political processes in each country, based on the multiple perspectives of practitioners in the field, and to learn from their experiences how these processes have unfolded (Weiss, 1995: 9). The semi-structured interview approach was chosen to capture the interviewees' viewpoints in their own words and to explore their experience in depth. The format of the conversation was based on open questions – a way of discovering their perspectives and opinions, producing a thick description of their experiences. Kathryn Roulston (2013: 398) stresses that the interview comprises a social co-construction of meanings by the researcher and the researched. However, Michael Huberman and Matthew Miles (2002) also warn that the validity of the interviews relies on the accurate description and interpretation of the research participant's words. Given this, it is worth noting that in both the countries under analysis, but particularly in the 'cross-cultural dialogues' I conducted with my Indian subjects, I had to remain aware of my potential influence on the interview process itself and in the translation and analysis of the interview data (Roulston, 2013: 309).

The structure of the interviews followed a schedule composed of three main topics, backed up with some supplementary information from the literature (the following subsection provides a detailed description of the interview process). The informants were chosen using snowball sampling, whereby the researcher finds potential interviewees according to specific criteria, and they then suggest other pertinent informants (Halperin and Heath, 2012: 246). The criteria of the sampling frame were based on recruiting government and non-governmental actors involved in the specific policy area of waste management who could provide a variety of contrasting perspectives on the subject (Rapley, 2004: 17). The main objective of these interviews

was to understand how the participation of these actors has shaped waste policies and practices in both countries. Although snowballing meant that my initial interviewees led me to other potential participants, and so on, it is important to highlight that the interviews also attempted to include a wide variety of voices involved in the political process, and the sources of information come from different perspectives, many of without any connection to the other interviewees.

Non-participatory observation

As Amir Marvasti (2013: 355) explains, ethnography means the observation and documentation of people's behaviour in the field. It allows the researcher to collect information by directly observing people, places and situations, observing the manifestations and variations of a particular setting.

Gobo (2010: 26) differentiates non-participatory and participatory observation, explaining that in the former, the object of study is observed without the researcher's interference, while in the participatory method, the researcher directly interacts with his or her subjects and their situation, in order to learn about their daily routines and understand their perceptions and behaviours. In the case of the non-participatory observation method, the researcher aims to detach him or herself so as not to influence the observed situation. However, as the interpretation of the observation passes through the researcher's subjective filters (Marvasti, 2013: 355), the analysis of the subject will always be mediated by the observer's analytical position.

In addition to the textual records, and the narratives and opinions of the interviewees, this research observed the behaviours and practices of its subjects, and their day-to-day social and working environment. Oral narratives and written documents do not

tell the whole history of interest group participation, and direct observation is employed to perceive and confirm some aspects of the process as it takes place in particular settings. As Marvasti (2013: 360) says, observation also provides the social context and the ambience of particular events, which can support other data collected in the field. In this research, the observation took place in a wide array of settings, including workplaces, organisational settings (observing relationships and channels of communication) and participatory events. In a broader sense, it also compares observations in different cities in Brazil and India, and in these countries as a whole. For example, in this last case, it was interesting to perceive the difference between the symmetrical policy implementation of Brazil, where the same policy is applied to all the regions, and the asymmetrical policy implementation of India, where each state has the legislative power to adapt the central guidelines according to its own characteristics, generating a regional diversity of methods, as discussed in section 7.3.

3.4.2 Detailed description of the fieldwork research activity

Fieldwork in India and Brazil

The majority of the primary data for this research was collected during four field trips, two in India and two in Brazil. These were carried out in:

- March 2013 – Pilot research of two weeks in Delhi, India
- September to December 2013 – Fieldwork in Brazil
- February and April 2014 – Fieldwork in India
- September 2014 – Fieldwork of two weeks in São Paulo, Brazil

The pilot research in Delhi provided my first contact with India. I stayed on Jawaharlal Nehru University (JNU) campus, where I met academics in the Centre for

Studies in Science Policy (CSSP). These contacts opened up opportunities to meet some of the activists and other academics involved in the fields of waste management and public policy. Through these contacts I visited key sites, such as Jantar Mantar, an official space dedicated to public contestation and social mobilisation in New Delhi, and Dilshad Gardens, a housing colony in northeast Delhi, where a large number of inhabitants are involved in waste picking and recycling.

I also attended the 'Khwahishein Awareness Campaign for Waste-Pickers' workshop in Delhi, where I became more conscious of the waste pickers' political claims. In addition, I visited research organisations, such as the Centre for Science and Environment (CSE), and the archives at the National Institute of Urban Affairs (NIUA) and the Nehru Memorial Museum and Library (NMML).

The following subsections describe the way these three primary data sources are used in this research, including their limitations.

Official documents

This area of the research comprised the review of twenty-nine official documents, published at the federal level, on the issue of solid waste management in both Brazil and India. Tables 1 and 2 show a sample of these government documents. These were analysed in order to verify their contents, establish the government bodies and other actors involved in their formulation, and build a panorama of and timeline for the two political processes. Some of these documents also provided the information that enabled me to formulate the questions for the interviews and to verify the information gathered from the informants.

Table 1: Sample of the legislation and task-force reports on MSW in India

Year	Documents selected	Data analysed
2016	Solid Waste Management Rules	Policy content
	Plastic Waste Management Rules	EPR and the inclusion of waste pickers in the policy content
	e-Waste Management Rules	EPR and the inclusion of waste pickers in the policy content
	Swachh Survekshan	First results after the implementation of the SBA
2014	Swachh Bharat Abhiyan	Programme content
	Report of the Task Force on Waste to Energy Planning Commission	Evaluation of Waste Rules policy implementation
2013	Draft MSW (M&H) Rules 2013 - withdrawn	Policy content
2011	E-Waste (Management & Handling) Rules	EPR and the inclusion of waste pickers in the policy content
	Plastic Waste (Management & Handling) Rules	EPR and the inclusion of waste pickers in the policy content
2010	Report of the Committee to Evolve Road Map on Management of Waste in India, MOEF	Evaluation of Waste Rules policy implementation
2009	Position paper on SWM, Ministry of Finance	Investment and financial mechanisms for SWM reforms
2008	National Urban Sanitation Policy (NUSP)	Policy content
	National Action Plan for Climate Change	Policy content
	The CAG audit on Municipal Solid Waste in India	Evaluation of Waste Rules policy implementation
2006	National Environment Policy	Policy content
2005	Inter-ministerial Task Force on Integrated Plant and Nutrient Management using City Compost, 2005	Policy content
	Jawaharlal Nehru National Urban Renewal Mission (JnNURM)	Investment and financial mechanisms for SWM reforms
2000	MSW (M&H) Rules & Manual MSW 2000 (CPHEEO)	Policy content

1998	Bio-medical Waste (Management & Handling) Rules	Policy content
1992	74th Constitutional Amendment Act (CAA)	Recognises the third tier in the Indian federal structure and sets the legislative powers and responsibilities of urban local bodies
1950	Constitution of India	Union, state and concurrent lists

Source: Author's illustration

Table 2: Sample of the legislation and official reports on SWM in Brazil

Year	Documents selected	Data analysed
2015	Solid Waste Management Diagnostic (SNIS)	Evaluation of policy implementation
2011	Sanitation Atlas (IBGE)	Evaluation of policy implementation
2010	Decree 7,404 ruling (national policy on solid waste)	Policy content
	National policy on solid waste, Law 12,305/2010	Policy content
2007	National policy on sanitation, Law 11,445	Policy content
	Growth Acceleration Programme (PAC)	Investment and financial mechanisms for SWM reforms
1988	Federal Constitution	Policy content on the environment, public participation and public service provision
1981	Environmental Policy, Law 6,938	Policy content on the environment and public service provision

Source: Author's illustration. All these documents are referenced when cited in the thesis.

All these documents are in the public domain. The Indian parliamentary debates are accessible online on the parliamentary website, and the older official documents are

available in Hansard in the library of SOAS (School of Oriental and African Studies), University of London. In addition to these official documents, I also investigated the statistics published by the Central Statistical Organisation (CSO) and the National Sample Survey of India (NSSO) in India, and the information contained in the National Information System for Solid Waste Management (SINIR) and the National Survey of Basic Sanitation (PNSB) at the Brazilian Institute of Geography (IBGE). As well as documents at the federal level, I perused other sources at different levels of governance in both countries, such as the policies on solid waste in some Brazilian states and official documents published by the Ahmedabad Municipal Corporation (AMC) and other government bodies in India, to verify information gathered elsewhere.

In addition, private organisations, such as the Brazilian Association of Public Cleansing (ABRELPE) and the Business Commitment for Recycling (CEMPRE) in Brazil, and the Federation of Indian Chambers of Commerce and Industry (FICCI) and the National Solid Waste Association of India (NSWAI), provided reports and statistics. I also consulted reports of international organisations, such as the International Solid Waste Management (ISWA); the German organisation, Gesellschaft für Internationale Zusammenarbeit (GIZ); Price Waterhouse Coopers (PwC); and the United Nations Development Report Programme (UNDEP). Academic journals and reports of international NGOs, such as Women in Informal Employment: Globalizing and Organizing (WIEGO) and the Global Anti-Incinerator Alliance (GAIA), also provided valuable perspectives on the issue. These organisations have provided extensive reports, with comprehensive data analyses of the condition of solid waste management in India and Brazil, from quite divergent perspectives (see section 7.4).

Daily newspapers in India, such as the *Hindustani Times* and the *Times of India*, and clippings from Brazilian newspapers available in the legislative assembly of the state of São Paulo, proved a significant resource of historical data about the implementation of waste management policies.

The interview process: the sample

In total, seventy-six (one-to-one) interviews were carried out in Brazil, of which twelve were conducted during the 4th CNMA, and fifty-one were held in India. The number of Brazilians interviewed is larger due to the opportunity I had to talk to participants at the 4th CNMA. The conference offered a unique scenario: I was able, at a single event, to conduct interviews with a broad range of participants from across the country, representing a wide-ranging sample of interest groups involved in the debate. Section 6.2 provides a sample of the delegates at the conference. I attended the conference armed with the names of several people I wanted to interview, as I knew I would be able meet them in person without the need to arrange a meeting in advance. While there, I was also able to approach other people randomly in the corridors to talk about their role in the conference. In addition, I conducted some other discussions via teleconference (Skype) and email after the fieldwork period to clarify some of the findings. Although these techniques may provide quick and easy access to specific informants, they are less personal and exploratory than face-to-face interviews and mainly useful to confirm specific information. The sample, therefore, covers a variety of actors involved in the political process of solid waste management policy.

Table 3 shows the sample of the interviewees in both countries, with the percentage of informants divided into five categories:

- Government – members of the legislature and executive government bodies at three levels, including ministries, environmental agencies, local authorities and civil servants;
- Private sector – private companies ranging from large corporations and international organisations operating in the country, banks, law firms and consultants to small businesses and professional associations;
- Civil society – community associations, residents' associations, activists, labour unions and NGOs;
- Research community – academics, research centres and think-tank organisations;
- Waste picker's organisations – cooperatives, NGOs and other labour organisations, and independent informal waste pickers.

Table 3: Sampling frame of informants

	Brazil		India	
	Informants	%	Informants	%
Government	28	37	15	30
Private sector	16	21	10	20
Civil society	9	12	8	16
Research community	7	9	3	6
Waste pickers' organisations	16	21	14	28
Total	76	100	51	100

Resource: Author's illustration

Tables 1 and 2 in Appendix provide a complete list of this sample, with the names of the interviewees and their respective organisations.

Some of these informants could be classified across categories in this sample. For example, some law firms work for the private sector, but during the research in Bangalore, the SWM Roundtable was led by a law firm engaged to defend the public interest in the issue of waste collection in the city. Equally, some activists could also be classified as either academic researchers or as members of civil society or the informal sector, due to their level of engagement during the period of the interview. Some waste pickers alternate their work, sometimes working as part of a cooperative and sometimes informally. The term NGO is also a changeable categorisation: some provide several different types of service, without any clear definition of their activity or level of institutionalisation. In this area, some NGOs are activist organisations, engaged in the support of waste pickers, which are either formed by waste pickers themselves as they try to establish a political constituency or become involved through advocating for other issues, such as the improvement of service provision in particular local communities; others, meanwhile, work with the government as research centres or think tanks.

While researching in India, with the support of SWaCH (India's first wholly owned cooperative of self-employed waste pickers) in the city of Pune and the AMC in Ahmedabad, or visiting cooperatives in Brazil, such as COOPVILA or COOPERE, I had the chance to talk to many waste pickers working in different communities, on the streets and in other sorts of organisation. These encounters are not part of the sample of interviewees and I classify them as observations. Although these observations helped me to clarify some aspects of the research, they do not follow the research structure of the interviews (see below).

The major limitation of this sample is the lack of ordinary citizens' voices. The reason for this is that the research was designed to interview practitioners in the policy area of waste management, and all those I had the chance to talk to, even informally, were engaged in some sort of organisation involved in that political process.

The interview process: preparation, interviews, data organisation

The semi-structured interviews were conducted face-to-face in the respondents' workplaces. The following subsections give a detailed explanation of the process: the preparation, the content of the discussions and the organisation of the data after the interview.

Interview preparation

The pilot research I conducted in Delhi provided information about key organisations and potential informants. After that trip, I contacted some academics studying in the area who gave me valuable information about potential interviewees, and their contact details. I repeated the same process in Brazil, creating an agenda for the interviews. Some weeks before the fieldwork, I started arranging meetings with my potential informants. While I was contacting them via email or telephone, I undertook extensive research (on the internet, in official documents and the literature) to prepare specific questions for the various interviewees, including questions concerning key information that would help to clarify their role in the decision-making process. For instance, before interviewing the director of Veolia in India, I undertook a preliminary survey of the company's activities to discover the challenges it met when it was operating in India, and why the company abandoned the waste sector in that country.

As mentioned above, my perception of the problems of waste management changed during the research. I decided to adapt my first research question after the fieldwork in Brazil. Thereafter, I used only some of the questions I had formulated before my fieldwork relating to the interviewee's participation in the political process.

Conducting the interviews

The interview questions were intended to help elucidate the characteristics of the waste sector in each country and the engagement of different actors in the political process that regulates the sector, from the perspective of the interviewee. All the interviews followed a relatively similar sequence:

- Introduction – The conversation began with an explanation of the purpose of the research, the format of the interview and its confidentiality. I explained the ethics form before asking for the interviewee's written consent to my recording the interview or taking notes.
- Warm-up – This comprised a brief conversation about my personal experience in both countries.
- The main body of the interview – The discussion was divided into four main topics (see Table 4, below). The first questions were intended to explore the interviewee's or their organisation's activity in the sector, in order to capture different perspectives about the structure of the waste management system in the country. The second part was related to their knowledge of national policy and the decision-making process. The questions were related to the interviewee's or their organisation's participation in the reform of waste management, as well as their opinions on the issue. The third part (related to technical details) was later discarded. The fourth was based on my

previous research about the interviewee, prior to the meeting, to clarify some specific aspects found in the literature.

Table 4: Interview guide, with the main themes for discussion

Theme	Notes about the question
Interviewee's characterisation	Could you describe your/your organisation's activity in waste management? Interviewees received different questions according to their position in the waste management system. For instance, in the case of government officials, the questions explored their role in the administration and their communication with other organisations and official bodies at other levels of government. Waste pickers were questioned about their daily activities, their level of political organisation and their engagement with other actors (e.g. cooperatives, politicians and middlemen).
Political participation	Do you know the official waste policy? What is your participation in the decision-making involved in this political process?
Technical discussion	What are the constraints that local governments face in achieving the targets set by central government? What are the main factors that contribute to the success or failure of the implementation of waste policies? What could be done to solve the problems?
Specific questions	For example, in the case of a business association, the questions were intended to capture the activities of the organisation, their position in relation to the political process, their strategy and their coalitions with other organisations.

Source: Author's illustration

- The interviews varied in length, and the sequence and depth of their questions, according to the different circumstances, and it is more appropriate to describe their contexts in the body of the thesis. For example, the interview with the official in the Ministry of Cities in Brazil took around ten minutes as the interviewee appeared busy, distracted and uncomfortable with the interview, while the interview with the official in the Ministry of Science and Technology was relatively prolonged (more than an hour) as he was interested in the research topic.

- Closure – After the questions, I asked if there was anything the interviewee would like to add or if they had any questions. Some became very interested in the comparative analysis and wanted more information about the waste management in the other country, thus extending the conversation. The interview often finished with an indication of other potential informants for further interviews.

After the interview

Some interviews were recorded, with the interviewee's permission, and were transcribed later. Although recording facilitates conversation, allowing for a more fluid discussion, on many occasions the conversation became more natural after the recorder was turned off – an aspect reported by other researchers (Rapley, 2004). After each interview, the transcriptions or the notes from the conversation were analysed and the main points coded to facilitate the organisation of the topics. After the first round of interviews, questions began to emerge that challenged my initial hypothesis and the assumptions I formed before the fieldwork while examining the official documents and the literature. After a few rounds of interviews, the information started to suggest specific questions, such as: 'How are policies formulated and how does society participate in these processes?' 'What are the main forms of interaction between the state and society?' 'Who are the main actors operating in this sector and what are their roles in the political process?' During the transcription, some respondents' opinions and key words were coded according to these questions. Johnny Saldaña (2014: 584) explains that this process of categorisation emerges from rereading and revaluating the data, as the researcher starts to gain new insights about the meaning of the data and interrelations become

more evident. Thus, a preliminary organisation of the data evolved out of its initial categorisation, as discussed later in this section.

One of the challenges encountered in this research is related to the issue of language. The range of practitioners in this sector encompassed actors operating at a global level, politicians and bureaucrats at all levels of government, as well as illiterate waste pickers. On the hand, in India, each state I visited has its own official language;[7] in general, only the top ranks in government bodies and companies speak English. My communication with non-English speakers in India – for example, waste pickers and members of grassroots movements – was mediated by interpreters, mainly from NGOs such as SWaCH, SEWA and AIKMM. On the other hand, my knowledge of Portuguese, my first language, facilitated the fieldwork in Brazil and gave me access to interviewees across the entire territory. The language limitation was a key factor in the research design: to overcome this barrier and achieve a more balanced sample of interviewees, the research explored the institutional policy framework, where the majority of official documents and institutional interviewees communicate using English in India and Portuguese in Brazil.

Observation

About forty-one organisations involved in solid waste management and its governance were surveyed in Brazil, and thirty-nine in India (Appendix, Tables 1 and 2, provide a complete list of organisations visited). In addition to these, the observations included visits to public and private facilities (landfills, transfer stations,

[7] For example, in Delhi the majority of people speak Hindi; in Mumbai and Pune most inhabitants speak Marathi; in Ahmedabad, Gujarati is the official language; and the inhabitants of Bangalore speak Tamil, Kannada or Telegu.

dumpsites, cooperatives of waste pickers) and public events, such as conferences, business fairs, and community and street events. Table 5 provides an overview of the main events attended. For example, in São Paulo, I attended two public hearings in the legislative assembly of the state of São Paulo, and seminars and business fairs. These events gave me the opportunity talk to participants and arrange interviews.

Table 5: Events attended in Brazil

Date	Event	Place	Participants
8-10/9/2014	ISWA 2014 World Conference	São Paulo	International conference
8-9/9/2014	IX Seminar on Waste - Recycle CEMPRE, RWM Brazil business fair	São Paulo	Business and public sectors
18/11/2013	Public hearings in São Paulo	São Paulo	Open to all citizens
1-2/10/2013	RWM Brazil business fair	São Paulo	Business and public sectors
25/10/2013	Waste and Citizenship Forum	Brasilia	Waste pickers, politicians
23/10/2013	4th National Conference on the Environment	Brasilia	Practitioners of all sectors

Source: Author's illustration

Table 6: Events attended in India

Date	Event	Place	Participants
26/2/2014	Safe Disposal of Municipal Solid Waste	Mumbai	Local government officials, experts
10/2/2014	'Exploring Pathways to Sustainability' symposium	Delhi	Academics, activists
16/3/2013	Khwahishein Awareness Campaign for Waste-Pickers	Delhi	NGOs, activists, academics
10/3/2013	Jantar Mantar	Delhi	Social movements, NGOs, activists

Source: Author's illustration

These events contributed to the process of snowballing used to find potential interviewees. For example, when I arrived in Delhi for my fieldwork, I was invited by Dr Kaveri Gill (we had previously engaged in email correspondence) to attend the 'Exploring Pathways to Sustainability' symposium at the JNU. During this two-day event, I was made aware of the current debates on the challenges of solid waste management in India, and I met several academics, with whom I was able to arrange subsequent meetings. Later, in the conference on 'The Safe Disposal of Municipal Solid Waste', held at the SNDT Women's University in Mumbai, I met municipal officers from several Indian cities, and I was invited by the representative of the Ahmedabad Municipal Corporation (AMC) to visit the city.

Cities visited in India and Brazil

Figs. 1 and 2 in the Appendix show two maps highlighting the cities visited in Brazil and India. As mentioned before, this research does not intend to make direct comparisons between solid waste management performances in different cities and countries. The cities visited during the fieldwork are not comparable, and they were not chosen as means of comparison. Prior to the fieldwork, I established contacts and organised my research specifically in the cities of São Paulo and Brasilia in Brazil, and Delhi, Mumbai and Pune in India, due to the concentration of government bodies, private organisations and events related to the waste management sector in these cities. Pune was particularly important to this research because of its progressive model of governance: one of the most important and enduring organisations of waste pickers, SWaCH, has been incorporated into the city's municipal solid waste management system.

In addition to the above cities, I visited Sorocaba, Maceió and Penedo in Brazil and Ahmedabad and Bangalore in India. The decision to extend my research to these other cities was a result of the snowballing process and the way visits unfolded according to the availability of and access to key informants. It is essential to note that the samples are not the cities per se, but the policies and the actors involved in the political process.

This research compares government-interest group relationships and the outcome of these national political processes in these countries. For example, when I was in Brazil, the city of Sorocaba was suffering a waste crisis due to a poorly drafted public tender, and the interviewee in the state of São Paulo environmental agency (CETESB) arranged an interview with members of staff in Sorocaba's municipal waste department. I visited the cities of Maceió and Penedo in the northeast as it was convenient to travel to that region; I decided to take the opportunity this offered to extend my research into an investigation of how Brazil's national policy on waste management was implemented far from the central axis of São Paulo, Brasilia and Rio de Janeiro.

In India, when I attended an event in Mumbai, organised by the NSWAI, I met representatives of several local governments and I received an invitation to travel to Ahmedabad. The municipal corporation there provided a series of contacts with actors involved in waste management. In the case of Bangalore, I arranged a meeting, through my university department, with the Janaagraha Centre for Citizenship and Democrac*y,* a think tank involved in the promotion of citizen participation in local governance in the city. Bangalore was also important due to the activities of protest movements and a number of significant lawsuits against government decisions, which

led to the formulation of the Waste Rules 2000, the withdrawal of the Waste Bill 2013, and the contestation of the National Consultation Programme, discussed in sections 5.2 and 6.4.

Data analysis

All the interviews and the written documents provided a range of competing and contrasting perspectives on the same topic. During the analysis, in order to reduce the data, I organised the material into five main categories based on the research question. This categorisation was the result of my reflection on the data, striving to make sense of the similarities in and differences between the same process in Brazil and India. The categories are as follows:

- the main organisations operating in the sector;
- how citizens participate in government decisions;
- the forms this participation take;
- the shape the political process takes;
- and how the policies are formulated.

Key information from the textual documents, and the transcriptions of and notes from the interviews and observations, were organised according to this categorisation in an extensive and time-consuming process (Saldaña, 2014). During the process of reviewing the documents, interviewing respondents, listening to the recordings of the interviews, and reading and re-reading notes of the data, some predominant themes began to emerge. As research is an on-going process, in which the researcher is both investigating and producing knowledge, some of the interviews and discussions with academics were used to test my first written analysis on specific topics and to clarify

some doubts (Rapley, 2004: 26). Some of these ideas were shared and tested with other audiences to discover whether the findings corresponded to the observations in a cyclical process of analysis (Marvasti, 2013: 364). As Allen Trent and Jeasik Cho (2014: 643) explain, the interpretation of data is a repetitive process, going back and forth between the data analysed and new interpretations. After revising the data many times, these categories finally crystallised into five main analytical themes:

- the solid waste management system and legislative framework in each country;
- the historical process that preceded this;
- the format of the decision-making in each country;
- the spaces of state-interest group interaction;
- and the main groups involved in the sector and their influence on decision-making.

The interpretation of the data led to a reflection on these themes and the division of the sections explored in the findings. Nevertheless, it was not entirely clear at that stage that some interest groups dominate the decision-making of these political processes, and it needed further critical reflection to draw this final conclusion. This information was then reorganised into these themes that evolved into the organisation of the findings into chapters.

The validation of these conclusions is the result of crosschecking these findings against different sources of data and methods (Halperin and Health, 2012: 281). The validity of findings is tested by whether credible conclusions can be drawn from the data set (Halperin and Health, 2012: 282). As Saldaña (2014: 604) suggests, the credibility of the research emerges from the methods of collection; a thorough description of the research process and the method of data analysis; the presentation of convincing evidence and quotations from participants; and credible illustrative

testimonies, showing the diversity of sources and data collected. According to Huberman and Miles (2002: 42), validity concerns not a specific method, but the way conclusions are drawn from the accounts and the data by employing a method of analysis that fits the specific circumstances and purposes of the research.

3.5 Chapter summary

This chapter has described the research methods employed in the thesis. It has explained the main decisions taken during the research process, clarified the choices that led to the formulation of the research question – the result of reflection on aspects of the political process that were not evident at the beginning of the study, and considered some of the key challenges inherent in the comparison of the same political process in two different countries and in my critical role as a researcher in the field.

A comparative analysis can offer an invaluable contribution to the understanding of these political phenomena: as this research argues, the political processes of decision-making in these countries are a result of the evolution of the practices in the sector, and so the dominance of certain groups are not necessarily perceived unless compared with other political contexts. As this chapter has discussed, comparative studies based on small-N analysis are essentially grounded in case selection. The methodology, therefore, was used to provide the means for a careful consideration of the choice of Brazil and India as the contexts for the research. The comparison of interest group participation in these two emerging economies helps explain how such activities, while inherent to the workings of a democratic system, vary from one political context to another. The chapter also considered other research approaches that seek to shed light on the role of interest groups in the decision-making process. However,

although a number of different statistical tools and indices could be used to explore and compare political processes in different countries, the literature review has shown that Brazil and India have their own political particularities which demand a thick investigation of the characteristics of these political phenomena in the field.

The research uses a structuralist approach to investigate the activities of the groups involved in solid waste management in these countries and their influence on government decisions. As Rod Hague and Martin Harrop (2010: 31) state, structuralists do not focus on particular individuals or groups as isolated agents of change; they understand that actions and behaviours are influenced by macro-structural configurations, and it is these that determine the results of public policy. Thus, this research collects information directly from the actors and organisations involved in order to construct a narrative that explains how the interconnection of these forces influences policy outcomes, because, as Landman (2000: 292) suggests, their actions and interests are embedded in a wider political context.

The chapter explained how the triangulation of qualitative methods is compatible with the structuralist approach: the explanation of the political phenomena is based on information collected from groups of people involved in the political process (Landman, 2000: 43), which is then triangulated with the examination of political documents and observations of the behaviour and activities of these groups (in industry events, conferences and workplaces), as well as the political environment in which they operate. This triangulation also aims to minimise the subjectivity of the researcher (Eisner, 1992). In this case, I also critically reflected on the perspective and preconceptions of my own personal judgments and my position as a researcher exploring the same political issue in two different cultural and political contexts.

This was followed by a thorough explanation of the collection, coding and interpretation of the data yielded by these methods (interviews, document analysis and observation), and a reflection on the limitations of these techniques. Section 3.4.2, for example, provided a detailed description of the research process, including all the documents analysed and their sources; the interview sample and the preparation and conduct of the interview process; and the organisational support received in the different cities visited during the fieldwork.

The subsequent chapters (4 to 7) present the research findings, using this research design to explore the extent to which government decisions in emerging economies are influenced by interest group participation. They explore the structures of the two democratic societies under review, revealing the historical roots of their political processes and government institutions, and examine the structure of their decision-making processes and state-interest group interactions, the institutional spaces that determine individuals' and groups' political activities, and the interconnections between the leading groups involved in shaping the political process.

Chapter 4 MSWM Systems in Brazil and India

4.1 Introduction

This chapter provides a brief introduction to the problems of municipal solid waste management (MSWM) in Brazil and India, comparing the current situation in these countries, the origins and historical evolution of their practices, and the relationship between the public and private actors involved. The chapter argues that the characteristics of the public-private relationship in these countries are the result of historical circumstances and the way in which the provision of public services evolved and were structured over time. More recently, due to both the prominence of debates on the global environmental crisis and the expansion of the international market, new actors have emerged who have begun to exert a powerful influence over domestic decision-making in Brazil and India, in ways that extend to all levels of governance.

The chapter establishes clear distinctions between the challenges of waste management implementation, its institutional arrangements and the characteristics of the service provision in place in each country. Each of these features have a significant but differential impact, according to the country, on the interaction between the state and (national and international) interest groups in this sector. The analysis of these characteristics helps to elucidate the origins of some of the current practices and the scope of the problem in each country, and the extent to which they are comparable in terms of their public-private relationships.

The chapter is divided into three main sections. The first compares the demographic characteristics of Brazil and India, and their waste management systems, in order to understand the problems of policy implementation. This section provides a snapshot

of municipal waste management in these countries, illustrating how this public service is organised. The second section considers historical factors that might explain some of the current practices and characteristics of waste management in each country, and the involvement of certain actors in its provision. The historical analysis looks at the early debates on the issue of waste management in Brazil and India, as well as the drivers – external (international agreements and market forces) and internal (constitutions, political practices and environmental accidents) – behind the evolution of their policies. Finally, the third section investigates their institutional frameworks – that is, the content of the waste management policies and the structure of the federal and government bodies mandated to provide these services to the entire population.

This knowledge underpins the analysis of the interest groups involved in the policy decisions and provision of MSWM services that is developed over the course of the subsequent chapters.

4.2 Comparative description of the waste refining systems in Brazil and India

This first subsection begins by comparing some contrasting features of Brazilian and Indian societies. Despite the fact that these countries have been commonly classified as 'emerging economies' over the last decades, since the term BRIC[8] gained global media attention, this generalisation hides certain striking and complex differences, in terms of socioeconomic characteristics, that appear in almost all the measures studied. Tables 7 and 8 show comparative features of demography and solid waste management performances in both countries. In Brazil, close to 200 million people

[8] The term 'BRIC' was launched in 2001 by Jim O'Neil, chairman of Goldman Sachs Asset Management, to describe the group of new emerging economies: Brazil, Russia, India and China.

speak the same language and the majority practice the same religion (IBGE, 2015). In India, with a population six times larger, its 1.22 billion people speak several languages, and there is a great diversity of cultures and beliefs. These numbers on their own could already partly explain the differences in each governments' provision of public services, but before we address the solid waste management issue, we need to highlight significant structural features that affect the capacity of these two countries to deal with the same problem.

Table 7: Demographic data comparing Brazil and India

	Brazil	India
Population – IBGE (2016)	202,033,670	1,267,401,849
Urban population – IBGE (2014)	85.34%	32.37%
GDP per capita (USD) - World Bank, 2014	11,384.40	1,851,50
Overall GDP (million USD) – IBGE, 2013	2,243,854	1,937,797
IDH – UNDEP, 2014	0.76	0.61
GNI per capita (PPP $)	15,590	5,630
Population living below income poverty line (%) – World Bank, 2014	8.9	21.9
Youth literacy rate (% ages 15-24) – World Indicators, 2005	98	81
Illiteracy	9.4% (Census 2010)	26% (Census 2011)
Total number of illiterate adults – UNESCO, 2013	13 million	262.9 million

Source: IBGE (2015), Census (2011), the World Bank (2016), UNDEP (2016)

India, which is classified by the World Bank as a lower-middle-income economy, is on the verge of becoming the third largest economy in the world, with an annual growth rate of 7.5%; meanwhile, Brazil, classified as an upper-middle-income

economy, is facing one of the worst political and economic crises of recent years. It is suffering its deepest recession in the last twenty-five years and showing economic growth of 0.2% in the first trimester of 2015 (IBGE, 2015). The survey on emerging consumer markets carried out by Credit Suisse (2015: 62) in 2015 shows two contrasting domestic consumption scenarios. Brazil's economic growth, on the one hand, is in steady decline, as it faces relatively high inflation, fiscal austerity and unemployment during a period of high political tension, leading to macroeconomic uncertainty. On the other hand, India has experienced economic optimism, due to the election of a new government after thirty years of rule by a single majority party (Credit Suisse, 2015: 66). The survey shows high levels of expectations on the part of Indian respondents in terms of improvement in their personal finances and future household income, especially as the income of the average urban household grew about 12% in 2014, following two years of stagnation (Credit Suisse, 2015: 7). The reverse is true in Brazil: there is a marked decline of optimism among the middle classes. These findings confirm the perceptions of respondents interviewed during the fieldwork for this research.

Consumer confidence has a strong impact on the generation of solid waste, due to its direct link to consumption (GWMO, 2015: 40). However, in Brazil, social welfare programmes, such as *Bolsa Família*, *Fome Zero* and *Minha Casa Minha Vida*,[9] have been successful in alleviating poverty and reducing inequalities over the last decades. Illiteracy in Brazil currently affects less than 2% of the youth population (World Bank, 2014) and 9.4% of the overall population, according to the 2010 Census (IPEA,

[9] Translated into English, these programmes are the 'Family Allowance Programme', 'My Home, My Life' and 'Zero Hunger', respectively. They are bold social programmes providing low-income families with subsidised goods and services.

2013: 59). In addition, in 2014, Brazil's gross national income (GNI) per capita was almost three times India's, and the percentage of the population living below the poverty line in India (21.9%) was more than double that of Brazil (8.9%). These demographic and economic figures show the complexities involved in analysing the contrast between two countries with the same economic classification.

In terms of urban infrastructure, the difference is also clear to visitors to Brazilian and Indian cities: 99.5% of Brazilians has access to electricity; in India, this coverage is only 78.7%, and some large cities face shortages of electricity during certain hours. Meanwhile, according to the 2014 National Survey on Basic Sanitation (SNIS, 2014), despite the fact that 82.5% of Brazilians have access to piped water in their homes, 51.4% still do not have sewage and drainage systems – that is, around 35 million Brazilians are without water and almost 100 million without sewerage (Table 8). In India, according to the 2011 census, the situation is even more acute, as 63.6% of households do not have latrines and 53.6% are not connected to a drainage system.

Table 8: Comparative figures on solid waste management (Brazil and India)

	Brazil	India
Improved sanitation facilities, urban (% of urban population with access)	82.80 (2015)	39.60 (2015)
Solid waste generated tons per year (TPY)	61.1 million (2013)*	54.75 million (urban) (2010)**
Waste per capita per day	0.85 to 1.61kg (2012)****	0.2kg to 0.6kg (2013)**
Amount of waste improperly disposed of	41.7% (2015)*****	91% (2010)***

Sources: World Bank (2015); *SNIS (2015: 54); **MoUD (2013: 2); ***Annepu (2012: 24); ****GWMO (2015: 55); *****ABRELPE (2015: 31)

Despite the fact that India has a population much larger than that of Brazil, both these countries generate comparable amounts of waste per year. The waste generation per capita in Brazil is higher than in India: while the average Brazilian generated between 0.85 to 1.61Kg of waste a day in 2012 (ABRELPE, cited in GMWO, 2015: 55), the India urban waste generation per capita ranges between 0.2kg in small towns to 0.6kg in metropolises (GoI, 2014a: 3). This difference is probably a result of the gross domestic product (GDP) per capita and the Western lifestyle of Brazilians, which is based on the consumption of industrialised, packaged products, which generate more dry waste. The diet of the Indian population, meanwhile, has up to recently been primarily based on unprocessed food, generating more organic waste. Nevertheless, these patterns are changing fast, and it is estimated that each Indian will be generating about 1.032kg of waste by 2030 (Kaushal et al., 2012: 1475). In addition, the Indian urban population is increasing rapidly due to industrialisation and the consequent migration from the villages to the cities. Today, only 32.37% of Indians (377 million) live in urban centres – compared with the 85.34%[10] of city-dwelling Brazilians (IBGE, 2015) – but it is anticipated that by 2050 half of all Indians will be urban dwellers (GoI, 2014b: 3).

Municipal solid waste management (MSWM) in Brazil and India

In Brazil, the door-to-door collection of household waste in cities is a basic public service provided by most municipal authorities. Although this service is not yet universal, according to the Brazilian National Information System on Sanitation

[10] The definition of rural and urban areas in Brazil is controversial. However, the official data published by the IBGE, based on the Municipal Law of 1996, considers as 'urban' those areas situated within cities (municipal bodies) and villages (district bodies), as well as isolated urban areas. It considers as 'rural', those areas lying outside the city limits, including rural settlements. According to a decree published in 1938 by the government of President Getúlio Vargas, the definition of the city limits is established by the city's mayor (Tubino, 2013).

(SNIS, 2015: 36), it covers 96.6% of urban households. However, this coverage varies considerably, from 100% in some cities in the centre-west to 47.1% in the north (SNIS, 2015: 36). This means that 2.9 million inhabitants (1.7%) do not receive this service (SNIS, 2015: 22) and some 20,000 tonnes of waste a day goes uncollected (ABRELPE, 2013: 29). The major problem, however, is the final disposal, since most of the urban waste collected (80.4%) is destined for landfill sites, and 41.1% of this is inappropriately disposed of (SNIS, 2015: 122). In the survey carried out by the Ministry of Cities (SNIS, 2015: 123), 1.233 municipalities admitted to sending their solid waste to dumpsites and uncontrolled landfills. Officially, the country has 1,196 dumpsites, 652 uncontrolled landfills and 702 sanitary landfills[11] (SNIS, 2015: 103), but these figures do not take into account clandestine and undeclared dumpsites, showing the enormous challenge the National Policy on Solid Waste (PNRS) faces.

Another problem is low rates of recycling. Despite the fact that 32.5% of Brazilian cities have declared some sort of recycling collection policy (SNIS, 2015: 55), official data shows that only 1.4% of all waste collected is recycled (SNIS, 2015: 75). It is likely that the recycling rates are higher, but as the majority of all waste is recycled by the informal sector, official sources do not take this into account.

A key challenge for the economic maintenance of solid waste management services in Brazil is the fact that only 39.5% of municipalities charge public fees to cover the costs (SNIS, 2015: 93); in general (88% of the cases), the cost is included in the

[11] There are three types of waste disposal on the ground: sanitary landfills, uncontrolled landfills and open dumpsites. The sanitary landfill is the most acceptable, where waste is confined and covered in layers, with monitoring and treatment of leachate and gas emissions under specific operational standards (Annepu, 2012: 46); the uncontrolled type of landfill does not have any of these treatments; and the open dumpsite, the worst method of disposal, is where the waste is randomly dumped and left exposed on open ground, with severe environmental and social impacts.

Urban Building and Land Tax (IPTU), and only 2.8% of municipalities have a specific waste fee. According to the SNIS (2015: 1), the cost per capita per year ranges between USD 19.11 (R$ 71.91) in small cities to USD 44.44 (R$ 167,20) in São Paulo and Rio de Janeiro, the two largest. Taking these two metropolises out of the equation, the municipalities expend, on average, USD 24.72 (R$ 93.00) on waste services for each inhabitant per year, which means that they each pay about USD 2.06 per month for the municipality to manage the waste they generate. However, this means that some 4% of the municipal budget, plus the income collected from the residents, covers only half a percent of these costs (SNIS, 2015: 99).

In small towns, the municipalities' financial situation is even worse, since, in exchange for votes, some mayors do not charge the population, leaving the municipality totally dependent on federal grants.[12] Gilmar Rodrigues (2007) shows that, on average, the Brazilian municipalities collect only 15% of their total revenues, while the rest (85%) is passed down by state and federal governments (Caderno do Ceas, 1997: 3 cited in Rodrigues, 2007: 276). Also, 75% of municipalities collect less than 10% of their municipal budgets, and 90% of those with less than ten thousand inhabitants are completely dependent on compulsory governmental transfers (Samuels cited in Souza, 1998 cited in Rodrigues, 2007: 296). In total, Brazilian municipalities spend almost USD 4.28 billion (R$ 16.1 billion) per year on waste management services (staff, lorries, maintenance, inputs, outsourcing and other remunerations) (SNIS, 2015: 100). As a result, the waste fee is always subject to controversy. For example, in order to improve and increase the transparency of waste management

[12] Valmir Lessa, Penedo City Hall engineer, interviewed at his office, Brazil, 23 December 2013.

services, São Paulo – the major business and financial hub of Latin America – introduced the Domestic Solid Waste Tax (TRSD) in 2002. However, after a huge political battle in the city council and the courts, the tax was revoked in 2005 (Soares, 2005). Nowadays, part of the IPTU is used to cover the costs of municipal solid waste management. Section 6.5 explains the case of the 'Cartel of Contractors' and São Paulo City Hall in the 1990s in depth.

Sanitation and solid waste management falls short in Brazil, but in India, the deficiencies are even more acute. The country's positive economic figures do not reflect the reality of waste management. A report published by MoUD (2013: 8) claims that the provision of primary collection by local governments is insignificant, and part of the waste simply remains on the streets or outside dustbins in residential areas. Official figures show that 70% of the 127,486 tonnes of municipal solid waste generated per day is collected in urban centres, but only 12.45% is treated (MoUD, 2014: 5). Annually, more than 81% of all urban solid waste collected is improperly disposed of in dumpsites (GoI, 2014b: 5). According to the Ministry of Urban Development (MoUD, 2013: 3), India had only fifty-nine landfills in operation in 2013. Despite that fact that some cities have achieved high levels of household collection, such as Chandigarth (96.2%) and Surat (90.3%), and others, such as Rajkot, Surat and Ahmedabad, have implemented Integrated Sustainable Waste Management (ISWM) [13] projects in public-private partnerships (PPPs), few municipalities provide the primary service of doorstep waste collection (Janaagraha, 2012: 7). This type of project is examined further in section 7.3, p. 315. The majority

[13] The concept of ISWM, proposed by the Dutch NGO, Waste, in the 1980s, aims to integrate the three dimensions – economic, social and environmental – into the MSWM system to promote sustainable development. Nowadays, this concept is accepted worldwide as a standard of good practice.

of the population, even in the metropolises, do not pay the land property tax; instead, they directly pay informal waste pickers (operating as individuals or organisations) or their resident welfare associations, which are responsible for the organisation of waste collection in their areas.

Usually, urban waste collection is divided into two parts. The primary collection, in general, is carried out by waste pickers (Fig. 1) and delivered to specific collecting points (called *dhalao* in Delhi), located on roadsides in residential areas (Fig. 2), where the waste is segregated. Then, the secondary collection, carried out by the municipality or private contractors, transports the waste to transfer stations (Fig. 3), or directly to municipal facilities outside the cities. In some cases, the primary and secondary collections are not synchronised, which means that piles of waste are stored at collecting points in the streets for days, awaiting transport (MoUD, 2013: 8). In addition, as Rajendra Kaushal et al. (2012: 1481) explain, in poor areas, where the population is unable to pay for these services, waste is thrown onto the roads, dumped on river banks or burned in empty lots (Fig. 4), creating serious health risks and environmental hazards. However, this is not a problem for poorer areas alone: there are several unauthorised settlements in the middle of the cities, some of them very wealthy, which do not pay land property tax, and as result, their inhabitants do not have access to public services such as water and electricity. Figs. 1, 2 and 4 are common scenes that can be observed daily across New Delhi. On specific days, the garbage men come to door-to-door to collect some of the household waste; invariably, however, the remaining waste is burned in the open. Fig. 4 shows a bonfire of waste from the previous day's religious celebrations at a temple in the *Shivalik* colony in South Delhi. Sections 7.3 and 7.5 discusses the role of some of the players involved in the collection of waste in Indian cities in greater depth.

Urban local bodies, therefore, face financial constraints in providing and improving waste management services. According to the report, *Advisory on Improving Municipal Solid Waste Management Services* (MoUD, 2013: 22), the majority of local authorities spend between 5% and 40% of their budget on MSWM, but in some cases, these costs can range from 10% in metropolises to 70% in smaller towns. From this amount, 60-70% covers street sweeping, 20-30% pays for transport, and only 5% is spent on final disposal (MoUD, 2013: 9). The survey carried out by the consultancy UNDEP (2016),[14] shows that India has ten dumpsites[15] in the list of the fifty largest dumpsites in the world; Brazil has one, the Estrutural dumpsite in Brasilia.[16] The description above, however, contrasts with the recent *Swachh Bharat Survekshan*, published by the MoUD in February 2016, showing the ranking of the seventy-three cleanest Indian cities (discussed in section 5.2 on the 'Clean India Mission').

[14] The D-Waste website provides a map with general information about these dumpsites: http://www.atlas.d-waste.com

[15] *Okhla, Ghazipur* and *Bhalaswa* in Delhi; *Bruhat* in Bangalore; *Deonar* in Mumbai; *Dhapa* in Kolkata, West Bengal; *Perungundi* and *Kodungaiyur* in Chennai; *Pirana* in Ahmedabad; *Moti Jheel* in Lucknow.

[16] *Jardim Gramacho* was closed down in 2014.



Figure 1: Primary collection carried out by waste pickers in New Delhi, India (Source: Author's photo)



Figure 2: Secondary collection in Delhi, India (Source: Author's photo)



Figure 3: Transfer station, Ahmedabad Municipal Corporation (AMC) (Source: Author's photo)



Figure 4: Waste burned on an empty lot in Delhi (Source: Author's photo)

Thus, a review of solid waste management in emerging economies reveals two contrasting realities: on the one hand, major infrastructure projects, involving enormous financial investment, and on the other, the informal work of waste pickers. An obvious feature of underdevelopment in both countries is the significant number of people making some sort of a living from sorting through waste. Indeed, the recycling systems in Brazil and India rely heavily on the work of this informal army of waste pickers (Sharholy et al., 2008: 467). They can be seen working on the streets of the city every day, rolling sacks of waste and transporting recyclables in pushcarts, and they are responsible for processing almost all recycled material. In India, according to Ranjith Annepu (2012: 49), recycling rates can reach 56% in large metropolises, which is high even for the most advanced systems in high-income economies. These countries also have high rates of recycling of specific kinds of materials: India is the highest plastic recycler (47%) in the world (BRF, 2015) and Brazil has the highest rate of aluminium recycling (almost 98%), due to the collection of beverage cans by its low-income population. The cheap labour in India and its proximity to China, the largest importer of plastic scrap in the world, have a significant impact on the Indian recycling sector (GWMO, 2015: 85).

The waste pickers manually sort materials in subhuman conditions, without protective equipment, labour rights, job security or benefits of any kind (Gill, 2010: 5). Some more organised groups own trucks, but most of them transport materials in irregular conditions. Generally, they are unskilled workers and rural migrants who cannot find a formal job in the city (Snel, 1997: 32); many do not have official identification papers. Lacking other alternatives, they scrape a living from the waste they collect, working day and night in unsafe conditions in streets and on dumpsites (Freitas and Fonseca, 2011: 18). Although prevalent in both India and Brazil, this specific interest

group receives very different treatment by these countries' legislatures – their capacity for political participation in government decisions is detailed in section 7.5.

Job informality, therefore, plays a significant role in this sector. The survey by the International Labour Organisation (ILO) (Kapsos and Bourmpoula, 2013), based on household surveys in emerging economies, shows the distribution of employment divided between five economic classes (Table 9, below). In Brazil, the majority of employees are concentrated in the middle classes (about 80%), while in India, 93.5% of jobs are taken by the poorer classes.

Table 9: Main characteristics of the labour force, encompassing waste pickers

	Brazil	India
Labour force participation rate, total (% of total population ages 15-64)	75	56.50
Unemployment, total (% of total labour force)	6.80 (2014)	3.60 (2010)
Vulnerable employment, total (% of total employment)	23.10 (2013)	80.80 (2010)

Sources: Suisse (2015), the World Bank (2016)

Table 10: Employment by economic class

	Extremely poor (below USD 1.25)	Moderately poor (between USD 1.25 and 2)	Near-poor (between USD 2 and 4)	Developing middle class (between USD 4 and 13)	Developed middle class (above USD 13)
Brazil 2008	3.2	3.5	13.4	48.8	31.1
India 2009	29.3	37	27.2	6.1	0.4

Source: Adapted from Kapsos and Bourmpoula (2013: 29)

These figures are reflected in these countries' societies. Banerjee and Duflo (cited in Kapsos and Bourmpoula, 2013: 5) explain that middle-class families live in healthier conditions than the poor since they have better access to healthcare, education and urban infrastructure. The developing middle classes are still poor, but above the poverty line, and they are part of an emerging consumer class able to purchase nonessential goods and services and access higher levels of education (Kapsos and Bourmpoula, 2013: 7). In addition, according to the Indian Ministry of Labour and Employment labour bureau (2014: 5), 90% of jobs in India are informal, comprising 50% of the national product.

However, in contrast to the social condition of waste pickers, the waste management market in these emerging countries has become extremely profitable, with heavy investments in infrastructure and technology. Advanced sanitary landfills are emerging, which use state-of-the-art methods to capture methane gases for generating energy. For example, the city authorities in São Paulo raised approximately USD18 million (R$ 75.7 million) through three carbon-credit auctions in 2007, 2008 and 2012, the result of Clean Development Mechanism (CDM) projects that capture methane gas from two disused public landfill sites. Meanwhile, in 2014, Rio de Janeiro's local government closed the 'Gramacho Garden', the largest dumpsite in Latin America, displacing the waste pickers in order to implement the same process. According to the Indian government (GoI, 2014: 6 and 35) and MoUD (2014: 280), there are eight waste-to-energy (WtE) plants in operation and five new projects under

construction.[17] WtE is now the focus of major contractors in these two countries. The last incinerator plant was closed down in São Paulo in 2002, but now, more than a decade later, new incinerator plants are under approval after the launch of the Brazilian National Policy on Solid Waste (PNRS).[18] Despite protests by residents, environmentalists and social movements, new incinerators such as the one in Barueri, near São Paulo city, are going through the licencing process. Washington Novaes (2013) argues that this is an inevitable process, since there are other ongoing projects near important urban centres across the country. Local governments are subject to strong pressure by major contractors, who are also the main funders of their electoral campaigns. The players operating in this sector in Brazil and India, therefore, have conflicting interests and very different capacities to influence government decisions.

Section summary

The section above shows that Brazil seems to present better performance figures than India in terms of coverage per capita and levels of waste collected, processed and properly disposed of. The salient point so far is the fact that the first stage of municipal waste management, door-to-door collection, is almost solved in Brazil, while, in India, service provision is very deficient in the majority of its cities and towns. One of the main priorities of the Brazilian PNRS is a resolution to the problem of the many dumpsites and unregulated landfills in the country. Meanwhile, in India, environmentally sound waste disposal is still limited to just a few cities. However, some significant demographic and economic differences contribute to these divergent

[17] In operation: two in Andhra Pradesh, three in Delhi, one in Kerala and two in Maharashtra; new projects: Timarpur-Okhla and Ghazipur in Delhi, Bangalore, Pune and Hyderabad.
[18] The incinerator plant, Vergueiro, was closed in São Paulo in 2002, due to outdated technology and complaints from the neighbourhood population.

statistics. Certainly, population size and other cultural and socioeconomic diversities impact the differential capacities of the Brazilian and Indian governments to provide such public services. It is interesting to note, however, that although their demographic characteristics are so diverse, both countries have produced comparable measures to address the problem. They also have significantly parallel historical trajectories and legislative frameworks in the sector, and have faced similar limitations when it comes to implementing these proposed solutions at a local level.

One key obstacle in both countries is the fact that the majority of local authorities face severe constraints when it comes to providing public services for their citizens and achieving the targets established by central government. Large metropolises face gigantic challenges in universalising waste management services, while the majority of medium-sized and small towns do not possess the necessary equipment or qualified staff. According to Benito Muiños Juncal, former director of the Department of Territorial Planning in Bahia, Brazil, for example, of the state's 417 municipalities, only forty have resident engineers, and few of these have environmental management skills.[19] However, as will be discussed more fully later in the chapter, the struggles of local governance are quite different in the Brazilian and Indian federal contexts. Historically, the municipalities have always been recognised as important players in the Brazilian federal system, and this has meant that the centralised power of the state is weaker.[20] The dynamics of the central-local relationship was crucial to keeping the territory united from the early times of the monarchy to the nineteenth century. Later, as Marta Arretche (2012: 25) explains, the 1988 Constitution combined the policy-

[19] Interviewed via telephone on 29 November 2014.
[20] Even during the military regime, the mayors, as well as the deputies and city councillors, were elected.

making power of its central elites with the limited political autonomy of its local elites. Meanwhile, the central-local state relationship was crucial to maintaining the Union of India during independence in 1947. Govinda Rao and Nirvikar Singh (2011: 62) explain that the bargain between a strong central government and regional elites (the colonial princely states) was critical to ensuring political stability, shaping the federation and accommodating its diverse ethnic, linguistic, religious, geographic and cultural demands. The Indian Constitution of 1950 established the discrete powers of the Union and the states, while the third tier was recognised later in 1992, with the 73rd and 74th Constitutional Amendment Acts. Nevertheless, until today, scholars have argued that local governments in India struggle to handle their public affairs.

Before discussing the legislative framework (below), it is worth giving a brief overview of the early days of the solid waste management issue in Brazil and India, and its evolution over recent decades. Although this study limits its analysis to events after the late-1980s, when the political processes and the design of the current policies began in these two countries, the characteristics of the current approach to waste management betrays the inheritance of some of those early practices.

4.3 Historical evolution of MSWM legislation in Brazil and India

Research carried out by Marielle Snel (1997) before the publication of the first Indian Waste Rules gives us some interesting insights into the early stages of waste management in India. She explains that, in the late nineteenth century, during the colonial period, there was little literature, apart from John Wallace (1893) and E. Ernest Freeman (1899), on sanitation in India; the issue did not interest the British administration until the Royal Sanitary Commission in 1873 drew attention to the fact that diseases such as cholera were killing some sixty nine out of every thousand

British soldiers annually (Snel, 1997: 39). Around the same time, a public awareness campaign, focused on water supply and waste, was launched after plague reappeared in 1868. From that moment, the government took a technocratic approach, based on the commission's analysis, which provided instructions on how to manage solid waste from an expert point of view. The idea took hold that civilian surgeons or 'executive officers of health', modelled on the British Medical Office of Health, should take charge of sanitation (Snel, 1997: 41). To some extent, these characteristics have remained part of the Indian administration: for example, for a long period, health officers continued to collect the waste and throw it onto designated sites, inside or outside the cities, unaware of the environmental implications. Vaishali Nandan,[21] senior technical expert at Gesellschaft für Internationale Zusammenarbeit (GIZ), explains that even today, solid waste continuous to be treated as a street-cleansing issue, under the responsibility of the health section of the urban departments in the large majority of urban local areas (ULBs). Prashant Pandya,[22] deputy director of MSWM of the Ahmedabad Municipal Corporation (AMC), points out that Ahmedabad is today one of the very few cities in India with a specific department for solid waste management.[23]

Rose George (2008) argues that Mahatma Gandhi was one of the few politicians of his time who discussed the oppressive practices of waste picking and cleaning latrines by Dalits (the 'untouchable' caste), advocating that each citizen take care of their own waste. Joshua Goldestein (2012: 338) explains that, during this period, the implementation of public services was always discriminatory, favouring 'foreign

[21] Interview recorded (41'40") in the headquarters of the GIZ in New Delhi on 9 April 2014.
[22] Interviewed at the AMC headquarters in Ahmedabad on 6 March 2014.
[23] *The Manual on MSWM* (MoUD, 2014: 60) suggests that health officers in MSWM should gradually be replaced by environmental or public health engineers.

enclaves and local elites' and ignoring the ordinary native population. Thus, the inequity of colonial programmes, always justified by lack of funds and the difficulty of adopting health practices, served to aggravate prejudice. Goldestein (2012: 339) states that the 'inability' of native population to modernise was a common theme amongst colonialists and nationalist sanitary ideologues.

The first policy, the Waste Nuisance Act 1911, enacted after the All India Sanitary Conference in Mumbai in 1911, established that municipal solid waste management was an obligatory responsibility of local civic authorities (Snel, 1997: 42). Yet, before independence, another law on environmental pollution, the Waste Act 1932 (Snel, 1997: 28 and 38) was enacted. Post-independence, Snel (1997: 24) explains that, due to vertiginous population growth, the government gave more attention to large-scale economic projects, ignoring environmental legislation; it was only after a series of environmental disasters in the 1970s that the Indian government published the first environmental legislation: the Water Act 1974, Air Act 1981 and Environmental Protection Act 1986. In the 1980s, sanitation and solid waste management in India was linked to World Bank assistance programmes, such as the International Drinking Water Supply and Sanitation Decade programme in 1981-90.

Until recently, the solid waste generated by the Indian population was mainly organic, and nature ensured its decomposition (Goldstein, 2012: 329). The environment was able to absorb the small quantities of waste that were generated, and the common practice in rural areas was to dump it in the open, on compost heaps or in rivers. In the 1990s, however, due to increasing amounts of processed, packaged and disposable products, packaging started to litter the roadsides.

In Brazil, meanwhile, according to Marco Roza (2006: 77), official documents from the early eighteenth century show that the population was responsible for their own household waste. Ariovaldo Caodagilo and Roney Cytrynowicz (2012: 32) also state that, around this time, the first official documents of the São Paulo administration make it clear that the population should deliver the waste left after festivities to specific sites outside the city limits. As Gisele Machado (2011: 8) explains, domestic waste used to be stored in barrels inside residences and transported by slaves to be dumped in the rivers, wetlands and beaches of Rio de Janeiro. Around 1839, documents show that the street cleaning was carried out by black and mulatto prisoners (Roza, 2006: 78) – Miziara (cited in Caodagilo and Cytrynowicz, 2012: 32) explains that waste handling was associated with punishment. In 1850, after a number of epidemics, the Rio de Janeiro city authorities established that urban waste should be collected from the central urban areas, removed from the view of the bourgeoisie and sent to the Sapucaia landfill site on the outskirts of the city, close to the poorest neighbourhoods (Machado, 2011: 8). By 1869, São Paulo, which had reached some thirty thousand inhabitants, signed the first contract for urban cleansing with a private company. Meanwhile, the Municipal Posture Code ruled that the city authorities were responsible for the collection and final disposal of urban waste (Caodagilo and Cytrynowicz, 2012: 22), and about two decades later, in 1892, the process of door-to-door collection began in Rio de Janeiro (Caodaglio and Cytrynowicz, 2012: 46).

The ideal of cleansing public spaces, not only physically but also morally, was present in the hygiene reforms and the political discourse that accompanied the proclamation of the republic in 1889 (Coimbra, 2006). Moral degradation and poverty were characterised as an intertwined ‘epidemic’ by the scientific Brazilian elites, who claimed they had no place in a hygienic, modern, civilised city. For example, in order

to solve the problem of recurrent yellow fever outbreaks, and influenced by the newly implemented urban renewal of Paris,[24] the mayor of Rio de Janeiro, Pereira Passos, enacted health reforms based on opening up large avenues, flattening the hills and enforcing sanitary measures (Machado, 2011: 8). In the mid-1960s, waste management in São Paulo city was privatised. According to João Gianesi Neto, vice president of the Brazilian Association of Solid Waste and Public Cleaning (ABLP), the first university faculty of sanitary engineering was founded in Rio de Janeiro in 1966, and many of its graduates participated in the country's sanitation projects.[25]

In India, however, it was not until 2015 that Dr. Bindeshwar Pathak, who has campaigned for sanitary reforms and championed the cause of the Dalits since the 1970s, proposed the creation of the Sulabh International University of Sanitation, the first university in India to be dedicated to research on sanitation. However, Pathak (cited in George, 2008) claims that, even until recently, few politicians wanted to be associated with issues such as sanitation, sewage and waste pickers. Nevertheless, influenced by his visions, the L N Mithila University, in the state of Bihar, included the subject on its curriculum in 2015 (TOI, 2015).

The historical characteristics and debates mentioned above have influenced the performance of solid waste management in these two countries, and some have continued to be part of the practices in both countries up to today.

[24] A massive urban renewal programme was carried out in Paris by Baron Georges-Eugene Haussmann between 1853-1870, during the reign of Louis Napoleon III.
[25] Interviewed at the ABLP offices in São Paulo on 10 October 2013.

Contemporary evolution of environmental legislation and MSWM processes in Brazil and India

As discussed in the literature review in Chapter 2, and made clear by the previous subsection, solid waste management in these two countries was historically driven by public health concerns. From the 1970s and 1980s, when the need for environmental protection began to gain global traction following a series of major environmental disasters, which resulted in the first international meetings on the environment, the governments of Brazil and India started to take (almost coincidently) measures to address sanitation and waste management in their territories.

Fig. 5 (below) shows a summary of the historical process, with the main recent environmental policies: the left vertical timeline shows a number of key facts and agreements taken at a global level; the other vertical timeline shows the policies linked to the issue of solid waste in the Indian context (left) and the Brazilian (right).

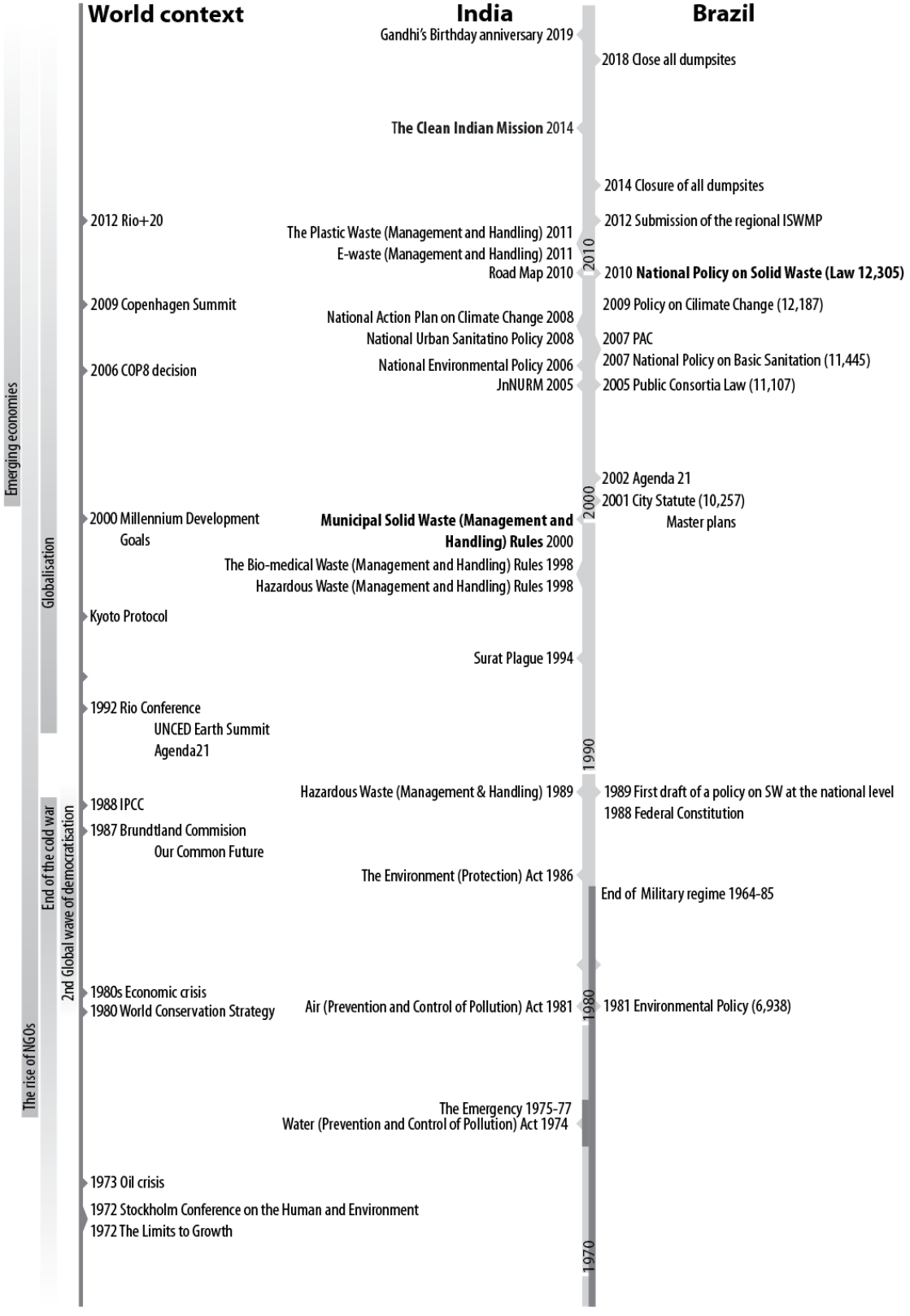


Figure 5: Summary of the historical progress of environmental agreements at a global level and of legislation related to solid waste management in India and Brazil (Source: Author's illustration)

The era of international environmental policies began with the UN Conference on the Human Environment in Stockholm in 1972 (Redclift, 1996). Thereafter, in the 1980s, the first legislation and governmental institutions dedicated to environmental protection emerged almost simultaneously in Brazil and India. The India-Stockholm Committee was born from the Conference and became the advisory group structuring the Indian government's actions on the environment (Snel, 1997: 25). Following this, in 1980, the Department of the Environment was created and the first environmental policy, the Air Act, was enacted in 1981. In the same year, the National Environment Policy Act (Law 6,938/1981) was enacted in Brazil, establishing the National Environment System (SISNAMA), which set up the decentralised structures of environmental governance. Then, in 1985, the Brazilian Ministry of the Environment (MMA) and the Indian Ministry of the Environment and Forests (MoEF) were created, respectively (the latter replacing the existing Department of the Environment). Both central governments were thus empowered to enforce environmental protection.

It is worth mentioning, however, that these two historical developments were completely separate; the two countries do not share any common interests in the subject or any working relationships. The main link is the evolution of the international environmental debate, legislation and jurisprudence, and the market for sustainable development (Sands, 2003: 26), as well as pressure by the UN to organise national structures to incorporate these international responses to environmental protection. Therefore, both countries were not acting proactively; reacting to

environmental incidents, they followed the legal framework available in the international arena.

The Indian Environmental (Protection) Act (EPA) was enacted in 1986, two years after a number of major environmental accidents, such as those at the Mathura oil refinery in Uttar Pradesh, the Thal-Vaishet fertiliser plant near Mumbai and of course the Union Carbide disaster in Bhopal (Snel, 1997: 241). Meanwhile, just two years later, in 1988, the Brazilian Constitution was enacted, with a specific chapter, Article 225, dedicated to the environment. In 1989, India enacted the Hazardous Waste (Management and Handling) Rules. Then, driven by activists' actions after the Surat plague, the MoEF published the Bio-medical and Municipal Solid Waste (Handling & Management) Rules in 1998 and 2000, respectively. In Brazil, also in 1989, Bill 354 on healthcare waste was proposed in the Brazilian parliament, signalling the start of the process of formulating a national waste policy. Dumping waste in the open became an environmental crime in Brazil in 1981, with the Law of Environmental Crimes (Law 9,605: Art.34, § 2nd, V), which establishes penalties for pollution and damage to the environment. However, as the national waste policy was evolving too slowly, some Brazilian states began to enact their own waste legislation during the 1990s (Abramovay et al., 2013: 47). This process is examined further in section 5.3.

A global wave of decentralisation during the mid-1980s and 1990s paralleled the evolution of environmental governance. The Brazilian Constitution, drawn up in 1988 after a period of centralised military rule (1964-1985), was influenced by this trend, and accorded local governments significant autonomy. According to the Constitution, the municipalities are responsible for the provision of basic public services. In 1993, the Indian government launched two significant decentralising reform acts: the 73rd

and 74th Constitutional Amendment Acts (CAA), giving new constitutional status to rural and urban local bodies, and stipulating (among other responsibilities) (Ruet and Lama-Rewal, 2009: 18, Singh, 2007: 4) the provision of public services (Article 243W: 12th Schedule, 6). Thereafter, the issue of solid waste management became part of the global agenda, emphasised in the UN resolution, Agenda 21, which was launched during the Earth Summit at Rio de Janeiro, also known as Rio92. This document provides guidelines for sustainable development at national and local levels, and provides ground-breaking principles for environmental legislation, such as the 'polluter pays' principle (principle 16) and the 'precautionary approach' (principle 15), and emphasising that successful sustainable development at a global level relies on local participation in decision-making and environmental management (principles 10, 20, 21 and 22) (UNCED, 1992). These principles were integrated into the environmental legislative framework of both India and Brazil. For example, based on these international policies, Brazil enacted the City Statute in 2001 and the Master Plans and Agenda 21 in 2002.

Both countries' governments also launched national financial programmes to improve infrastructure, including sanitation and waste management in their strategies. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) is a significant urban modernisation scheme, launched by the Indian government in 2005, with estimated investments of USD 14.7 billion (Rs. 1,00,000 Crore) for a period of seven years and direct investment of USD 9.7 billion (Rs. 66,000 Crore) from central government (MoUD, 2014: 21). The project aims to improve urban infrastructure and basic services, with solid waste management as one of its priority themes. Meanwhile, in 2007, the Brazilian government launched the second phase of its Growth Acceleration Programme (PAC), a strategic USD 872.3 billion (R$ 1.59 trillion) urban

infrastructure improvement programme, in which sanitation and solid waste management are regarded as essential elements. Following this process, Brazil launched its National Policy on Sanitation (Law 11,445) in 2007, and in 2008, India launched its National Urban Sanitation Policy (NUSP).

Climate change topped the new global agenda, and has become one of the central priorities in international negotiations over the last two decades. In 1988, the Intergovernmental Panel on Climate Change (IPCC) was established, and in 1992, the issue was discussed in the United Nations Conference on Environment and Development (UNCED) at Rio92. In 1997, both India and Brazil signed the Kyoto Protocol. These treaties and international instruments pressured countries to reduce their carbon dioxide (CO_2) emissions, taking into account the fact that waste disposal has a major impact on climate change, mainly due to the large amount of greenhouse gases (GHG) and methane gases (CH_4) released from dumpsites. On the brink of the Conference of the Parties (Cop15) in 2009, India launched the National Action Plan on Climate Change in 2008, and in 2009, Brazil launched its National Policy on Climate Change (Law 12.187) to manifest their commitment to Copenhagen. For example, the Brazilian National Plan (PNMC, 2008) and the National Policy on Climate Change (Law 12.187/2009) established voluntary reduction targets of GHG emissions of between 36.1% and 38.9% until 2020 (ICLEI, 2012: 12).

The last decades have seen intense debates on solid waste management, strongly influenced by international organisations – the deficiencies of waste management in developing countries represents a promising market for the industrialised world: the majority of Brazil's 5,569 municipalities, for example, need solid waste solutions. In 2010, the Brazilian PNRS (Law 11.305) was enacted; around the same time several

existing Indian Waste Rules were reviewed.[26] Nowadays, these waste policies comprise concepts such as integrated solid waste management, a waste treatment and disposal hierarchy, and some sort of 'extended producer responsibility' (EPR) plan. With regard to the latter, the Indian EPR was introduced in the Plastic Waste (M&H) Rules 2011, while the PNRS proposed an alternative sectoral agreement on reverse logistics in Brazil, which is explored in section 6.3.

Recently, in 2012, at Rio+20 UNCED, the subject was debated at the 'Zero Waste Strategies and Actions towards Sustainable Cities', one of five hundred fringe events at the conference. Among topics such as waste management, sustainable cities, green economics and poverty eradication, the Brazilian PNRS took a central position in the debate (UN, 2012).

Last, but not least, waste reforms in both countries set extremely tight targets for implementation: Prime Minister Narendra Modi has expressed the aim of implementing waste reforms throughout India by 2019; while the Brazilian Parliament is discussing the extension of its deadline to close all the country's dumpsites by 2021.

These two foregoing sections have described the current situation of solid waste management in Brazil and India, and provided a historical background to the structuring of these practices. Ground-breaking documents, agreed as part of a global consensus and published alongside international conferences, have been crucial to promoting the political and economic agendas of these emerging economies; they

[26] The Hazardous, Bio-medical and Plastic Waste Rules were revised in 2010 and 2011. See Table 1 (section 3.4.2) for a compendium of all the main official documents on SWM published by the Indian government.

have had a significant influence on policy decision-making, contributing to changes in attitudes and practices concerning environmental issues and the provision of public services. In addition to the environmental legislation and the scientific and technological developments in waste management, the active participation of academics, activists, the business sector, the mass media and social movements has also pressured these governments into developing their practices. The following section discusses the recent waste reforms in Brazil and India.

4.4 Service provision of municipal solid waste management in Brazil and India

The following subsections describe the democratic institutions and federal arrangements for the implementation of waste management policies in India and Brazil, respectively.

4.4.1 Policy framework on MSWM in India

The waste reforms in India began after an outbreak of plague in the city of Surat in Gujarat in 1994. According to Snel (1997: 23), eighty-three people died and another 5,905 were affected by the spread of the waterborne disease after flooding aggravated the problem of uncollected waste. In 1996, Almitra Patel submitted a public interest claim (PIL) to the Supreme Court against the Union of India and all its states (discussed more fully in section 6.4, p. 261). This PIL forced the MoEF to form a committee to study the problem and finalise the waste rules (GoI, 2014a: 6). In 2000, the MoEF codified the Municipal Solid Waste (Management & Handling) Rules, establishing that all cities and towns should enforce their implementation (MoEF, 2000). The MSW Rules 2000 were accompanied by a detailed *Manual on Solid Waste Management*, prepared by the Central Public Health and Environmental Engineering

Organisation (CPHEEO), under the oversight of the Ministry of Urban Development (MoUD), with a comprehensive set of mandatory guidelines for the implementation of the Rules in every ULB in the country (MoUD, 2000). According to the Rules' Schedule I (MoEF, 2000: 5), the deadline for implementation was set as December 2003. However, in 2003, the majority of the cities had not even started the process, a fact that was confirmed again in 2011. In 2013, after more than a decade, a report by the Central Pollution Control Board (CPCB, 2013: 5) identified that hardly any city in the country was able to provide door-to-door collections to all their residents, and that the majority of the waste, once collected, was dumped in the open.

India has separate sets of guidelines for different types of waste (municipal solid, bio-medical, hazardous, plastic and e-waste). Subba Rao, director of the Ministry of Environment, Forest and Climate Change (MoEFCC),[27] explains that the Indian Waste Rules are not acts, but subordinate legislation, under the Environmental (Protection) Act (EPA 1986).[28] Such legislation[29] comprises rules formulated by government departments entrusted with the legislative power to draw up regulations on specific matters. As John Carey and Matthew Shugart (1998: 13) explain, the subordinate legislation does not have the same status as a law; rather, these rules are executive decrees, establishing guidelines for the formulation of state policy across the country. According to the EPA 1986, Articles 23, 25 and 26, the MoEFCC is the government body vested with the legislative power to draw up rules to protect and improve the environment.[30] Although solid waste management is part of public health

[27] In 2014, the MoUF was renamed the Ministry of Environment, Forest and Climate (MoEFCC).
[28] Interviewed at the MoEFCC headquarters in New Delhi, 9 April 2014.
[29] Parliament of India. Available online: http://www.mpa.nic.in/mpa/Manual/Manual_English/Chapter/chapter-11.htm
[30] EPA 1986. Available online at: http://envfor.nic.in/legis/env/env1.html

and sanitation, as specified in the State List II (item 6) of the Constitution of India, the regional states' legislatures have exclusive powers to legislate on any of the matters enumerated in List II under their jurisdictions. However, according to the Janaagraha Report (2012: 5), many states have not yet enacted any waste policies, strategies or plans,[31] despite the fact that (as mentioned earlier) the 73rd and 74th Constitutional Amendment Acts (CAA), enacted in 1992, give constitutional recognition to rural administrations and ULBs, specifying their powers and responsibilities, including the provision of waste management services as a primary responsibility (GoI, 2014a).

Table 11 gives a brief overview of the policy framework and the institutional structure of the main bodies responsible for the implementation of the MSW Rules in India. In the Indian federal structure, at central level, the MoEFCC has the power to set the legal framework and the MoUD provides financial support and coordinates policy implementation across the country. The state governments are responsible for preparing state and municipal policies and plans, enforcing the provision of policies in the cities and providing guidance and financial support for ULBs. The ULBs are responsible for the provision of public services to citizens at the local level. At city level, solid waste management service provision is the responsibility of the MoUD; in the majority of cases, this falls under a health department, and in a very few cases, a specific MSWM department (DEA, 2009: 1). Monitoring this implementation is the responsibility of the Central Pollution Control Board (CPCB): the ULBs monitor the local situation and report to the State Pollution Control Board (SPCB), which then

[31] MoUD (2014: 23) shows the example of the Karnataka State Policy on Integrated Waste Management, one of the few state policies enacted in the fifteen years since the MSW Rules.

reports to the CPCB. The MoEFCC is also responsible for monitoring the activities of the CPCB, SPCB and pollution control committees (MoUD, 2014, 32).

Table 11: Policy framework and executive bodies responsible for the implementation of the Indian Waste Rules

Tier	Legislation	Executive Bodies
Central	Constitution of India and 73rd and 74th AAC Environmental Protection Act, 1986 National Urban Sanitation Policy, 2008 Waste M&H Rules	Ministry of the Environment, Forest and Climate Change Ministry of Urban Development Central Pollution Control
State	State policy	Ministry of Urban Development and State Pollution Control
Municipal	Local policy	Urban local body

Source: Author's illustration

Even government officials, however, criticise this complex bureaucratic structure, which inevitably leads to a lack of coordination between the different ministries and departments; added to which, the hierarchical culture in the bureaucracy prevents any cohesion between the efforts of civil servants from different departments. A civil servant (who requested anonymity) claims that:

> *There are always parallel things being done at separate venues with separate agendas. The primary focus is the same, but operating at different times. There is no connection within the ministries and this characteristic can be extended to the industry and the NGOs too.*

In 2015, in order to alleviate the financial constraints of the ULBs, the Indian government launched the Jawharlal Nehru National Urban Renewal Mission (JnNURM) (mentioned earlier). This is a large national investment programme of USD 22 billion (Rs. 145,816 crores) to improve urban infrastructure and public service delivery (MoUD, 2014a: 21). It covers sixty-five selected cities (58% of the Indian population) over seven years, with waste managements as one of the requirements. There are other central government financial schemes to assist the sub-national governments. For example, the 11th Five-Year Plan (2007-2012) for the improvement of infrastructure for urban water supply, sewerage and sanitation aimed to achieve 100% household coverage of solid waste management services, funded by investment of USD 334 million (Rs. 2,212 crores).[32] In all these schemes the national government aims to attract private investment through public-private partnerships to increase financial capacity and build infrastructure, making Indian cities more attractive to investors in order to sustain economic growth. Despite improvements in the more developed cities and metropolises, some critics (Kundu and Samanta, 2011: 63, Sivaramakrishna, 2009) argue that JnNURM has failed to address the problems of the urban poor, privileging instead capital and real-estate investment.

Due to the unsustainable sanitary conditions in the country, in the first year of his mandate, Prime Minister Modi launched the 'Clean India Mission' (SBA),[33] as one of the priorities of his government. The plan covers 4,041 statutory towns – urban centres with a local body such as a municipality, corporation or municipal committee (MoUD, 2014a). The MoUD is in charge of implementing measures to eliminate

[32] The Indian government has also allocated financial support to ULBs through the 12th Financial Commission grants – USD 368 million (Rs. 25 billion) to improve SWM – and the 13th Financial Commission grants – USD 12 billion (Rs. 87,519 crores) for training and capacity building (MoUD, 2014: 32).
[33] Swachh Bharat Abhiyan in Hindi.

defecation in public and construct household, community and public toilets; promote public awareness campaigns to change sanitary behaviour; and improve the capacity of ULBs to provide waste management services and eradicate waste 'scavenging' (MoUD, 2014a: 5) within five years. The SBA is both a programme and a communications campaign, published by the MoUD. As part of this new national strategy, the Municipal Solid Waste Rules were amended in April 2016.

Apart from the committee of experts in the ministry responsible for the Waste Rules, the Indian Parliament has also nominated the Standing Committee on Urban Development, comprising representatives of the Lok Sabah (House of Commons) and Rajya Sabah (House of Lords), to assist the politicians with information and oversee the actions of the executive on behalf of the Parliament and all citizens.[34] In addition to the MoEFCC and the MoUD, other government bodies have published a series of reports on the issue of solid waste management. Table 1 (section 3.4.2) provides a list of the main rules and reports published by the government. Also, institutions such as the Central Public Health and Environmental Engineering Organisation (CPHHEO), the Central Pollution Control Board (CPCB), the National Institute of Urban Affairs (NIUA) and the National Environmental Engineering Research Institute (NEERI), among others, contain highly qualified experts, who provide the government with information. In addition, the National Urban Information System (NUIS),[35] within the MoUD, has a town-level urban database, which provides information to agencies concerned with urban infrastructure planning across the country. This operates on two platforms: the Urban Spatial Information System (USIS) and the National Urban Data

[34] For other standing committees on solid waste, see the 186th Report on MSW (M&H) Rules 2000 (Rajya Sabha) and the 38th Report on MSW (Lok Sabha) of the Standing Committee on Urban Development, 2009.
[35] National Urban Information System, available on [http://moud.gov.in/nuis]. Its access is not open to the general public, restricted under the Rights to Information Act (RTI).

Bank and Indicators (NUDB&I). Despite the deficient monitoring of municipal solid waste management, all these documents show that there is an extensive literature inside government itself about the issue in India.

4.4.2 Policy framework on MSWM in Brazil

The Brazilian Federal Constitution of 1988 has an exclusive chapter dedicated to the environment (Article 225). The legislation establishes that subjects of national interest such as sanitation must be treated as federal law, and that the municipalities are responsible for the delivery of public services (Art.30, V). According to Arnaldo Jardim and José Valverde (2012: 671), the history of the National Policy on Solid Waste (PNRS) begins in 1989, one year after the enactment of the Constitution, when the draft of Policy Bill 354 on healthcare waste was submitted to the Senate, then in August 2010, after more than twenty years of proceedings, the PNRS (Law 12,305) was finally sanctioned by the National Congress. Thereafter, just four months later, it was made law via Decree 7,404 in December of the same year, receiving emergency treatment by the executive. Section 5.3 explores this internal governmental proceeding in detail. Alongside this process, the legislative branches at regional level started to legislate on the matter – the states have competence to legislate for their territories in the absence of a national policy – beginning with Rio Grande do Sul in 1993 (Law 9,921 and Decree 38,356/1998) and Paraná in 1999 (Law 12,493 and Decree 6,674/2002, among others) (Jardim and Valverde, 2012: 658).

Table 12 (below) shows a brief overview of the policy framework and the institutional structure of the main bodies responsible for the implementation of the PNRS. The Constitution (Article 24) establishes the concurrent competences of the central, state and municipal authorities to legislate on environmental protection and pollution

control, and the PNRS sets specific competences within the federal government, states and municipalities to legislate and enforce the law. The federal legislative branch is responsible for setting national policy, the states can add supplementary legislation, while the municipalities are only competent to legislate on local matters.

Table 12: Policy framework and executive bodies responsible for implementing PRNS

Tier	Legislation	Executive Bodies
Central	Federal Constitution of 1988 National Policy on the Environment, 1981 National Policy on Sanitation, 2007 National Policy of Solid Waste, 2010	Ministry of the Environment
State	State policy	State Secretary of the Environment State Environmental Agency
Municipal	Organic law City statute	Secretary of the Environment Municipal Authority on Cleansing

Source: Author's illustration

The PNRS is part of a larger institutional policy framework and is coordinated with several other policies and government institutions. The National Environmental System (SISNAMA), introduced by the National Environment Policy (6,938/1981), establishes the decentralised actions and responsibilities on environmental management shared between central government, its departments and its subnational agencies. Within this structure, the Environmental Policy also introduced the National Council on the Environment (CONAMA), a collegiate body responsible for deliberations on national environmental issues. Cristiana Losekann (2012: 190) explains that, albeit access to this body is limited to those representatives deemed

legitimate, its deliberations are the result of an extensive participatory debate. She explains that its plenary is composed of several government representatives (central, state, municipal), the public prosecutor, deputy chamber members, representatives from the private sector and twenty-two representatives of civil society associations, including representatives of indigenous peoples, rural workers, labour unions and environmentalists (Losekann, 2012: 190). She claims that, although CONAMA demands a high level of institutionalisation of civil society, the deliberations are very democratic.

In the case of the PNRS, however, the central government is still responsible for setting national policy and producing a national plan and programmes to assist the sector, with the Ministry of the Environment (MMA) as the national government body responsible for the planning, coordination and control of implementation. The states are responsible for the coordination and formation of consortia and programmes of regional interest, and each state has different technical executive bodies responsible for managing the implementation and monitoring of environmental compliance. At the local level, the structure of implementation varies: major cities and state capitals have specific departments for cleansing and solid waste management, and a secretariat of the environment, while in medium and small towns, when they have the personnel and infrastructure, waste management is delegated to a specific department or engineers in charge of public works. The municipalities are responsible for organising environmental zoning and the monitoring and provision of public services. Also, specific laws, such as the Organic Law, Agenda 21 and the Statute of Cities, regulating the procedures at the local level. According to SNIS (2015: 9), the majority of Brazilian municipalities (93.5%) provide direct public administration, with specific departments or secretaries responsible for MSWN, followed by indirect

administration through state-owned companies (3.5%), autarchies (autonomous public entities in the municipality) (2.3%) and 1% of mixed-ownership companies (SNIS, 2015: 9). There has been an increasing delegation of contracts through outsourcing MSWM services to the private sector.

In order to access the federal financial resources allocated to solid waste management, the law requires that the authorities at all levels of government (municipalities, municipal consortia, micro-regions, metropolises, states, federal districts and federal government) submit their Integrated Plans for Solid Waste Management (ISWMP) (ICLEI, 2012: 29). These plans help the government to gather information for the National System of Information on Sanitation (SNIS) in order to map a picture of waste-related activity in the country. The PNRS establishes guidelines, targets and instruments, with specific obligations assigned to government, industries and society. As a law, it follows the trend of current legislation in industrialised nations, incorporating approaches to address climate change, the waste-recovery hierarchy and principles such as prevention and precaution: the 'polluter pays' and the 'protector-receiver' principles (Article 6).

The value of solid waste is recognised in the PNRS: the legislation differentiates solid waste and refuse – waste has social and economic value, and only refuse, after it has exhausted all treatment and recovery possibilities, can be disposed of in landfills (PNRS, 3rd, XV). Municipal solid waste management, therefore, is expensive and demands scale. However, Sérgio Gonçalves (2012: 42) explains that 90% of the 5,565 cities in Brazil have less than 100,000 people, making solid waste management economically unsustainable. In order to reduce costs and gain economies of scale, the legislation has interlinked activities with the Public Consortia Law (11,107/2005),

which empowers mayors of neighbouring cities to develop collaborative projects for the provision of public services. According to the SNIS (2015: 2), in 2013, there were 166 municipal consortia established for the provision of waste management services, involving 1,846 municipalities across the country, which means that one third of the country's municipalities participate in consortia. Thus, the PNRS defines mechanisms for the operational and financial sustainability of the waste management processes. The law provides lines of credit, incentives and tax regulations aimed at improving the system. Financial institutions have developed special credit lines for the elimination of dumps, improvement of waste-management services and promotion of the recovery of value from waste. Incentives are also available for research into clean technologies, environmental management systems and commercial activities aimed at improving productive and recycling processes. The government, therefore, provides several financial incentives aimed at attracting interest group investment in waste management policy implementation.

In the case of waste pickers (*catadores*),[36] one of the key features of the PNRS is the recognition of solid waste as an economic good of social value, generating income and encouraging citizenship. This recognition has entailed prioritising the inclusion of *catadores'* cooperatives in recycling and reverse-logistics programmes: for example, municipal contracting of cooperatives is exempt from competitive bidding processes (Article 36). The government seeks to create 600,000 jobs through the social and economic inclusion of waste pickers in the waste-management sectors (Freitas and Fonseca, 2011: 57). The law also provides lines of credit and tax incentives for

[36] In Brazil, waste pickers are called *catadores* of reusable and recyclable materials, according to the Brazilian Occupation Classification (CBO) of the Ministry of Labour and Employment.

projects that enhance the consolidation of cooperatives, such as the development of new technologies, equipment and innovative techniques.

The effects of these new approaches are currently unfolding in Brazil, with the active participation of interest groups and through debates at business fairs and conferences and in publications. However, the policy proposes bold reforms that require the coordination of several sectoral institutions, and the involvement and efforts of public administrations, the private sector, civil society, *catadores*' cooperatives and citizens. Brazil is a huge country, with many regional and cultural differences that inevitably generate difficulties in the implementation of the law. Although the PNRS has been well accepted by the majority of local governments and interest groups, the government has been severely criticised for its delay in putting the legislation into practice. First, the PNRS has been waiting for approval in the MMA for more than five years, and secondly, some sectoral agreements on reverse logistics involve endless negotiations without clear solutions for agreements between the government and some industrial sectors. At the moment, the deputies are analysing the Senate's proposal to amend the PNRS and postpone the deadline to close all the country's dumpsites (Câmara, 2015). Neither the municipalities nor the federal districts were able to achieve this second target (September 2014) established by law. Bill 2289/15 has set new deadlines for local governments to close their dumpsites that vary according to the different sizes of the cities, ranging from July 2018 for metropolitan regions to July 2021 for municipalities with less than fifty thousand inhabitants. These results show a mismatch between the central government's objectives, the actual capacity of local governments and the interests of the business sector, posing enormous challenges for the implementation of the PNRS.

Section summary

There has been a one-decade gap between India's Waste Rules in 2000 and Brazil's waste policy (PNRS), enacted in 2010, and during this time, several international standards on pollution and new technologies have evolved. Thus, the new MSW Rules 2016 have improved on several aspects of the previous MSW Rules 2000, and can be better compared with the later Brazilian PNRS. Both laws apply contemporary strategies adopted worldwide in the most advanced countries' legislatures, such as adopting 'integrated sustainable waste management' policies, delegating responsibility for financial mechanisms to support subnational governments, and implementing the necessary measures and mechanisms to promote inter-municipal projects. The main difference between the two pieces of legislation is the fact that the PNRS is one main policy, which serves as the basis for all types of waste,[37] setting regulations for sectoral agreements for reverse logistics that address different types of waste.[38] Brazilian policy also includes the content of Decree 7,404, which regulates the law and expands the policy, developing how the executive will put the legislation into practice. The Indian legislative framework, on the other hand, divides the legislation according to different types of waste. Therefore, in addition to the MSW Rules, there are also specific laws for plastic, hazardous, bio-medical and e-waste. In this manner, these rules appear to be more concise, particularly in terms of local government implementation. However, an extensive *Manual on MSWM,* published by the MoUD, compensates for this brevity: it expands the knowledge on solid waste

[37] This is with the exception of radioactive refuse.
[38] In distinction to the European Extended Producer Responsibility (EPR) model, Brazil has adopted shared responsibility for waste generation along the chain of the product's life cycle, relying on a series of sectoral agreements with productive sectors.

management, covering most of the topics in detail, even those not addressed in the Waste Rules.

Another key conceptual difference between these policies is the fact that the PNRS recognises the economic value of waste, separating waste from refuse. The ultimate goal of both policies is similar, based on the segregation of waste at source, and the promotion of recycling and waste recovery to minimise landfill; however, the recognition of the value of waste leads to different outcomes. The Indian legislation is primarily an environmental and managerial policy, with specific responsibilities for waste generators and authorities, while the Brazilian waste policy (despite a number of criticisms) has married technical and social aspects by providing mechanisms for the socioeconomic inclusion of waste pickers in the waste management system. This difference has had a strong impact on conditions in the informal sector. In India, by contrast, all the evidence points to the fact that the informal sector has been neglected since the Waste Rules 2000. The 2016 rules have improved the process; however, critics claim that it is still not enough, and there is a lack of clear measures and mechanisms to guarantee waste pickers' inclusion in the process. The PNRS and its Decree (7,404), meanwhile, clearly define the role of *catadores* in the Brazilian waste management system, and establish clear mechanisms for their socioeconomic inclusion. These differences have strong implications for interest group participation in policy decision-making in both countries, an issue that will be scrutinised in depth in section 7.5.

4.5 Chapter summary

This chapter has discussed the complexity of public service provision and its institutional arrangements (the policies and government bodies) in Brazil and India.

As such, it contributes to the study of how the relationship between public and private agents has evolved over the course of the development of public sanitation in these countries, and why this relationship takes the forms it does. The chapter, therefore, investigated the inheritance of the historical relationship between public and private agents in the waste management sectors. To some extent, these earlier practices have influenced current interest group activities: in Brazil, private contractors and public administrators have a long tradition of collaboration in the management of urban problems; in India, the definition and monitoring of such problems have always been the exclusive preserve of experts and the bureaucracy at central and state levels.

As Kennedy Loraine (2009: 72) explains, in India, the privatisation of public services at the local level is still not a significant factor, and as a result, there are a variety local experiments in progress in the various sectors. For example, budgetary constraints and widespread deficiencies in the supply of public services are perceived as the failure of the local authorities, and this has led residents (and their associations) to shift towards subcontracting low-skilled private bodies to provide these services. However, the poorest members of the population lack the resources to pay for these outsourced services (Kennedy, 2009: 73). P. U. Asnani (2008: 170) explains that the capacity to outsource the delivery of waste management services and to monitor their implementation has, for this reason, always been limited. Although the arrangements vary greatly in character across the country, the contracts are generally awarded to small entrepreneurs and NGOs, which are labour-intensive and fragmented: they employ cheap, often unskilled labour and lack the capacity to manage the waste of an entire city. The chapter drew attention to the fact that although individuals like Almitra Patel and Bindeshwar Pathak have dedicated their lives to demanding better public services for the whole population, many politicians in the past have avoided

linking their names to sanitation policies – possibly due to cultural beliefs. Research by Marielle Snel (1997) and documents from the Rajya Sabha (the lower house of parliament) show that sanitation has always been the domain of committees of experts; it took a series of environmental crises and energetic judicial activism before the government was forced into regulating the sector. Current higher rates of urban waste collection, therefore, are the result of the efforts of administrators who have tried to tackle India's historical sanitation problems.

In Brazil, on the other hand, the links between municipal administrations and public health experts have earlier origins. The chapter recounted how the first outsourcing of municipal solid waste management, with the provision of door-to-door collections in the city of São Paulo, dates from the late nineteenth century, while the first University of Sanitation and Public Health was established in the late 1960s (Caodagilo and Cytrynowicz, 2012). It also revealed that, over the years, many sanitarians and public health experts have assumed public office in Brazil, including mayoral positions in the major cities.

International agreements on the environment

The chapter also took into account the almost simultaneous impact of international agreements and environmental legislation on the national legislative frameworks of both countries. These laws and agreements introduced environmental principles that transformed public attitudes towards natural resources, engendering an increasing social acceptance that solid waste is one of the main sources of environmental degradation (Sands, 2003). International environmental legislation thus empowered concerned citizens, interest groups and the judiciary to demand state action (discussed more fully in section 6.4). It also brought a myriad of new actors into the political

process, and the state subsequently became an institutional arena of conflict and negotiation over the issue (Sands, 2003). In Chapter 7, section 7.4 discusses in detail the results of globalisation, due to which, environmental problems and their proposed solutions cross national borders, and in the process, strengthen the hand of foreign lobbying organisations in national government decisions.

Differences between 'law-making' and 'rule-making' procedures

The chapter went on to ask how the presidential system in Brazil and the parliamentary system in India differentially affect interest group activities and citizen participation. Both provide opportunities for participation; however, there are wide variations in the policy design and decision-making processes adopted in each specific polity. The Brazilian and the Indian decision-making processes take distinct forms. The Brazilian PNRS was formulated by the legislative branch of government, which meant that the 'law-making' was decided on in Congress by elected political representatives; the Indian Waste Rules, however, were published by the executive, which meant that its 'rule-making' was conducted by ministerial decree and decided on by unelected bureaucrats (Golden, 1998: 246). Both proceedings are legitimately democratic. As Scott Furlong and Cornelius Kerwin (2004: 354) stress, in the rule-making process, public participation is crucial to ensuring the procedure is democratic, since the rules are formulated by politically appointed public servants, invited experts and consultants. In the case of the Indian Waste Rules, participation is guaranteed by a mandatory period of 'public notice', when the bill is uploaded onto the web page of the government agency concerned and open to comments from the public. These two models provide distinct institutional spaces for interest group participation in government decisions.

Although, the term ‘public participation’ infers the inclusion of the citizen in the political process, it also allows more pluralist interest groups, often with disproportionate social and economic power, to participate in the political debate. The next chapter discusses how public participation has been established in the legislation and how interest groups have participated in the decision-making processes of waste reform in both India and Brazil.

Chapter 5 Public Participation as a Legal Concept

5.1 Introduction

While the last chapter discussed some of the key differences that characterise the politics of the management of solid waste in Brazil and India, this chapter extends the investigation by exploring the distinct ways in which public participation in these countries' waste reforms has been designed, its impact on their decision-making proceedings, and the main players involved. The chapter argues that it has been implemented strategically in both contexts, but that each process possesses a distinct political purpose.

In order to analyse the role interest groups play in these political processes, the chapter investigates how public participation is conceptualised in law. It looks at the decision-making processes involved in these sectoral policies from the perspective of public participation, exploring how and why it has been implemented, and who has benefited. Although the literature review has shown that interest groups employ various formal and informal strategies in their attempts to influence policy decisions, their actions need to be contextualised by the particular political and legislative frameworks in which they are embedded (Cornwall, 2004: 9). The chapter, therefore, discusses the democratic basis for public participation in each country in order to reveal who comprises the 'public' participating in these processes and the impact of their activities on policy outcomes.

The decision-making proceedings determine how individuals and groups participate in policy formulation; the decisions agreed in these processes shape the sectoral practices in each country. By analysing the proceedings, this chapter contributes to an understanding of how these processes are implemented and why they assume distinct

configurations according to their different political contexts. This theme – the practices of public participation in the sector and the consequent activities of interest groups – is enlarged on in the following chapters.

The chapter is divided in two main parts. The first section explores how participation was conceived of in two specific moments of waste reform in India: the Indian Waste Rules 2000 (and its amendment in 2016) and the Clean India Mission (SBA), launched in 2014. The second section analyses public participation in the context of the decision-making process of the Brazilian National Policy on Solid Waste (PNRS).

5.2 Interest group participation in the decision-making process in the Indian MSW Rules and the Clean India Mission

According to official documents and the testimony of groups involved in the debate on solid waste management in India, the decision-making process of the successive Indian MSW Rules, from 2000 to 2016, has been for the most part conducted at the central level, and is essentially a top-down process. This means that the policy decisions have been taken by high-ranking officials and invited experts, with little institutional space for public participation. This technocratic approach has influenced the contents of the policies and impacted the engagement of interest groups in the solution of problems related to waste management.

Although most of the literature shows that the current Indian solid waste legislation began in 2000 with the publication of the MWS Rules by the Ministry of the Environment and Forests (MoEF), the archives of the legislative branch in the Lok Sabha (the lower house of parliament) and the Rajya Sabha (the upper house) reveal a history of extensive debates on sanitation and solid waste issues. Well before the publication of the first MWS Rules, parliamentarians were questioning the ministries

about different problems caused by deficient waste management services; for example, the risk of aircraft colliding with birds as a consequence of waste dumping near airports (RS, 1986); the conversion of waste into energy at the incinerator plant of Timarpur in Delhi, the first to be installed in India (RS, 1987); and the privatisation of urban public services (RS, 1992). However, the major concern of parliamentarians was the spread of epidemics and the risk of outbreaks of plague, resulting from poor or non-existent waste collections in several cities (RS, 1978). In general, the ministries appeared to answer these kinds of questions by stating that, according to the Indian Constitution, solid waste and sanitation were state affairs, and the National Waste Management Council (NWMC), under the MoEF, was studying the problem.

As mentioned in Chapter 4 (section 4.3), in 1996, after the plague in Surat, Almitra Patel, who had been lobbying bureaucrats for several years to outlaw the dumping of waste on open ground and adopt eco-friendly waste management practices, filed a public interest litigation (PIL) at the Supreme Court against the central government, the Central Pollution Control Board (CPCB), and all the states and municipal governments (Patel, 2006), discussed more fully in section 6.4. The court, the petitioner and the government agreed to appoint a committee, headed by Asim Barman, to draw up a report. The final report was submitted in March 1999, and in October 2000, the MoEF published the MSW (Management & Handling) Rules (Rajamani, 2007: 297). In this case, it was the judiciary that put the management of waste issue firmly on the political agenda by ruling that the government should formulate national legislation to address the problem.

The formulation and decision-making stages of the political process were delegated to an expert committee. The Asim Barman Committee, which consisted of seven top-

ranking technocrats and the petitioner, held four regional workshops to present the results of their work. However, as Lavanya Rajamani (2007: 297) explains, because the Supreme Court had not set the guidelines, the decision about the participatory process was delegated to the members of the Committee. After interviewing some of the participants, Rajamani (2007: 297) showed that the formulation of the MSW Rules 2000 was basically a technocratic process. The Committee, for example, decided to restrict the attendance of NGOs. Ravi Agarwal from the NGO, Toxic Link (cited in Rajamani, 2007: 304), explains that local authorities were invited to the regional workshops, and in one of these events, international organisations also attended, but NGOs were not allowed to participate. Bharati Chaturvedi, director of the NGO, Chintan Environmental Action and Research Group (cited in Rajamani, 2007: 304), had to force her way into one of the events. She claims that the process was neither participative nor consultative, and that the recommendations of the Committee were 'driven by the notion that "leaner municipalities and greater efficiency" would solve the problem of MSW management'.

Debolina Kundu and Dibyendu Samanta (2011: 55) argue that, since the 1990s, the Indian government's development reforms were intent on improving the urban infrastructure and governance of a few major cities. This process was boosted by the launch of the Jawaharlal Nehru National Urban Renewal Mission (JnNURM), when the central and state authorities turned their focus onto urban infrastructure. Despite the implementation of measures to improve infrastructure for the poor, the largest part of government investment has been directed at large metropolitan cities and the most developed states, which represent about 58% of the urban population (Kundu and Samanta, 2011: 55). The main objective of the urban development reforms is to create 'global cities' with the potential to attract both domestic and international investment

and public-private partnerships (PPPs), since the government is not in a position to invest 100% in any sort of infrastructure (see section 7.3). One official, who requested anonymity, explains the rationale behind this policy:

> *Any private agency, either domestic or international, would invest in Indian cities in a project which is cost-effective. Private players do not want to invest in a project which does not give returns. So this is the basic logic by which any agency would work. In order to give a boost to this, the government is creating the environment for investment in India.*

Urban development plans, therefore, have been directed at the most developed and industrialised areas, where real estate interests prevail, rather than addressing the poorer areas, thus increasing inequality (Kundu and Samanta, 2011)

In 2014, activists in Delhi gained access to copies of official documents from internal MoEF meetings held between 1998 and 2013, which reveal that the committee discussing the MSW Rules was composed of twenty high-ranking officials and experts, and did not include any representatives of civil society. In the case of solid waste management in India, the lack of public participation in the decision-making process is aggravated when informal social groups are ignored by the legislature and local authorities, while some of the participants boast personal links with major corporate groups (see the discussion about 'revolving door' politics in section 6.5). Representatives of the most active NGOs in Delhi, Toxic Link and Chintam, confirm they were not invited to the discussions.

In addition to the expert committees in the MoEF, the main agency responsible for setting the guidelines and monitoring the implementation of the MSW Rules, there are

other committees, task forces and audits investigating the issue and writing reports for the government on the financial and technological aspects of waste management. In the sixteen years since the publication of the MSW Rules 2000, several government departments have produced reports evaluating their outcome. The parliament has also set up a permanent Standing Committee on Urban Development, comprising members of the Lok and Rajya Sabhas, which is responsible for providing parliamentarians with information and overseeing executive actions. Following the recommendations of the 186th report of the Rajya Sabha Committee and several other official reports (MoUD, 2013, GoI, 2014a, CPCB, 2013), which state that the existing Rules are unable to solve the waste crisis, the MoEF Expert Committee began discussing the amendment of the MSW Rules 2000.

One of the outcomes of the Expert Committee's deliberations, the Draft Amendment Rules 2013, was published online for public consultation on the MoEF website for a period of sixty days. A written petition (WP (C) 46523), filed in the High Court of Karnataka by Leo Saldhana, a member of the Environment Support Group NGO in Bangalore, alleged the proposed amendment was opposed to segregation at source and, thus, was contrary to the principals of the MSW Rules 2000. The Amendment Rules 2013 were criticised because 'waste collection without segregation at source' is in the interests of some private waste operators. Recycling is a big industry in India: the economic value of waste is completely extracted by several informal players along the waste stream, leaving only valueless refuse. Waste without segregation halts the activities of the informal sector and facilitates the specific technologies of a few corporate operators. Given that an institutional space for debate and public consultation did not exist, the courts effectively became the only alternative for public participation. Fig. 6 (below) replicates the notice published by the MoEF in leading

newspapers inviting further 'public comments and suggestions', over a period of seventeen days, when the draft was re-uploaded at the request of the Court of Justice. According to activists who were in contact with Subba Rao, the chairman of the Expert Committee, it was intent on passing the bill before a new general election, but in addition to the public interest litigation (PIL), the Committee also received more than a hundred comments on the draft, and it was unable to revise the process before the elections in 2014.



GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
PUBLIC NOTICE

The Ministry of Environment and Forests, Government of India, in exercise of the powers conferred by Sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), has notified the draft Municipal Solid Waste (Management and Handling) Rules, 2013.

These draft Rules are published inviting public comments and suggestions. The full text of the draft Municipal Solid Waste (Management and Handling) Rules, 2013 can be accessed at the Ministry's website at www.moef.nic.in.

Any person interested in making any objection or suggestion on the proposals contained in the draft Rules may do so in writing, within a period of 17 days from date of publication of this notice in the newspaper, to the Secretary, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi-110003 or electronically at the e-mail address: subbarao@yahoo.co.in

davp 13101/11/0047/1314

Figure 6: 'Public notice' of the MoEF inviting comments and suggestions on the Waste Rules 2013. (Source: *The Gazette of India*)

Agarwal of Toxic Link explains that there is nothing wrong with this decision-making process, since the government can invite whoever it wishes to participate.[39] In fact, sections 3, 6 and 25 of the Environmental (Protections) Act 1986, define the powers of the central government to appoint officers to plan and execute nation-wide programmes, lay down standards, and produce manuals and guides, notifying, if necessary, the official gazette. Proponents also claim that the experts involved in the process are the best qualified in the field. However, without the participation of interest groups and civil society, solid waste management becomes purely a government process, ignoring the fact that local governments have appeared unable to solve the problems of waste management over the last decades. The MSW Rules, therefore, represent solely the vision and objectives of those allowed to participate in the decision-making process.

Some non-governmental bodies have evaluated the outcomes of the MSW Rules 2000. The STEPS Centre's research (Agarwal et al., 2015: 3) argues that Indian waste legislation is primarily environmental legislation, which means that their measures are essentially based on regulations and standards for waste management processes such as collection, transport, treatment and final disposal by specific bodies. This managerial approach reflects the views of the officials and experts involved in the formulation and implementation of policies – in this case, the MoEFCC and the MoUD, and urban development departments at municipal and state level. These researchers claim that this partial understanding of waste management ignores the health risks and social injustices associated with waste flow by dismissing the

[39] Interview recorded (42'59") at the Toxic Link offices in Delhi, 9 April 2014.

involvement of different social groups along the informal waste chain, their movement of waste across the cities and their links with the formal waste management system. In addition, the implementation of certain processes and technologies may exacerbate these problems, leading to the displacement and marginalisation of social groups and aggravating conflicts between formal and informal actors (Agarwal et al., 2015: 5).

What seems clear after interviewing a number of actors involved in waste management is the fact that bureaucrats and their invited experts are remote from the on-going debates and the social movements involved in the issue. During fieldwork for this research, I attended events organised around the issue, such as the 'Exploring Pathways to Sustainability' symposium, which fielded a specific panel on solid waste management (Fig. 7), and the '*Khwahishein*: Awareness Campaign for Waste-Pickers' seminar (Fig. 8), both of which were organised by Jawaharlal Nehru University and the STEPS Centre,[40] as well as demonstrations called by the 'Jantar Mantar', the official website for social movements in Delhi (Fig. 9). In all these events, I observed a broad understanding of the waste problem in India. Furthermore, the experts' decisions seemed very distant from well-known models of implementation such as the Seva Sahakari Sanstha Maryadit (SWaCH) and the Self-Employed Women's Association (SEWA) schemes, launched in collaboration with the municipal corporations of Pune and Ahmedabad, respectively. These, along with so many other actors and debates, are absent from the waste management decision-making process.

[40] A joint research initiative between the Centre for Studies in Science Policy (CSSP), Jawaharlal Nehru University (JNU), and the Social, Technological and Environmental Pathways to Sustainability (STEPS Centre), University of Sussex, UK.



Figure 7: 'Exploring Pathways to Sustainability' symposium at the JNU, India, 10 February 2014 (Source: Author's photo)



Figure 8: '*Khwahishein*: Awareness Campaign for Waste-Pickers' seminar in Delhi, India, 16 March 2013 (Source: Author's photo)



Figure 9: A 'Jantar Mantar' demonstration, Delhi (Source: Author's photo)

Ranjit Gadgil, programme director at Parisar, a civil society organisation involved in lobbying and advocacy for sustainable development, critiques the lack of citizen participation in the decision-making process:[41]

> *It is not just the waste. We have been arguing that this is not the way to see public consultations in general. This is not a country of a million people; this is a billion[-people] country, where everyone has been affected by this [planning]. There is a lot of different people belonging to different segments of society, so consultations have to be more meaningful. You cannot put notes in English on the website and just say: "We invite suggestions and objections." You have to go out and talk to people, meet NGOs, set up meetings everywhere across the country […] you have to go to small towns and villages and you have to involve all the stakeholders. And there is no*

[41] Interview recorded (51'44") at the Parisar offices in Pune, 28 March 2013.

> *such process whatsoever. Neither is the government particularly keen on implementing this process. So, when you don't [carry out] such a process, what eventually happens is that the groups that have the most direct access to government are the ones that become more influential. I am sure they got inputs from large companies involved in waste management. I think this is a very biased, one-sided and unfair process.*

This non-participatory decision-making process, therefore, has generated a strong reaction, igniting protests against the government. For example, Myriam Shankar from the Solid Waste Management Round Table (SWMRT),[42] an activist group devoted to increasing waste segregation at source and improving solid waste management in Bangalore, explains: 'We, as representatives of civil society, participate by reacting against the measures imposed by the government; we do not have access to the conversations and individuals responsible for these measures inside the government.'

Probably because of the lack of a broad debate or of any input by interest groups from different parts of the country, the MSW Rules do not represent the reality on the ground. Therefore, until mid-2014, the whole decision-making process was marked by low levels of public participation, and this was reflected in the measures established by the government, which, as a result, have been unable to solve the waste problem. For example, the UN-Habitat report on MSWM in the world's cities (2010: 142) states that, despite the mention of recycling in the Indian Acts and Rules, the legislation does not recognise the informal sector's role in the process.

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[42] I interviewed Myriam Shankar, Neethu Peter, Sandya Narayanan and Rosario Anslem in a meeting of the SMWART in Bangalore, 1 April 2014.

Rajamani (2007: 306) states that the MWS Rules 2000 are 'techno-legal' rather than 'social-legal': they treat the waste problem as a technical and managerial problem, promoting privatisation without taking into account the role of waste pickers in the recycling process. He claims that the MSW Rules 2000 ignore the poor, and there are no measures to improve waste pickers' conditions and ensure their effective inclusion in the waste management system; nor do they provide mechanisms to promote recycling and waste minimisation at source. Yet, years later, activists claim that the proposed Amendment 2013 still only reflects the economic interests of private players by facilitating technologies such as incineration, which threatens other methods of treatment such as the segregation of waste and recycling.

Unlike the approach of the central government, the city of Pune, however, has pursued a very different model over recent decades. This is a participatory model, the result of a historical process in the region, and is formed around participatory budgeting, the input of both industries and academics, and frequent consultation with interest groups involved in urban planning projects. However, Lakshmi Narayan, co-founder of SWaCH, a world-famous Indian waste-pickers' cooperative, claims that it has not been an easy process.[43] Every new administration initiates a new set of actions, so achieving a successful historical process has required the establishment of a permanent channel of negotiation. Even Subba Rao, the director in charge of the Rules Amendment 2013, has admitted to never having visited SWaCH and SEWA in Pune and Ahmedabad, despite receiving a number of invitations, although he stated that he plans to visit in the future.[44] This distance between politicians and social

[43] Interviewed in a park in Pune, 28 March 2014.
[44] Interviewed at the MoEFCC headquarters in Delhi, 9 April 2014.

groups is one of the key differences between the Indian and Brazilian political processes. Finally, in early 2015, a parliamentary standing committee visited Pune, and its subsequent report suggests that, with the participation of SWaCH, the model should be applied to the whole country.

At the local level, there are different schemes for public participation in urban development. The 'Area Sabha' was introduced by the Nagar Raj Bill in the 74th AAC to ensure citizen participation in governance, in addition to the JnNURM (Sivaramakrishna, 2009: 35). However, Agarwal et al. (2015: 6) claim that, unfortunately, public consultation for some larger waste management projects at the local level are designed to engage 'minimal rather than maximum participation'. These authors state that the public hearing for the construction of the Okhla incineration plant in Delhi was held without properly notifying residents. Agarwal criticises these attitudes:

> *They [the bureaucrats] are trying to create a 'publicness'. This is problematic, because they occupy the public space. But you cannot produce that space. They occupy it for their own purposes. I think that, politically, it is a problem. (Agarwal et al., 2015: 6)* [45]

Agarwal explains that sometimes his organisation, along with other activists and NGOs, are called on to participate in meetings promoted by government agencies and expert committees, but in fact their inclusion is simply used to legitimise the actions of the working groups. Another example that illustrates this idea of 'creating

[45] Interviewed at the Toxic Link offices in Delhi, 9 April 2014.

publicness' is the case of the National Consultation Programme promoted by the Indian government in 2015 (discussed more fully in Section 6.2).

The media, however, has been actively involved in demonstrating that the waste issue is an important social concern. In 2014, the TV programme, *Satyamev Jayate* (*Don't Waste Your Garbage*), hosted by Bollywood actor Aamir Khan, featured a debate with several leading figures, including Malati Gadgil and Lakshmi Narayan, founders of SWaCH Plus, scientist Dr. S. R. Maley, and Dr. Almitra Patel. The programme's website received more than six million 'actions taken' and more than three million 'votes for change' (Khan, 2014). There are also daily articles in the *Times of India* (Figure 10), the *Hindustan Times* and *The Hindu* on issues such as PPP schemes, protests against incineration plants and the lack of attention paid to the livelihoods of waste pickers. This media campaign intensified during the national elections in 2014.



THE TIMES OF INDIA, NEW DELHI
TUESDAY, MARCH 25, 2014

TIMES CITY

Docs write to PM against Okhla plant

Say Polluting Emissions Can Cause Allergies, Asthma, Cancer & Reproductive Anomalies

Jayashree Nandi | TNN

New Delhi: About 80 doctors from Holy Family Hospital in Okhla and some other hospitals across the city have written open letters to the Prime Minister's Office raising concerns about emissions from the Okhla waste-to-energy plant. In their letters, written on individual letterheads, doctors have said polluting emissions from the plant could lead to allergies, asthma, cancers and reproductive anomalies.

Many of these doctors also live close to the waste-to-energy plant. Central Pollution Control Board checks at the plant site have revealed dioxin emissions to be way higher than the permissible limit. Residents are extremely concerned about fly ash from the plant falling on their homes and vehicles. Delhi Pollution Control Committee issued a show cause notice to the plant in January for not meeting the air quality standard.

"An unusually large number of patients are coming in with respiratory ailments like asthma and bronchitis which can be attributable to the high levels of pollution in Okhla caused by the plant. The Holy Family Hospital has announced plans to launch a medical college. We would like it to function in an unpolluted environment," Fr P A George, director of the hospital, said.

Neonatologist with Fortis La Femme Ashu Sawhney, who lives just behind the plant, said, "Based on my experience as a paediatrician as well as various studies, I can say such pollutants cannot just cause respiratory illnesses but also learning and behavioural problems. My daughter developed asthma last year," she said.

Another paediatrician from AIIMS Shivani Randev said, "Most children from the area are suffering from respiratory illnesses. These pollutants can cause foetal anomalies, infertility, cancer and other health issues. This is a humble request from residents, especially doctors, from the area to please help us and shut down the plant."

The letters will be submitted to the National Green Tribunal by petitioners who have filed a case against the plant. One of the main reasons for anxiety among residents and environmentalists is high dioxin levels around the plant. When CPCB monitored air quality there last October, dioxin level in stack 1 was 1.06ng TEQ/Nm3 (toxicity equivalent) and that in stack 2 was 0.93ng TEQ/Nm3 though safe level is 0.1ng TEQ/Nm3 only.

Not just pollution, environmentalists are also concerned about the social cost of this technology as a large number of ragpickers stand to lose their jobs if waste-to-energy plants are widely adopted for waste management. Though they are common in the West, there is a raging debate even there about the suitability of waste-to-energy plants. In Delhi, the issue is even more relevant because there is no waste segregation at source which is why chances of non-biodegradable waste like plastics ending up in the incinerator is high.

HOW GREEN IS THE ENERGY PLANT

WHETHER TO GO FOR WASTE-TO-ENERGY METHOD

PROS

- Reduces burden on landfills
- Produces energy
- Most modern waste-to energy plants have air pollution control technology to ensure that smokestack emissions (final waste product) are safe for human health and environment
- Is likely to reduce garbage littering in residential colonies as all waste materials are taken to the plant

CONS

- Construction and operational costs of incinerators are extremely high. To increase efficiency (and limit dioxin emission), incinerators need to operate 24 hours
- Employs less number of people; waste-pickers and informal recyclers lose their livelihood
- Releases pollutants like dioxins, mercury, lead, cadmium and others
- Destroys waste materials that can be reused or recovered
- Doesn't encourage segregation of organic and non-organic waste at source

PILOT PROJECT

- Supreme Court has permitted the ministry of new and renewable energy to set up 5 waste-to-energy projects to study their viability. It has also directed that no other such project will be taken up until the pilot project is completed
- Ministry has formulated a programme on energy recovery from municipal solid waste to set up pilot projects. It provides central financial assistance of Rs 2 crore per megawatt (MW)

PLANTS UNDER PILOT PROJECT

- Srinivasa Gayatri Resource Recovery LTD in Mandur village, Bangalore—**8MW**
- RDF Power Projects in Nalgonda, Andhra Pradesh—**11 MW** Timarpur Okhla Waste Management, New Delhi—**16MW**
- East Delhi Waste Processing Company, Ghazipur—**12 MW**
- Rochem Separation Systems in Pune—**10 MW**

The pilot project is not over, but another 25MW project is in the pipeline at Narela-Bawana, Delhi

Figure 10: A *Times of India* article on the Okhla incinerator plant in Delhi (Source: Nandi (2014)

As mentioned earlier, there are no measures for public participation or consultation in the existing MSW Rules 2000. The 2016 Rules, however, contain specific measures for public participation, establishing the duty of the MoEFCC to formulate rules and strategies on waste management with public consultation. According to new MoUD legislation (MoEFCC, 2016: Sec.6, b), local urban development departments must prepare a waste strategy 'in consultation with stakeholders, including representatives of waste pickers' (MoEFCC, 2016: Sec.11, a), and the urban local bodies (ULBs) have a duty to disseminate information through their websites, public workshops and public awareness programmes.

Nevertheless, emerging alternative platforms have begun to engage interest groups in the process. The business sector has taken initiatives to bring together different players to discuss issues associated with solid waste management. Among these initiatives, in February 2014, the Indian Beverage Association (IBA), with the support of the Energy Research Institute (TERI) and Gesellschaft für Internationale Zusammenarbeit (GIZ), held a conference with representatives of waste authorities, the business sector, the recycling industry and waste pickers to discuss problems associated with packaged waste collection and recycling, and to propose a road map to implement a 'shared responsibility model' in urban centres.[46]

In July 2014, the GIZ hosted a two-day workshop to receive feedback from interest groups on the draft of *The Manual on MSWM*.[47] The manual was developed by an

[46] 'Waste to Resource: Waste Management & Recycling' conference, New Delhi, 12 February 2014.
[47] 'National Workshop for Finalisation of the Draft Manual on Municipal Solid Waste Management', New Delhi, 24-25 July 2014.

expert committee in the MoUD, with the support of the German group, to update the existing manual released in 2000. This is one of the most participatory public consultations yet held in India, with more than 240 participants and representatives of government bodies, private sector companies, academia, international organisations, industries and NGOs. The manual describes this 'stakeholder consultation' for assessing the current situation and the planning, approval and evaluation of the MSW Plans (MoUD, 2014b: 113), and highlights the importance of public participation in 'information, education and communication' (IEC), behaviour change and awareness campaigns. Shortly after this, in October 2014, the prime minister launched the Clean India Mission, which aims to engage the population in a massive campaign to transform social behaviour and attitudes to waste management.

This section has shown that the limited opportunities for public participation in the formulation of the Indian Waste Rules has had implications for policy implementation. The following section explores the effect of the participatory process adopted by the Clean India Mission.

5.2.1 The Clean India Mission[48]

'Sometimes, one individual makes the difference in India,' says Anand Singh Bhal, an economic advisor at the MoUD. He explains that after an outbreak of plague in Rajkot in Gujarat in 1984, the municipal commissioner, Suryadevara Ramachandra Rao, acted efficiently by pulling together the entire system of people and finances in an effort to solve the problem that threatened to spread out of control.[49] Twenty years on,

[48] Swachh Bharat Abhiyan (SBA) in Hindi
[49] Interview recorded (1:02'05") at the MoUD headquarters in New Delhi, 12 March 2014.

the city is a beacon of success in the history of solid waste management in India. Other cities in Gujarat, such as Ahmedabad and Surat, also present better performances than the rest of the country. Part of the national electoral success of Prime Minister Narendra Modi in 2014 was due to the image of Gujarat, where he was formerly chief minister, as the 'best state for business' (Kumar, 2015). In October of the same year, a picture of Modi wielding a broom and sweeping a pavement in Delhi made headlines around the world. In his speech on the 68th Independence Day celebrations, the prime minister put sanitation at the top of the government agenda, launching the Mission (SBA). He pledged to commit 100 hours per year (two hours per week) in voluntary work so that the 150th anniversary of Gandhi's birth in 2019 could be celebrated with a 'clean India' (TOI, 2014). This kicked off a massive awareness campaign, involving celebrities and politicians, with several events across the country and a powerful marketing campaign to engage the population in a nation-wide movement. After two weeks of much publicity and daily headlines in the Indian mass media, a new threat of conflict with Pakistan (Iyengar, 2015) diverted media attention, and the campaign receded in visibility.

Since 2014, however, the SBA has opened up a new dimension of popular participation in the solid waste management process in India, with the potential to reverse the insanitary living conditions of majority of the population. Section 5.2 has explored the Indian Waste Rules as a legislative framework; this section, therefore, explores this new aspect of citizen engagement in waste management and its potential to solve the sanitation problems of the country. It first explores the historical context of India's struggle to improve sanitation, then looks at a recent survey of the first results of the SBA campaign (published by the MoUD), and finally discusses some of the challenges India faces in achieving Modi's goal.

Historical infrastructural challenges

The SBA not only comprises a campaign, but also an action plan. The campaign itself is subdivided into two programmes: the MoUD is the ministry in charge of SBA-Urban (SBA-U) implementation in urban areas, and the Ministry of Drinking Water and Sanitation (MoDWS) directs the SBA-Gramin (SBA-G) in rural areas. Parliament has also set up a specific Urban Development Committee to supervise the SBA-U and a Rural Development Standing Committee for SBA-G. The SBA seeks to put an end to public defecation, manual scavenging and serious sanitary constraints in a country where, according to the 2011 national census, 7.9 million households do not have access to toilet facilities (MoUD, 2014a: 3). The programme is aimed at increasing public awareness and motivating the population and local governments to adopt improved sanitation practices.

The central government estimates that comprehensive sanitary solutions for all 4,041 statutory towns – urban agglomerations with a municipal government, corporation, cantonment board or notified town area committee – will cost Rs. 62,009 crores (USD 9.3 billion). This financial assistance will be divided into three main parts: Rs. 14,623 crore (USD 2.2 billion) provided by central government, Rs. 4,874 crore (USD 735 million) by the regional states, and the rest via private sector participation and market borrowing (MoUD, 2014: 5). Central government provides financial assistance of Rs. 240 (USD 3.5) per capita to each city/town, according to population, and Rs. 12 (USD 0.17) per capita to cover the cost of formulating the *Detailed Project Report* (DPR).[50] Solid waste management is one of the programme's six components, alongside the

[50] Information provided via email by Prashant Pandya and Nishit Pandya (AMC) on 23 February 2016.

provision of public, community and household toilets, improvements in the capacity of ULBs to deal with the problem of sanitation, and campaigns of public awareness.

In reality, the scheme is not a novel creation. According to research by the Police Research Institute (PRSIndia, 2015), an NGO that provides information about India's legislative process, the government has been trying to solve the country's sanitation crisis through a series of programmes for the last three decades:

- In 1986, the government launched the first infrastructure-oriented programme providing sanitation facilities for rural families living under the poverty line – the Central Rural Sanitation Programme (CRSP);
- In 1999, this programme was reformulated as the Total Sanitation Campaign (TSC), changing its strategy to a community-led and people-centred approach;
- In April 2012, the programme was again re-launched, this time as the Nirmal Bharat Abhiyan (NBA), which aimed to achieve 100% sanitation for all of rural India by 2022 (Kaliski, 2015: 76);
- In October 2014, the Swachh Bharat Abhiyan (SBA) expanded the scope of the programme to cover all of rural and urban India, advancing the previous target from 2022 to 2019, in order to accommodate its results with the prime minister's term of office.

Despite the improvements made since the 1980s, these plans and the massive investments they have generated have not been sufficient to solve the problems. In fact, an online media evaluation by PRSIndia (2015) demonstrates that the SBA's meagre results were considered to be one of the main failures of Modi's first year in office. The government was unable to deliver the economic growth promised during the campaign, and India's declining infrastructure, low volume of exports and

disappointing stock-market performance compared badly with other Asian economies (Joshia and Ahmeda, 2016, Seetha, 2015).

Furthermore, during 2015, the government came under attack from opposition parties and workers – a wave of strikes hit major cities across the country. Regular waste workers struck against lack of payment by the municipal corporations: in February, 3,000 waste workers participated in violent protests against the Meerut Municipal Corporation (MMC); in June, after ten days of strike, 15,000 tonnes of waste were left uncollected on the streets in the eastern part of New Delhi; in July, 8,000 tonnes of waste were dumped on the roads of residential areas of the Greater Visakhapatam Municipal Corporation (GVMC); in September, the same happened in the Shimla Municipal Corporation (SMC)'s area (Bhatia, 2015, ET, 2015, Rao, 2015, Thakur, 2015). The opposition Bahujan Samaj Party (BSP), the party of low-caste members of the population, including Dalits, also mobilised social movements in protest against Modi's ruling Bharatiya Janata Party (BJP). Government opponents, such as Rahul Gandhi of the National Congress Party (INC), accused the BJP, the Aam Aadmi Party (AAP) and the East Delhi Municipal Corporation (EDMC) of causing the waste crisis in Delhi. As the SBA campaign had not achieved better results, the solid waste issue became the fuse for a conflagration of political battles.

In October 2015, the headlines of the main Indian newspapers were dominated by the unsatisfactory results of the SBA. The *Indian Express* (Nair, 2015) showed that the results of the first year were lagging behind its targets, with only 20-25% of toilets installed, and with even worse results for waste management infrastructure. The *Hindustani Times* (Gupta and Kumar, 2015) reported that inadequate budgets, a lack

of capacity and ineffectual awareness campaigns, in addition to the private sector's lack of enthusiasm, were the main obstacles hindering implementation on the ground.

In February 2016, Minister of Urban Development Venkaiah Naidu announced the *Swachh Bharat Survekshan*, a survey ranking seventy-three of the cleanest Indian cities, which comprise about 40% of India's urban population.[51] The survey was commissioned by the MoUD and was conducted by an independent consultancy, the Quality Council of India (QCI, 2016). However, while even some of Modi's political opponents still hope for the success of the SBA, the fact is that municipal solid waste management and sanitation have been chronic problems in India for decades and it is too early to celebrate any successful outcomes. Municipal solid waste does not simply disappear from the urban areas, rivers and dumpsites. The previous CPCB reports and academic research carried out over the last sixteen years since the publication of MSW Rules 2000 exposes the serious challenges ULBs face.

#MyCleanIndia

The SBA campaign was structured so as to engage the population in its implementation and to change social behaviour towards sanitation and waste management, employing the main media channels to spread the prime minister's message to the whole country and to the rest of the world. Suddenly, waste lost its distasteful image, and newspapers and social media were full of news of celebrities sweeping the streets, Twitter messages and Facebook posts. By means of the

[51] Swachh Survekshan website: https://gramener.com/swachhbharat/

ICleanIndia app[52] (Fig. 11), designed by Mark Zuckerberg, Facebook's CEO, everyone could participate, uploading before-and-after photos of their clean-up endeavours (TOI, 2014).[53] #mycleanindia, the social media campaign, was designed to spread the message and to advertise the success of the SBA, involving the population in a national effort to improve sanitation around the country.[54]

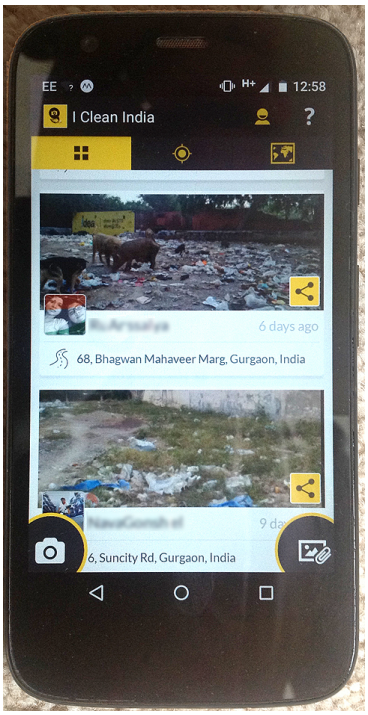


Figure 11: The app ICleanIndia (Source: Author's photo)

The internet campaign was considered a success. The SBA follows the same electoral strategy, based on direct communication with the electorate, that differentiated Modi

[52] Website: http://www.icleanindia.com
[53] Website: https://swachhbharat.mygov.in/view-activity-map
[54] Social media – Instagram: https://www.instagram.com/explore/tags/mycleanindia/;
Facebook: https://www.facebook.com/hashtag/mycleanindia;
Twitter: https://twitter.com/hashtag/mycleanindia?lang=en-gb

from his political opponents. By July 2015, there were 5,267 users registered to the government website and 133,088 pictures had been uploaded. Today, social media and campaign's websites are full of examples of voluntary initiatives of ordinary citizens cleaning passages, parks, train stations and other urban areas.[55] However, Jessica Kaliski (2015: 149) questions the effectiveness of the campaign: her research reveals a lack of correlation between the regional location of app users and improved sanitation in the most disadvantage areas.

Public participation

A few weeks after the launch of the SBA campaign, Naidu launched a further 'Action Plan', while in parallel to this, the MoEFCC prepared the Draft Waste Rules 2016. An interesting aspect of this campaign is the way public participation has been framed to 'catch the imagination of citizens', to use Naidu's expression (QCI, 2016: 4). Since the beginning, it has claimed that its success is only possible with citizen participation. However, in reality, the decision-making process follows the example set by the MSW Waste Rules, where experts make the decisions, and ultimately there is minimal popular participation in the design of the policies themselves. Some interviewees claim that the programme simply follows the pattern of previous top-down schemes for major centralised infrastructure projects. Sandya Narayanan[56] of SWMRT explains:

> *The launch of the SBA led us to believe that the whole approach would be very participative, hands-on, an on-the-ground kind of exercise, and of*

[55] Examples on social media: https://www.facebook.com/ChakaChakBandra/videos/1502082526762598/?fref=nf
[56] Interviewed via email, 24 August 2015.

> *course it was a big hit, and mini Swachh Bharat campaigns instantly started up, all from the people, communities, etc. … The idea of a SBA is so welcome to the general public, they have adopted it as a concept, with high expectations of what it will deliver.*

Narayanan also criticises the experts' approach to solid waste management:

> *The SBA is a centralised funding process with the central government holding the financial strings to get the state governments to plan and invest in sanitation and SWM. The SWM guidelines are limited and rigid, and have no scope for any creativity, [even] going as far as to promote WTE [waste to energy], which is completely the antithesis of what citizen groups want.*

The Indian government has come to the realisation that without engaging interest groups in the process, the promised goals are unlikely to be achieved. Recently, the MoUD, with the support of the Federation of the Indian Chamber of Commerce & Industry (FICCI) and the GIZ, has organised debates in order to build a dialogue with interest groups – for example, the international workshop on 'Extended Producer Responsibility in India: opportunities, challenges and lessons from international experience' in May 2016, bringing speakers from other countries to discuss the implementation of 'extended producer responsibility' (EPR) in India.

Green environmentalism

The Swachh Bharat Survekshan survey (mentioned above) has been well received by the middle classes, many of whom aspire to cleaner urban centres, although without paying land taxes or ameliorating the plight of those who collect their waste. Kaveri Gill employs the term 'bourgeois environmentalism' to describe this phenomenon:

> *The middle and upper classes pursue 'green' environmental causes and push their own agendas of a visually pleasing and cleaner city, often at the expense of the marginalised, and disregard their pressing 'brown agenda' concerns, such as housing in slum settlements and work in the informal sector. (Gill, 2010: 219)*

Bharati Chaturvedi and Vinay Gidwani (2011: 136) also criticise the 'bourgeois environmentalism' that marginalises slum dwellers while benefiting the enclaves of the rich and promoting elite-driven demands and investments. These authors cite as an example the 2021 Master Plan for Delhi, which envisages a city free of slums (Puri, cited in Chaturvedi and Gigwani, 2011: 136), a project that aims to create a 'world-class city' by excluding 40% of its residents.

Waste pickers

Research conducted by Manisha Anantharaman (2015), Ali (2015: 22), Gill (2010: 239) calls attention to the stark divergence between the aspirations of the upper classes ('green cities' and business opportunities) and the perpetuation of the appalling conditions of the lower classes (the lower castes and waste pickers). Subhash Gatade (2015: 29) argues that the government's simplistic propaganda has failed to address the complex, interlinked realities of cultural behaviour and sanitation. The editorial of the *Economic & Political Weekly* (2014), one of the most well-known academic journals in the country, argues that the SBA has failed to comprehend the reasons for 'dirt' in India.

Several critics (Kumar, 2014, Teltumbde, 2014, Ali, 2015, Gatade, 2015) have raised the problem of the scant attention paid by the SBA campaign to crucial themes such

as the link between cleanliness and the caste system, and the rights of the marginalised social groups that comprise the informal sector. The government – at both central and local levels – has failed for decades to include waste workers in the MSWM system. Gatade also claims that the Hindu notion of dirt and impurity associated with the caste system, as well as the availability of a cheap workforce, has maintained the exploitation of the Dalit population. She stresses that without the labour of the waste pickers, Indian cities would grind to a halt; nevertheless, the government has continued to ignore their existence. Anand Teltumbde (2014: 11) also claims that the lack of sanitation in India has been assumed to be a problem of poverty, due to the lack of infrastructure. However, he argues instead that it is a cultural problem, a result of the caste system: 'This culture externalises the responsibility of maintaining cleanliness to a particular caste. It stigmatises the work as unclean and the workers as untouchables.' Gatade (2015: 29) argues that if social attitudes towards sanitation, and the servitude and marginalisation of lower-caste waste pickers, are not addressed, the worthy goals of the SBA may never be achieved. Teltumbde (2014: 12) agrees that 'unless this caste culture is eradicated and people themselves internalise their responsibility towards cleanliness, no amount of campaigns is going to succeed'.

The caste issue is reviewed again in section 7.5, which explores the inclusion of waste pickers in solid waste management.

Section summary

The SBA campaign has created a momentum unique in the history of sanitation in India, drawing the attention of society and politicians to the problem of sanitation. Many interviewees claim that before this campaign, it was common to hear that waste

management was not a priority: it did not win votes and no politician would associate their political image with waste and dirt, and the ordinary citizen was not worried about the amount of waste they generated, because once they dumped it outside their homes, they no longer considered it their problem. This perception has certainly changed amongst a section of the population; however, it seems that the technocratic approach of central government has shown little innovative capacity to take the campaign beyond the promotion of top-down, centralised financial schemes and propaganda machinery, and produce concrete measures to address the reality of those working formally and informally in the waste management sector. India's history of successive series of nation-wide government programmes and large infrastructure projects has proved unable to solve its sanitation crisis. The problem demands a participative and pluralist debate, involving social actors and interest groups, rather than experts, in the solution of the problem.

5.3 Interest group participation in the decision-making process of the Brazilian PNRS

The history of Brazil's national policy on solid waste (PNRS) begins in 1989, when Bill 354 on the disposal of healthcare waste was submitted to the Senate by deputy Rodrigo Rollemberg. José Valverde, who participated in the formulation of waste policies at state and central levels as the technical co-ordinator of the committee rapporteur, explains that the bill was motivated by the proximity of the UN's Earth Summit (ECO92).[57] In 1991, the draft became Bill 203, receiving close to a hundred proposals until, in 1998, the Special Committee for the National Policy on Solid

[57] José Valverde, one of the drafters of the PNRS, was interviewed in a restaurant in São Paulo, 15 November 2013. (43'52")

Waste was nominated to analyse the theme (Silva, 1991: 14). However, Valverde points out that there were several obstacles to the evolution of the debate in parliament. In his view, the country, which was grappling with the aftermath of a long economic crisis, had other priorities; there was little appetite for environmental issues, and the bill was not proposed as national policy. The business sector, however, had already started to discuss certain principles, such as the 'polluter pays' principle, established by European directives, anticipating that these ideas would arrive in Brazil in the near future. There was a powerful lobby inside Congress, organised by the retreated tyre import industry, determined to block any initiatives. In the midst of this process, Emerson Kapaz, the committee rapporteur, caused a scandal when it was leaked in the media that he had ordered the deletion of all enquiries received through the bill's participatory process. In the end, the bill was not approved and the policy was terminated. As a result, it was clear that citizen participation in the legislative process should command more attention: Valverde states that 'public policy that does not discuss and does not consider the principle of participation is doomed to fail'.

In 2002, the process of formulating a new bill was reinitiated and a second committee was established. The retreated tyre lobby was still strong and the industrial sector reacted adversely to any proposal that it take responsibility for the rapid growth in waste generation. Although Minister of the Environment Marina Silva adopted a firm stance against waste importation, this deadlock hindered the debate in Congress until the Supreme Court (STF) decision to ban the import of retreated tyres and the overturning of the World Trade Organisation's (WTO) position on the export of waste from industrialised nations to developing countries in the Conference of the Parties (COP8) in 2006. However, as Valverde explains, even at this stage, the business sector was reluctant to adopt the 'polluter-pays' principle or take any responsibility

for consumer waste. There was a common reactive discourse prevalent in the sector that argued that 'the industry does not generate waste, it generates production'.

At the same time, due to the lack of leadership from the federal government, some states had independently begun to introduce legislation; the municipalities were demanding solutions for the problems of solid waste management and the regulation of contracts for the provision of waste services. Valverde mentions the case of the state of São Paulo as an example. In 2003, a non-partisan and multi-disciplinary working group was formed in the São Paulo Legislative Assembly to formulate the state's policy on solid waste. From the outset, it differed to the parliamentary model, with the emphasis on the express participation of civil society in the proceedings. According to Arnaldo Jardim and José Valverde (2012: 665), the working group drew up a schedule for public hearings, and presented the preliminary draft at a public event in February 2004 to receive suggestions and amendments. There were more than fifty participants from different sections of society at this event, including representatives from business associations and concessionary companies, academics, and members of civil society organisations and the *catadores*' (waste pickers') movement. In addition, the process involved seminars, technical visits and a link on the Legislative Assembly's website to facilitate contact between society and municipal decision-makers. This was followed by a public hearing to discuss the deliberations. Praise for this participatory process was unanimous among those interviewed for this research, from public managers to businessmen and waste pickers. Diógenes Del Bel, director of the Brazilian Association of Solid Waste Treatment Companies (ABETRE), highlighted that he had never experienced such a vibrant and rewarding democratic environment:

> *Those meetings were a surprising experience to me. I did not know that democracy was something that could work in such a way. There was a lot of dialogue and everybody was in direct contact, debating waste policies and suggestions from different perspectives. We knew the plenary had no legal validity, but the promotion of an alignment between all sectors was a great triumph.* [58]

In 2006, the São Paulo State Policy on Solid Waste (Law 12,300)[59] was unanimously approved, and its legislative process was also characterised by broad public participation.

At the national level, three major events consolidated the participation of society in the decision-making process for environmental policies. In 2003, the I National Conference on the Environment (CNMA), held in Brasilia, marked the first time that a variety of representatives of society had come together to discuss proposals for a national policy on the environment (Silva, 1991). In 2004, the Ministry of the Environment held a seminar, 'Contributions for the National Policy on Solid Waste' (MMA, 2010), gathering feedback from society on the formulation of a new bill. In the following year, the issue of solid waste management became one of the key themes at the II CNMA (2005), with the widespread participation of interest groups, evidencing the need for federal regulation (Silva, 1991: 14).

According to Silva (1991: 15), a group was created in early 2005 within the Ministry of the Environment to evaluate the existing waste bills in Congress and the

[58] Interviewed the ABETRE offices in São Paulo, 22 August 2013.
[59] Available at: http://www.ambiente.sp.gov.br/cpla/files/2012/09/2006_Lei_12300.pdf

contributions of the participatory processes mentioned above, in order to formulate a new bill. In September 2007, Bill 1991 was submitted by the executive to the legislative branch of government, reinitiating the process in Congress. The new project was attached to the existing debate, resuming the discussion and introducing the institutional format of the National Policy on Solid Waste. The experiences of the policy-making and participatory processes carried out at state level were integrated into the federal proceedings, which involved new debates, technical visits and public hearings. In November 2007, the 'International Seminar on the Solid Waste' was held in Brasilia, organised by the Parliamentary Environmental Front and the Environmental Committee for Sustainable Development in the Chamber of Deputies, with panel debates presented by congressmen, academics, environmentalists and representatives of business sectors. In 2008, a non-partisan working group was nominated by the Chamber of Deputies to debate the policy (Jardim and Valverde, 2012: 675). The group established a programme of four public hearings, with representatives of government bodies (MMA, FUNASA and the Ministry of Cities),[60] corporate entities (CEMPRE, CNI, FIESP, ABES)[61] and academics, as well as a series of technical visits to privately run recycling centres, the Wal-Mart and Coca-Cola recycling plants and the waste pickers' cooperative, Coopere, in São Paulo. In addition, the public hearing entitled, 'The *catadores*' cooperatives and the social mobilisation in the PNRS', was held by the São Paulo Legislative Assembly and the Waste and Citizenship Forum.

[60] The Ministry of the Environment (MMA) and National Health Foundation (FUNASA).
[61] The Brazilian Business Commitment for Recycling (CEMPRE), the National Conference of Industry (CNI), the Federation of Industries of the State of São Paulo (FIESP) and the Brazilian Association of Sanitary and Environmental Engineering (ABES).

Valverde states that the participatory process was crucial for the whole process of formulating a national waste policy. From the beginning, there were several conflicting demands, but the idea was to engage all political and economic interests in the debate. Thus, a participatory process was crucial to debate the divergent interests of all the actors involved. As a result, the national waste policy emphasises the responsibility of all economic agents for waste management; the interests of the business sector, established through a number of different sectoral agreements; and the economic potential of the recycling sector, with the inclusion of the cooperatives of waste pickers (Jardim and Valverde, 2012: 673). This pluralist approach pushed the solid waste issue up the government's political agenda and enabled the development of a policy that found wide acceptance amongst all those involved in the process.

Valverde states that the participatory process was crucial for the approval of the PNRS:

> *No one particular interest prevailed over others. All sectors that participated in the organisation during the process conducted in the Chamber of Deputies were heard. It was a thoroughly transparent and participatory process. On the whole, even government interests did not prevail. Certainly, not all propositions prevailed, but all were heard. And the policy was approved unanimously at first instance. It was an achievement that was entirely constituted by way of a participatory process.*

Public participation was ensured by several articles in the PNRS. The policy is based on the concepts of shared responsibility of all the actors involved in a product's life

cycle (Art 3, XVII), the right of all citizens to access information (Art.6, X) and the 'social control' [62] and participation of interest groups in public hearings and consultations on the formulation, implementation and evaluation of public policies and plans (Art.14, 15 and 18). The Basic Sanitation Law also guarantees democratic consultation on policy-making and the control of service provision, with the establishment of collegiate bodies (involving organisations comprising public and private representatives of the authorities in charge of public services provision, government bodies, service providers, users, technical entities, civil society and consumer protection organisations at local, state and central levels) in which the decisions are agreed on a collective basis (Law 11,445/2007, Art.47).[63]

In August 2010, the PNRS was approved in Congress, and in December of the same year, it was enacted as law. Silvano Silverio, the secretary for water resources and urban environment at the MMA, who was in charge of the process at the time, recognises, however, that the process was extremely delayed.[64] He explains that the the PNRS is the result of a history of several years of National Congress proceedings, from 1989 to 2007, and three additional years of formulation, which indicates the difficulty and effort involved in reaching a consensus among the various sectors, each with diverse interests, involved in the issue. However, few policies in Brazil are promulgated in four months, and the PNRS was only realised because the debate displayed a level of political maturity, and because the public, the public prosecutor,

[62] Both the Basic Sanitation Law (11,445/2007, Art.3rd, IV) and the PNRS (12,305/2010, Art.3rd, VI) define social control as "a set of mechanisms and procedures that guarantee information to society and participation in the processes of formulation, implementation and evaluation of public policies".
[63] These collegiate bodies can be councils, committees, working groups and chambers, among other sort of organisation.
[64] The current president of the Municipal Authority of Urban Cleaning (Amlurb), interview recorded (40'04") at the AMLURB headquarter in São Paulo, 5 December 2013.

the business sector and local governments pressed for the enactment of a regulatory framework with national coverage. In addition, two months later, two institutional spaces for the implementation of the PNRS were created: the Inter-ministerial Committee on Solid Waste and the Guidance Committee for Reverse Logistics. Silverio explains that, a few years earlier, President Luiz Inácio Lula da Silva had experienced the creation of the Basic Sanitation Law, which took three years to pass, a delay that ultimately weakened its implementation, and thus wanted to sign the PNRS into law during his term in office.

President Lula's legacy

The PNRS was not solely the achievement of the Worker's Party (PT), which was in power at the time, as several political parties contributed to the debate during the history of its evolution; however, all interviewees in this research, whatever their political persuasion, agree that President Lula was responsible for the inclusion of waste pickers in the PNRS, as well as the involvement of civil society in the decision-making process. It would, however, be wrong to link the PNRS exclusively to his government: the political process of the PNRS was non-partisan, involving a range of interest groups, and it is likely that a large segment of the engineers involved in the solid waste management sector opposed the government on most other issues. President Lula undoubtedly left a significant legacy of environmental and social welfare policies; however, Flávio de Miranda Ribeiro, technical advisor to the vice-president of the state of São Paulo Environmental Agency (CETESB), explains that it

is difficult to attribute the inclusion of the waste pickers in the PNRS exclusively to Lula or to the Workers Party: [65]

> *It is certainly a fundamental contribution. Nevertheless, at the same time that there is a merit in this cause, there was also a populist use of that good intension. There was a personal cult of the former president as the 'Father of Catadores'. Albeit this fact is open to criticism, it is also a legitimate strategy. He was not the first to take advantage of this sort of strategy, and will not be the last.*[66]

In fact, it is worth mentioning that during his two terms in office, Lula appointed two leading environmentalists to head the Ministry of the Environment: Marina Silva (from 2003 to 2008) and Carlos Minc (from 2008 to 2010). Opponents criticise the 'featherbedding'[67] practices of the Workers' Party (PT), due to partisan interests and personal links between civil society organisations, party activists and environmental bodies, mainly within the MMA, but also in the municipalities across the country. However, Cristiana Losekann (2012) stresses that the former president played a key role in putting social and environmental policies onto the government agenda. In addition to the presence of environmentalists in the MMA, she claims that during his presidency, new spaces for dialogue between state and society were opened up, and the National Conference on the Environment, the National Council on the Environment (CONAMA) and the powers of the public prosecutor were strengthened (Losenkann, 2012: 179). All of these institutional processes had considerable

[65] This subject is addressed again in the case study of waste pickers in section 7.5.
[66] Interviewed via telephone on 22 February 2016.
[67] The practice of hiring more employees than necessary to the bureaucracy, mainly due to partisan interests ('*cabide de empregos*' in Portuguese).

influence on the promotion of pluralist debates and interest group participation in government decisions.

However, since its enactment, the PNRS has faced several challenges (as mentioned in section 5.3), and there are a number of critiques against the delays to its approval and the negotiations of the sectoral agreements (see section 6.3). Del Bel claims that the process was well managed in the past, but now it is waiting for further definition by the government. He criticises the lack of synergy on the sectoral agreements for reverse logistics:

> *Here in Brazil, everyone wants to be friendly and avert conflict, and in the end, matters are not properly resolved. I always participate in meetings, and many of them get nowhere. Then it takes even more time to assess what has in fact been done, and things don't move. Months pass and no solution is reached. Definitions require deadlines.*

Section 6.3 discusses the impact of interest group participation in the Sectoral Agreements on Reverse Logistics, probably the most important mechanism for the success or failure of the implementation of the PNRS.

5.4 Chapter summary

The chapter has analysed the decision-making processes involved in the Indian and Brazilian waste reforms from the perspective of public participation, starting with an examination of the legal proceedings and the actors involved. It argued that the design of the participatory processes in each country has influenced policy outcomes in the waste management sector: in Brazil, political and economic elites in the sector took advantage of the participatory mechanisms within the legislative process to overcome

existing barriers erected by internal lobby groups in Congress; in India, due to the constitutional configuration of the decision-making process in this sector, and the limited space granted public participation, pressure groups were forced to appeal to the judiciary, which afforded them a participatory space for contestation of the rules.

The first conclusion that can be drawn from the descriptions above is the fact that the political environment of the debates on waste management is dominated mainly by business groups and technical and policy experts, with little space for ordinary citizens. This chapter has also shown that, in both cases, although policies may provide mechanisms that are intended to facilitate citizen participation in government decisions, according to participants' descriptions of the processes and observations made during this research, only interest groups participate. As a result, there is a near-absence of ordinary citizens in the political negotiations, while experts, government authorities, associations of industrialists, large NGOs, academics and other influential groups tend to dominate the technical debates. However, the lack of citizens' engagement in decision-making on environmental issues is not a problem confined to Brazil and India. The chapter's findings confirm previous research by Marissa Golden (1998), Scott Furlong and Cornelius Kerwin (2004), and other scholars, which reveals similar characteristics in the passage of environmental legislation in the US, where mechanisms designed to engage citizens in the decision-making processes are appropriated by powerful interest groups.

The chapter went on to show that the Brazilian PNRS was the result of a series of intensive participatory processes, while the Indian MSW Rules and the SBA were technocratic decisions formulated inside the ministry concerned. By comparing both cases it became clear that the participatory process in Brazil in fact helped interest

groups and decision-makers to overcome the internal lobbies in Congress and thus strengthen the evolution of the bill, bringing pluralist perspectives to the political debate and pressure to bear on the enactment of the policy. According to one of the policy's authors, who worked with the committee rapporteur, other bills had failed in the past and only social pressure and interest group involvement helped further the negotiations. At the beginning, there were too many conflicting perspectives, and the industrial sector opposed any proposal that would place them in the position of taking responsibility for domestic waste generation. However, government bureaucrats used the experience of successful participatory decision-making at regional or state level to gain the support of interest groups to advance the law at the federal level. Public participation became a key strategy in gaining public support, and even the media contributed by placing the waste issue on the government's political agenda and putting pressure on the decision-makers. It is important to keep in mind that the promotion of these diverse spaces of debate also demands investment from the government and the support of interest groups. Therefore, public participation was an articulation of the desire of certain politicians and coalitions of powerful interest groups involved in the waste management sector to pass the law in the Congress.

In India, the passage of the waste rules started with a PIL in the Supreme Court. As section 5.2 showed, there were frequent debates in which parliamentarians in the Rajya Sabha questioned the actions of the government. According to the descriptions discussed in this chapter, the nominated expert committee announced a public consultation, but with access limited to certain interest groups. In 2013, the proposed amendment of the MSW Rules aggravated the discontent, since its content seemed slanted towards particular economic interests. On the other hand, the Clean India Mission (SBA) is based on a nation-wide campaign, promoted by the government

with public awareness campaigns, social media communications and educational programmes. Minister of Urban Development Venkaiah Naidu has emphasised the importance of the involvement of the entire population for the success of the campaign (QCI, 2016: 4). After so many decades of unsuccessful national schemes, only the power of a wide social movement could shift government inefficiency. However, as the chapter has shown, in the case of the SBA, the 'public' is politically passive. There is no tradition of public participation in government policy decisions in India, and the internet and social media are no substitute for participatory open debates; instead, these channels are used to disseminate the government programme, encourage the population to participate in cleaning up urban spaces, and gain support from government bodies, local authorities and interest groups.

The chapter went on to compare the outcomes of both these political processes. In India, for example, only the small group in charge of promoting the bill possessed the power to establish the methods and technologies of waste management, and the actors allowed to provide these services. In the case of the amendment of the MSW Rules 2016, however, the working group in the ministry responsible organised public consultation meetings, with the support of industry sector associations, in New Delhi, Mumbai and Kolkata. The chapter, therefore, emphasised that when the formulation of the law-making process includes participatory debates, in order to gather insights and contributions from the wider society, as in Brazil, these institutional spaces are able to provide opportunities for interest groups to meet and discuss the proposals, making their interests and alliances more evident in the political arena.

The political participation of waste pickers in decision-making processes is a key distinction between the political processes in the two countries. In the Indian process,

due to the limited participatory spaces for debates, only a few groups have access to decision-making and the policies can end up biased towards specific technical and economic interests. By contrast, in the Brazilian participatory process, *catadores* have an institutional forum in which to raise their voices and claim their rights. Using the concept proposed by Lavanya Rajamani (2007), the Indian MSW Rules could be classified as a techno-legal document, which mainly addresses the managerial aspects of solid waste management and the responsibilities of the actors involved in the process; the Brazilian PNRS, on the other hand, also addresses the social and legal aspects of the problem. In addition, as the chapter has illustrated, the active participation of these groups throughout the process of its formulation ensured that the law mandated their political inclusion: the PNRS established legal mechanisms and government institutions to promote *catadores'* social and economic inclusion in the waste management system. Chapter 7 has an exclusive section on the situation of waste pickers in Brazil and India.

The chapter concluded that the PNRS combines technical waste management measures with progressive socioeconomic aspects, while the Indian MSW Rules have the characteristics of environmental legislation oriented towards technical and managerial interests. These specific characteristics have supporters and opponents in both countries. In Brazil, the private sector complains that the technical aspects of waste management should not be mixed with social policies; while in India, activists claim that the policies are too managerial and do not represent the reality on the ground, excluding the major contribution of the informal sector.

The next chapter explores in more detail the institutional spaces resulting from these policy frameworks and how interest groups interact in these political arenas.

Chapter 6 The Nature of Institutional Spaces

6.1 Introduction

The previous chapter has discussed how interest groups have participated in the formulation of waste management policies in Brazil and India; this chapter explores the nature of institutional spaces for public participation generated by those policies in order to understand if and how they inform the practices in the sector. It argues that the participatory spaces provided by the state play a crucial role in enabling pressure groups to put their interests forward in the political arena; they allow such groups to meet and negotiate with government authorities, and to some extent, shape subsequent policy decisions. However, these spaces are not impartial, and there are few institutional mechanisms in place to regulate their processes. As such, they are highly politicised – as evidenced by the political tensions manifest in the MSWM sector.

The comparative analysis presented in this chapter contributes to an understanding of how the political realm differs in the countries under review, and how it influences the practices of the interest groups involved in the political processes of these participatory spaces. The cases studied illustrate different forms of state-society interaction, where the state represents the social space that regulates and organises the relations of production and the hierarchy of organisations, individuals and interest groups involved. They exemplify how these different forms of public participation have shaped government decisions through the actions, alliances and networks of individuals and interest groups.

These cases were chosen, therefore, according to how the waste management sector, the state and the main actors involved are organised in each country. Thus, they represent key nation-wide participatory processes that are specific to each country,

shaping their waste reforms in different ways. The findings enhance our understanding of the different actors engaged in these debates and the power relations involved, and provide evidence of how democracy operates in different ways in this sectoral niche, according to the political context.

The chapter examines the activity of interest groups, employing the three types of participatory space proposed by John Gaventa (2005): 'invited space', 'closed space' and 'hidden space'. It discusses two examples of 'invited space' in Brazil, where interest groups are called on to discuss alternative resolutions to the challenge of implementing waste management policies; while in India, it describes how pressure groups have reacted to the 'closed space' of the government's decision-making process by turning to the judiciary to provide a political arena for the contestation of government policies (see section 6.4). In both cases, the sector's manifest irregularities are classified as 'hidden spaces'; they exemplify how weak institutions affect public participation in these countries.

The chapter is organised in four sections. Following Brazil's first national plan to deal with solid waste, the National Policy on Solid Waste (PNRS), the government established two national participatory processes – the National Conference on the Environment (CNMA) and the Sectoral Agreements for Reverse Logistics – in order to engage a large number of interest groups in the decision-making process. Sections 6.2 and 6.3 of the chapter covering this subject also reflect on similar processes under development in India. Similarly, in both countries, the judiciary is currently one of the most respected of political powers and is itself a key player in the participatory processes of the waste management sector. Nevertheless, in India, it appears to have taken on the role of 'defender of the poor', becoming the main instrument for social

change, and has incontestably advanced Indian policymaking on solid waste management since the late 1990s. Finally, the last section investigates the irregularities that hinder the implementation of waste management policies and impact negatively on the relationship between state and society, and on the participation of interest groups in government decisions. The chapter raises the question of whether regulation of the practices of pressure groups would help mitigate the unequal balance of power between the different interests when it comes to policy decisions in this sector.

6.2 The 4th National Conference on the Environment in Brazil

In 2013, over the four days of the 4th CNMA, 1,981 people from all parts of the country met in Brasilia to debate proposals for the improvement of the implementation of the PNRS (MMA, 2013a: 15). (Fig. 12, below, shows the opening session of the conference.) National public conferences such as this are the largest on-site democratic institutional spaces in Brazil: during its preliminary stages, the 4th CNMA mobilised about 200,000 people across the country, involving 643 municipal conferences, 179 regional conferences across 3,009 municipalities, one virtual conference accessed by 3,881 users, and 224 free conferences, allowing civil society to mobilise and submit proposals to the national commission, with 24,771 participants in twenty-six states and the federal district (MMA, 2013c). In total, 3,652 municipalities were involved, which includes 65,61% of Brazilian cities (MMA, 2013a: 5).



Figure 12: Opening session of the 4th CNMA in Brasilia, 24 October 2013 (Source: Author's photo)

The political environment of the national conferences

As Clóvis de Souza et al. (2013b: 56) explain, the national conferences on public policies are one of a number of institutional tools used by the Brazilian government to strengthen public participation in the processes of decision-making, implementation and monitoring of public policies. These broad institutional spaces, designed to support public debate (Luchmann, cited in Alencar and Cruxên, 2015: 8), have introduced a new framework aimed at mobilising the majority of actors involved in specific areas of interest and sectoral policies to promote a dialogue between the government and society.

According to Souza et al. (2013b: 8), the first National Conference on Education and Health was held in 1941. However, these authors explain that, at first, the conferences were instruments for planning decentralised measures, and only involved government representatives. It was not until after the 8th Conference on Health in 1986 that the purpose of the conferences changed and they were opened up to extensive public participation. In the 1980s, due to the rise of new democratic institutions during the

country's transition to democracy, the employment of these conferences as an interface between government and society gradually expanded to other public policy areas (Souza and Pires, 2012: 501). Between 2003 and 2010, eighty-three national conferences were held on a variety of themes, including education, health and human rights (Souza et al., 2013: 11). The first National Conference on the Environment was held in 2003, with the theme, 'Strengthening the National System on the Environment', and involved 65,000 people across the country. It was followed by two others, in 2005 ('Natural Resources and Sustainable Development') and in 2008 ('Climate Change').

The national process

Joana Alencar and Isadora Cruxên (2015: 6) explain that, in general, the conferences are convened by the executive and organised in successive stages. The process begins with preparatory stages at the local level (municipal and regional conferences), evolving into conferences at state level, and concluding at the national level. Each of these stages involves a selection process for representatives and for proposals submitted by both the government and civil society that will be taken forward to the next stage, thus seeking to mobilise a variety of actors from different social classes from all regions of the country. During the 4th CNMA, I had the chance to observe and interview some of the participants – for example, Irilene Alcantra,[68] a civil servant from the state of Maranhão, who stressed that the whole process demands a lot of effort. She explained that, at the local level, the municipal conferences enable the participation of the ordinary citizen, who is the most directly affected by the

[68] Interviewed during the 4th CNMA in Brasilia, 24 October 2013.

legislation for and delivery of the public service. At the state conferences, these local representatives bring their particular perspectives to the regional debate, where they have the opportunity to balance their claims against the views of their peers from other localities. All proposals are debated and voted on again to determine what will be included at the national conference in Brasilia. Alencar and Cruxên (2015: 9) point out that all these stages are crucial, given that the public administration at local and state levels have the opportunity to take suggestions, monitor the effect of their actions and plan programmes to address local issues. The whole process, therefore, encourages interaction between government bodies and interest groups.



Figure 13: One of the 20 working groups of the 4th CNMA (Source: Author's photo)

In the last stage, which took place in Brasilia, the central theme of the conference, waste reform, was divided into four thematic axes (or sub-themes): sustainable production and consumption; environmental impact minimisation; labour, employment and income generation; and environmental education. Each of these axes

had about two hundred proposals on a variety of topics.[69] The 1,130 delegates could join any of the twenty working groups – four working groups of about fifty delegates per axis. For example, I attended 'Axis III – Labour, Employment and Income Generation' (Fig. 13), participating in the discussions as a guest without the entitlement to vote. In this session, delegates from different states and a variety of backgrounds (for example, a tourism official from the state of Alagoas, a waste picker from Rio Grande do Sul, a banker responsible for financing programmes on solid waste management in Sergipe, a public servant from Rondonia, and a micro-entrepreneur from Minas Gerais, among many others) debated forty proposals on themes such as economic mechanisms, inter-sectoral partnerships and labour rights.

On the second day, the proposals debated the previous day were circulated for the delegates to vote on. They were mandated to submit fifteen of these to the plenary. During the ballot, the participants walked around the room with their lists and notes, reading the proposals and putting their stamps on their priorities (Fig. 14). Also apparent was the activism displayed by members of social movements: 'Let's prioritise this policy'; 'Let's organise our votes to approve this proposal'; 'Hey, this proposal does not guarantee waste pickers payment for their environmental services'; 'The text of that proposal is more complete than this one'; 'Have you ever voted for that one?' All the participants seemed very aware of the waste management problems in their localities and their role in this deliberative process. A civil servant from the state of Pernambuco said: 'Each has their own militant [ideas], but we have to work

[69] For example, the thematic axis 'Sustainable Production and Consumption' addressed the following topics: sustainable production; recycling; reverse logistics; certification; family farms and agro-ecology; packaging; research; waste segregation; environmental education for sustainable consumption; the environmental agenda in public administration; participatory spaces; labelling; normative instruments and environmental consumption.

with objectivity to defend our proposals. They should involve partnerships; we need to integrate the actors.' After this analysis, all the delegates returned to the plenary to receive the working groups' proposals and motions. Each delegate received fifteen more adhesive voting labels (Fig. 14) and was asked to approve the final document, comprising 160 actions (Fig. 15) – fifteen per thematic axis (MMA, 2013a: 15).



Figure 14: Prioritisation of proposals in the working groups and submission to the plenary (Source: Author's photo)



Figure 15: Deliberative process in the 4th CNMA (Source: Author's photo)

Thus, during the event, a large number of interest groups and decision-makers were brought together in the same venue, debating the problems and proposals. Leading Brazilian experts, politicians, activists and leaders of social movements participated in the discussions. For example, in one of the twelve debates held before the working group activities, the Minister of the Environment, Izabella Teixeira; the chief justice of the court of auditors of the state of Amazonia (TCE); a representative of the National Confederation of Industry (CNI); the head of the Brazilian Association of Urban Cleansing and Waste (ABRELPE); the president of the Municipal Authority of Urban Cleansing in São Paulo (AMLURB); the leader of the National Movement of *Catadores* of Recyclables (MNCR); and the secretary of the environment of the state of Pernambuco sat at the same table, debating related legal instruments. Everyone was able to chat informally with any expert, businessman or interest group, strengthening the sense of dialogue between all of the actors involved in the process. As a result, the main authorities involved with the issue were in direct contact with ordinary players.

The participants

The national conference brought together people from different backgrounds, social classes and ethnic origins. According to a survey by the MMA (2013a: 61), the distribution of representatives was fairly homogeneous across the states, varying from 14% from the south to 32% from the north-western regions. Out of the 1,000 delegates interviewed, 28% belonged to the business sector, 25% to the government, 21% to social movements, 9% to NGOs, 7% to waste pickers' associations, 5% to labour unions, 5% were traditional communities and indigenous people, and 4% were academics. The majority (68%) had worked in the environmental field or in activities related to civil society over the last five years (MMA, 2013a: 69). In terms of gender,

it was also relatively balanced, with 57% men and 43% women. Their ages ranged from 35 to 54 years. In terms of education, 67% had a graduate degree and 9% had not concluded their studies. Alencar and Cruxên (2015: 25) point out that a large number of the delegates had never experienced public deliberations of this kind before – according to the survey, the 4th CNMA was the first national conference that 73% of them had attended. Thus, it was an enormous challenge to enable such a wide variety of voices to present their interests and be heard receptively and with respect.

Each national conference has its own structure, which is decided on collectively by a national organising committee, comprising representatives of the government, civil society and professional associations, to ensure that all participants have the opportunity to engage with the debates. In addition, Alencar and Cruxên (2015: 27) highlight that this structure includes a system of information to apprise delegates of the conference process and its content, and ensure there is adequate space for the debates and access to transport, food and accommodation. Each national conference takes around a year and costs the government about USD 3.2 million (R$ 12 million).

Participatory observation

During the 4th CNMA, it was interesting to capture different perspectives on the same theme from people from different regions of the country. Although each participant was concerned with specific regional aspects of the problem, the event was conducted in such a way that particularities could be taken into account by the legislative process, to ensure that any obstacles to national implementation could be overcome. For instance, an entrepreneur, Alexandre Massimo, from the state of Minas Gerais,

was interested in discussing oil recycling and business opportunities;[70] the secretary for tourism in a city in the northwest came to discuss environmental education in the municipality's schools; and Marilyn Oliveira, from the state of Rondonia, wanted to discuss financing schemes for the formulation of an Integrated Regional Plan through the National Health Foundation (FUNASA). She commented that without social accountability, implementation is always problematic. Meanwhile, Ana Lucia, a member of the Association of *Catadores* of Recyclables from the Island of Vitória (AMARIV) in the state of Espirito Santo, claimed:

> *Our problem has been the lack of information. There are a lot of public managers taking advantage of the catador. It is easy to justify their projects with our flag. The catador attracts attention […] We have to be vigilant with regard to the laws they approve. The catador is not a fool. The municipal councillor no longer takes advantage of [us]; now we have lawyers, public prosecutors, managers and social assistants on our side.*

Despite their different regional interests, the delegates, almost unanimously, supported the PNRS; their criticisms focused on the economic interests involved in service provision. Dauri Correia da Carecica, a representative of the Federation of Associations of Residents and Popular Movements of Espirito Santo (FAMOPES), claimed that implementation demands a lot of effort and, in the end, the actual decisions are made by the mayor. Despite the political engagement of social movements, it appears that implementing the PNRS is still a complex operation.

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[70] All the participants were interviewed during the 4th CNMA, held between 24 and 26 October 2013.

Critiques of the national conferences

After the experience of the conference, the first question that emerged was: what is the effect of the deliberations and recommendations?[71] Have these proposals been translated into actions, and if so, how? Souza et al. (2013a: 36) explain that the Permanent Committee for the Conference Organisation within the MMA monitors the results. The proposals are evaluated according to their legal basis, and there is a tracking system to follow the current progress of proposals. However, they also mention that the committee faces limitations, due to the way it is structured in the ministry, as well as difficulties relating to the flow of information from other ministries. In addition, the MMA has not yet specified an evaluation index. This problem should be resolved in the future with the application of a new methodology decided at the 4th CNMA.

Some government interviewees regard the conferences with a degree of scepticism. A number of bureaucrats at central, state and municipal levels claim they have never received or read any of the documents created in the conference: 'These documents do not reach us. It may be that they are sent to the MMA or to the parliament?'[72] Some see the conference as simply a pro-forma exercise, undertaken to comply with the requirement for public participation in the legislative process, but of limited practical use. Diógenes Del Bel, president of the ABETRE, comments:

[71] According to Souza et al. (2013: 35), the proposals of the conferences are called 'deliberations' when implementation falls within the scope of the ministry running the conferences and 'recommendations' when they are the responsibility of another ministry.
[72] Official at the Ministry of Science, Technology and Innovation (MCDI)

> *I saw a study on the approval of public policies by the governments of FHC73 and Lula. In FHC's, decisions were made by a small group and went to trial. In Lula's, the definitions are already given, but it seems that the government must show that the decisions have been validated by the majority. The current government makes the decisions and calls [on] society to ratify [them]. […] The cards have already been previously marked.* [74]

The participants' view of the 4th CNMA was quite different, however. The majority of delegates seemed very engaged and conscious of their commitment to the debates and the poll. For example, a civil servant from the state of Maranhão told me that he had participated actively in all the National Conferences on the Environment,[75] being very active in the social movements in his state. However, he claimed that the results of the last conference were determined on paper but not implemented – the government provided space for public participation but the results were simply archived. Nonetheless, he stressed that he had confidence in the minister's claim had that this time it would be different: 'The proposals discussed throughout this process are quite important, and popular participation is crucial; otherwise, the politicians will formulate their policies according to their interests.' Above all, the delegates seemed very politicised, extremely aware of the problems in their localities and of their role in the political process, each one bringing the interests of their regions to the table, seeking to reach agreement on the measures needed for better national implementation.

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[73] Former Brazilian presidents Fernando Henrique Cardoso (1995-2003) and Luiz Inácio Lula da Silva (2003-2011)
[74] Interviewed the ABETRE offices in São Paulo, 8 December 2013
[75] The interviewee requested anonymity.

For example, Ana Lúcia, the waste picker from the state of Espirito Santo referred to above, said that the conference was important in that it brought everyone together in the same place to debate their problems.[76] She said that the *catadores* meet frequently so as not to lose focus: 'Our proposal has been discussed for a long time. If we make changes to it now, it might get weakened. We should make all efforts to approve it.' In a similar vein, Mana do Abaque, a native from the Kaxinawás ethnicity in the Alto Purús National Park in the Amazon,[77] described how he lives near a large city in the state of Acre, whose waste has been responsible for the spread of disease amongst his tribe, the pollution of their rivers and the deaths of animals in their forest. He had travelled five hours by canoe, then by airplane, to get to Brasilia to attend the conference. He said he came for information, because his tribe needs to learn how to discuss their problems with the municipality, but he also stressed that politicians, in turn, have to learn to listen to and work in partnership with indigenous communities.

Despite the absence of indicators with which to monitor and evaluate the results of the conference, researchers from the Institute for Applied Economic Research (IPEA) have provided a broad review of the value of the conference. Souza and Pires (2012) explore the national conferences from the perspective of the bureaucrats. According to their research, public managers display diverse motivations for holding conferences (Souza and Pires, 2012: 510). Firstly, they are used to strengthen federal links between the central government and state and municipal governments, improve internal links for the execution of programmes that involve different areas and departments of government, and establish a dialogue with the interest groups involved

[76] Interviewed during the 4th CNMA in Brasilia, 24 October 2013.

[77] Interviewed during the 4th CNMA in Brasilia, 24 October 2013.

in specific sectoral policy areas. Secondly, the conferences are employed within the policy cycle in order to share information and broaden the debate on specific themes and to introduce other topics onto the government agenda; to compile a record of social demands and mobilise interest groups; to propose guidelines for the formulation of public policies; and as a mechanism of evaluation. Alencar and Cruxên (2015: 25) point out that the conferences also provide an opportunity for collective learning about the benefits of an 'inclusive political culture'.

Despite these potentialities, the national conferences are still under-used. The survey carried out by Souza and Pires (2012) shows that, out of 399 federal programmes evaluated between 2003 and 2010, only 15% employed these conferences as instruments to interact with society. Therefore, in the Brazilian system of participatory democracy, the national conference is just one form of institutional space among other mechanisms, such as participatory budgeting, public hearings and public consultations (Souza et al., 2013a: 8).

Silvano Silverio, president of the Municipal Authority of Urban Cleaning (Amlurb), who also participated in the formulation of the PNRS as secretary of Water Resources and Urban Environment (SRHU) in the MMA, highlights that the conferences also brought important contributions to the municipalities:[78]

> *In the case of the municipal stage of the conference in the city of São Paulo, in addition to the conference's contributions at state level, the participatory process is also important for the formulation of the Integrated MSWM Plan. We had a basic proposal already formulated, therefore our conference was*

[78] Interviewed at the AMLURB headquarter in São Paulo, 5 December 2013.

> *very focused. The interest groups were separated in working groups (i.e. dry waste, organic waste, environmental education, construction and demolition, hazardous and industrial waste) to evaluate the proposals, amend and include projects and actions. Now, we are elaborating our Integrated Plan based on the results of the municipal conference. Therefore, the CNMA also has a very strong impact at local level, because we can incorporate in our executive plan the contributions of interest groups through their representatives. I believe this is the best we can do with this participatory process.*

In Valverde's opinion, there is no need for any deliberation:

> *The CNMA has an intangible value. The most important thing is the fact that the conference brings all interest groups into the same space to debate. It generates news for the mass media and shows that the MSWM is part of the political agenda of the government.*

The evidence above demonstrates that the national conferences are important spaces of participation, involving the majority of interest groups in a specific sectoral policy in a dialogue and the search for collective solutions. As Santos and Avritzer (cited in Souza and Pires, 2012: 501) point out, it is a 'collective exercise of public power'. Therefore, what these conferences deliver is the power of popular discussion and the dissemination of ideas, on the one hand, and a deliberation on the effectiveness of the policy proposals, on the other. The analysis of the results of the national conferences, however, requires a broader understanding of all the participants involved and of their impact on the political process of waste reform. Nonetheless, they appear to offer a unique scenario in which government officials and interest groups from all regions of

the country can gather together to debate solid waste management policies and strategies. These pluralist spaces provide some potential to influence the decision-making process.

These sorts of conferences exemplify the state promotion of an institutional participatory space, established to engage interest groups in a debate about public policies. In 2015, the Indian government also promoted a national consultation programme, which comprised four regional meetings in the cities of Delhi, Mumbai, Bengaluru and Kolkata. The draft amendment of the MSW Rules 2015 was published on its website as a 'public notice' and these events were intended as part of the public consultation process. However, this programme illustrates how the discourse of people's participatory spaces can be subverted to promote business interests. The 'Stakeholders' Consultation on Draft Waste Management Rules 2015' was organised by the Ministry of Environment, Forests and Climate Change (MoEFCC) in partnership with the Central Pollution Control Board (CPCB), the Federation of Indian Chambers of Commerce and Industry (FICCI) and the Confederation of Indian Industry (CII). Despite being called a 'Stakeholders' Consultation', according to the descriptions of some of the participants, these meetings were not designed to produce open public participation. The NGO, the Environment Support Group (ESG, 2015), claims there was misconduct in the consultation process; it calls the process illegal and undemocratic, restricted to the corporate lobby and the waste management industry to the detriment of civil society. Environmental activists claim that there was no public advertisement of the event; the institutions organising the meeting invited only selected lobby groups from the industry; and the event took place in a five-star hotel, where entry was restricted to previously registered invitees (Sharholy et al., 2008). Sandya Narayanan, a member of the Solid Waste Management Round Table

(SWMRT), gives as an example one of these participatory events in Bangalore, stating that the debates were very hierarchical and restricted to All India Services (AIS) commissioners and high-ranking officers.[79] The meeting was fractious, disrupted by various squabbles, and the MoEFCC was forced to cancel it after several irregularities in the process came to light (BS, 2015).

6.3 Sectoral Agreements on Reverse Logistics

Another significant participatory institutional space that shapes the implementation of the Brazilian PNRS is the set of Sectoral Agreements for Reverse Logistics. Unlike the Indian process, where the MoEF publishes separate guidelines for specific types of solid waste, the Brazilian legislation proposes that the market should provide solutions for solid waste management, according to each productive sector. The PNRS establishes that all waste generators share responsibility for the product's lifecycle, which means that all players along the waste stream (manufacturers, importers, distributors and traders, consumers and conveyors of public services, such as urban cleansing and solid waste management) are both individually and collectively responsible for minimising the amount of waste generated and reducing the impact on human health and the environment (PNRS, Art. 3, XVII). As such, the Brazilian concept of 'shared responsibility' differs from the globally recognised European extended producer responsibility (EPR) model (adopted by the Indian Plastic Waste Rules 2011), in which producers and importers are responsible for the environmental impact of a product's lifecycle and its end-of-line costs (Abramovay et al., 2013: 30).

[79] Interviewed via email on 24 August 2015, in order to collect more information about the National Consultation Programme in Bangalore in May 2015.

In order to activate the return of post-consumer waste to the productive sector, the Brazilian policy introduced the concept of 'reverse logistics', which consists of a series of procedures to collect and recover the solid waste, and reintroduce it into either its own lifecycle or the lifecycles of other products, or to dispose of it in an environmentally sustainable way (Art. 3rd, XII). The success of the PRNS relies on the implementation of these reverse logistics.

At first, instead of imposing this process by decree, the government's strategy was to bring all the business sectors and entities involved in solid waste management to the negotiating table to produce a unified proposal for reverse logistics for each productive sector. Some government officials recognised that the government alone does not have the expertise and technical capacity to offer solutions for the enormous challenge of implementing this across the country. As Ricardo Abramovay et al. (2013: 17) suggest, establishing an economic rationale for the treatment of waste creates an incentive for multiple players to seek solutions to the enormous difficulties of the reverse-logistics process. Therefore, the PNRS created an extensive participatory process based on market mechanisms, where the business sector, social movements and representatives of local government could debate ways of implementing the process nationally.

According to Paula Silva (2013), the first 'take-back' programme was introduced in Brazil in 1989. The law established that consumers were responsible for returning the empty packaging of pesticides and their components to the retailer, and the manufacturers and traders were responsible for its safe disposal. The productive sector was also responsible for monitoring these mechanisms, designing educational programmes and creating incentives to ensure the system's success. Additionally,

over the last decade, the National Environmental Council (CONAMA) has set specific standards requiring the recall of products which could pose a significant risk to public health and the environment, such as used or contaminated lubricant oil (1993) and tyres and batteries (1999).

Reverse logistics really came into its own with the enactment of the PNRS, when the government called on business sectors to sign up to a sectoral agreement on five priority product chains (MMA, 2013b):

- plastic packaging for lubricating oils;
- fluorescent bulbs, sodium and mercury vapour bulbs and mixed light bulbs;
- general packaging;
- electrical and electronic products and their components;
- and medicines.

During the six years since its implementation, one sectoral agreement has been put into operation: that concerning plastic packaging for lubricating oils, which was concluded in December 2012. At the time of writing, in late 2015, the sectoral agreement on packaging waste had been signed, and two other agreements were still in progress: medicine and e-waste.

Beatriz Carneiro, general manager of Sustainable Development at the Department of Industrial Competitiveness in the Ministry of Development, Industry and Trade (MDIC), explains how the sectoral agreements are structured.[80] In 2011, after the national waste policy passed into law, the government established the Guidance

[80] Interview via the internet held on 29 May 2014.

Committee for the Implementation of Reverse Logistics Systems (CORI). This body is composed of five government ministries and assisted by the Technical Advisory Group (GTA), coordinated by the Ministry of the Environment. The government announced the establishment of five Thematic Technical Groups (GTTs), one for each of the priority productive chains listed above. Each GTT comprises GTA advisers and representatives from industrial bodies, NGOs, catadores' organisations, financial institutions and other players involved in the production chain, who come together to study the technical and economic feasibility of reverse logistics, and to formulate proposals for their sectoral agreements.

However, reaching an agreement among the different interest groups has been a complicated task. For example, the most difficult aspect was negotiating an agreement among the GTTs on packaging, electronic products and medicines, due to the enormous variety of products and players in these markets. To illustrate this point, the packaging GTT was presented with three conflicting proposals from separate groups of associations of producers of packaging for glass and steel and a coalition of producers of other materials. It turned into a drawn-out negotiation process, replete with disagreements and conflicting interests, lasting over four years. The greatest difficulty, however, concerned the disposal of medicines, which was divided between three proposals, representing the different perspectives of the manufacturers, distributors and retailers. Even in this case, however, the government required a unified proposal for reverse logistics.

Currently, all the GTTs' remits have been concluded and their proposals are under scrutiny at the GTA, which will soon submit its resolutions to the CORI. The conclusions of the sectoral agreements must then go through a consultation process to

gather responses from the wider society. After a final summing-up by the CORI, the whole process should result in sectoral agreements between the Ministry of the Environment and the parties concerned, finally being published in the official gazette.

Clearly, producing sectoral agreements is a challenging process, with a number of technical obstacles; however, even more problematic are the conflicting interests of those involved. These result in political and administrative disputes, which are difficult to overcome, making the decision-making process the major challenge of the reverse logistics system. To illustrate some of the difficulties in this process, Abramovay et al. (2013: 19) explain that some products, such as tyres and packaging for lubricating oil, enable a centralised reverse-logistics process, due to the fact that these supply chains involve commercial operations with capacity for waste storage, which favours incorporating reverse flows into their productive cycles. Other products' lifecycles, however, depend on a huge number of actors operating in a completely decentralised way, as is the case in general packaging, electrical and electronic products, lamps and batteries.

In addition to all these problems, there are geographical barriers to reverse logistics. Mirtes Boralli, a consultant on solid waste management, explains that the recycling infrastructure is deficient and unequally distributed across the country.[81] The majority of recycling plants are based in the south-eastern and southern regions of Brazil, close to the industrial areas. For this reason, recovery programmes near major urban centres and industrial zones are more feasible, whereas recycling in the regions in the hinterland is very costly and sometimes impractical, due to a lack of markets for

[81] Interview via the internet on 29 May 2014.

recycled materials in regions with low industrial activity. The cost of transporting waste over long distances also makes reverse logistics impracticable in some areas. Moreover, some states have less political will and technical capacity to implement the necessary measures, and these differences end up hindering the even development of reverse logistics across the country. The government, therefore, needs to foster the implementation and development of recycling markets in the less economically developed regions of the north, north-east and west-central areas of Brazil.

As Ribeiro from CETESB stresses, a large debate involving all interest groups is crucial, since the economic returns of reverse logistics in many cases are not enough to maintain the recycling industry.[82] The cost of reverse logistics is a critical issue for the industrial sector. Business executives consider it a financial burden, an additional cost that has to be incorporated into the product's final price. Paula Bernardes, project manager of the Brazilian Technical Association of Automatic Glass Industries (ABIVIDRO), claims that the government needs to work in partnership with the business sector, as the industry is searching for technical solutions to make reverse logistics feasible.[83] The government should provide incentives; for example, tariff reduction in the recycling chain. There are also taxation issues: in the lamp sector, for example, national manufacturers want to retain control over imported products and receive equal price guarantees, since some 90% of the lamps used in the country are imported. Similarly, in the electrical and electronic products sector, there are problems of pirated and illegally imported products without any certification of origin, where supply chains cannot be tracked. On the other hand, local governments

[82] Interview recorded (1:10'55") at the CETESB headquarters in São Paulo, 6 January 2014.
[83] Interview via the internet on 28 May 2014.

claim that it is unfair that municipalities, which are responsible for the collection of municipal solid waste, assume this burden alone. They are unable to cope with the increasing complexity of the waste. Hence, it is vital that business sectors assume financial responsibility for the return of recyclable materials into the chain of production (Abramovay et al., 2013: 41).

One of the key features of the reverse logistics programme is the integration of waste pickers of reusable and recyclable materials into operations involving shared responsibility over a product's lifecycle. The government has tax incentives and lines of credit for initiatives that enhance the development of projects in partnership with cooperatives of *catadores*. As Abramovay et al. (2013: 41) suggest, the *catadores* can be important allies for the business sector in the recovery of post-consumer products and their reintegration into the supply chain, as the legislation strengthens their role in reverse-logistics programmes. However, like all the actors in the system, waste pickers need to receive remuneration for the environmental services they provide.

As mentioned earlier, in November 2015, the Sectoral Agreement of Packaging Waste was signed between the Minister of the Environment, Izabella Teixeira, twenty-one sectoral business entities (producers of aluminium, plastic, food and cosmetics, among others) and the National Movement of *Catadores* (MNCR).[84] According to this agreement, the sector agreed to reduce 22% of the post-consumer packaging sent to landfill by 2018, which means approximately 3,815 tons per day during the following two years (SINIR, 2015). This was very modest, according to Jardim and

[84] The agreement is available in the website of the National Information System for SWM (SINIR), available at: http://www.sinir.gov.br/documents/10180/93155/Acordo_embalagens.pdf/58e2cc53-3e38-420a-97fd-dba2ccae4cd3

Valverde (2015).[85] The agreement formalises the reverse logistic system among these sectors and the cooperatives of *catadores*. During the negotiations, the MMA received three proposals, and eventually chose the Coalizão[86] proposal. Between September and November of 2015 the agreement was put to public consultation, and was signed in November, in the face of strong opposition from the Brazilian National Association of Municipal Sanitation Services (ASSEMAE, 2015).

Opponents claim that this agreement only benefits the industrial sector and the *catadores*' cooperatives, prioritising the twelve major state capitals acting as hosts for the World Cup,[87] which represents a mere 18.5% of the Brazilian population, neglecting the other 5,553 municipalities. In addition, the proposal does not establish any dialogue between the industrial sector and the municipalities or the inter-municipal consortiums. Walter Plácido (Pedro, 2015) claims that the agreement will only foster 'green-washing' campaigns by the large retail and industrial corporations, whose advertising budgets are far larger than the budget for reverse logistics. Ribeiro from CETESB explains that the agreement may sound reasonable to those states where recycling is not yet in operation, but in fact only serves the interests of the industry lobby that wants to postpone effective action on the problem:

> *The agreement details one phase, while it should detail the process. [It] should be broader, and structured in different phases, so that each state could adapt it to its own stage of development. For example, [it] does not*

[85] Deputy rapporteur and co-ordinator of the committee responsible for the PNRS bill proposal.
[86] The 'Coalizão' ('Business Coalition') is led by the Brazilian Business Committee for Recycling (CEMPRE) with another twenty business associations, which comprise the major retail and industrial producers of plastic, aluminium and cardboard packaging, and vegetable oil, meat, food, beverage and beer packaging, among others. Among the members are Coca-Cola, Unilever and Nestlé.
[87] São Paulo, Rio de Janeiro, Salvador, Brasilia, Fortaleza, Belo Horizonte, Manaus, Curitiba, Recife, Porto Alegre, Natal and Cuiabá.

> *meet the state of São Paulo's needs, where the recycling structure [has] already [introduced] the early stage of implementation.*[88]

Until now, it seems that the only beneficiaries are the chosen cities, the corporate members of the Coalizão; the MNCR and the cooperatives of *catadores* established in those cities, and the central government, which has at least achieved some degree of success. In the end, the approved proposal was less widespread than expected. The Sectoral Agreement has also generated dissent among the *catadores*. A group of nine cooperatives from the western region of the state of São Paulo have joined together to form a new association of cooperatives, as they do not feel represented by the MNCR leaders who signed the Agreement.

It is still too early to report favourable results for Brazilian reverse logistics, due to the fact that the process is still getting underway. The lessons learned up to now, however, prove that it is a long and complex process, involving a multitude of negotiations. In Ribeiro's opinion, the government failed to give the sectoral agreements a fully democratic character:

> *The Sectoral Agreements on Reverse Logistics sound great, but they do not work in practice. How do you suppose these conflicting and at times competing interests will reach a consensus spontaneously? Someone has to arbitrate. There are a few exceptions, mainly in high monopolised and closed markets where few players have the majority of the market share, such as lubricating oils; in very fragmented markets, like food packaging and electronic waste, it is almost impossible to reach an agreement.*

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[88] Interviewed via telephone on 22 March 2016.

Nevertheless, proponents suggest that these problems are teething troubles and that much can be expected of a country that intends to align radical economic growth with social and environmental justice. Brazil's policy aims to change the way that citizens and industries view solid waste, attributing it economic and social value, and assigning the burden of cost to those who cause pollution.

In comparison, in India, as mentioned above, the EPR was introduced in the Plastic Waste Rules 2011. However, Lakshmi Narayan, co-founder of SWaCH, the Indian waste pickers' cooperative, claims that this kind of process, which should establish arrangements between municipalities and industries, and also include the waste pickers in the system, is very far from developed: 'There is no clear context for how it is supposed to work; it's a completely new area, a grey area, even for the municipalities and central government. So, there are no mechanisms in place to figure out how to implement it and how to pin responsibility on industry.'[89]

In February 2014, the Indian Beverage Association (IBA), together with The Energy and Resources Institute (TERI) and GIZ (an international provider of sustainable development services), organised a conference with different interest groups to discuss waste packaging and the shared responsibility model in Indian urban centres.[90] It aimed to build a common platform for representatives of the beverage industry, urban local bodies (ULBs), NGOs and policy decision-makers about the collection and recycling of waste, and to discuss the roles and duties of the different actors in the recycling process. This is a proactive initiative of the industrial sector, with the support of an international organisation, to organise the roll-out of the shared

[89] Interviewed in a park in Pune, 28 March 2014.
[90] Conference on 'Waste to Resource: Waste Management & Recycling', Delhi, 12 February 2014.

responsibility system in the country, discussing, among other topics, the role of local governments and informal sectors in the process.

Returning to Brazil, the participatory process and the involvement of a large number of interest groups in working groups, conferences and business fairs has helped to build greater interaction among the different actors and the government. Ribeiro explains that until 2009, the industrial sector was reticent about the introduction of reverse logistics into its waste management bill, arguing the unconstitutionality of the process; nowadays, however, reverse logistics and shared responsibility have become marketing strategies. In addition, this process has extensively shaped the policy formulation process, with a high level of participation by business associations and other actors. It is expected that these measures will significantly contribute to solving the problem of the enormous amount of waste produced in Brazil. Moreover, there is an opportunity for competitive gains for those companies or business sectors that develop reverse logistics systems in advance. It is hoped that, in future, reverse logistics will become the defining factor in achieving competitiveness in the market. Thus, as Ribeiro points out, the evolution of the environmental issue is part of a process of political improvement that evolves along with public awareness, access to information and democratic debate.

6.4 Participation and the judiciary in India and Brazil

Introduction

Due to the limited space for public participation in policy-making, the judiciary has assumed a key role shaping solid waste management in India. In recent decades, it has been both one of the main channels for citizen participation in central government decisions on waste, as well as an active participant in the political process. As

discussed throughout this thesis, waste management involves disputes over social rights and competition for financial and material resources, market share and contracts for service provision. The legislative framework is supposed to control this system so that the relevant actors can provide services and the population receive public goods. However, as Rod Hague and Martin Harrop (2009: 10) point out, it is extremely rare that bureaucrats will actually effect changes without pressure from society, lobbying organisations or particular incidents that trigger a demand for immediate action; in general, policymakers react to demands rather than shape the agenda. Also, the written texts of the policies do not cover all details or prevent conflicts of interest – in fact, the reality is quite the opposite. The legislative process both in Brazil and India comprises a complex overlay of competing institutions and frequently contradictory policies, enacted at different times in a variety of political contexts. Consequently, the judiciary has become the final arbiter in these disputes.

The judiciary and environmental legislation

Ana Paula Barcellos (2014: 36) claims that courts worldwide have protected and promoted human rights through public law suits. In Brazil and India, the judiciary has played a key role in the defence of social and environmental rights and has enlarged the opportunity for citizens and social movements to participate in and question government decisions. This section discusses the role of the judiciary as a key player, influencing and empowering public participation in environmental governance and the provision of waste management services. In Brazil, the federal constitution grants the public prosecutor the autonomy to represent the community, including the power to oversee public administration, initiate inquiries and propose civil action to protect the environment. Additionally, the judiciary has been active in cases of improper

waste disposal in dumpsites, non-compliance with policies and problems of contract concessions, among other irregularities. In India, where the central government provides the public with few participatory spaces, the judiciary has gained prominence with its actions in support of environmental protection and has become, as Justice Balakrishnnan (2008) shows, a powerful catalyst of social change.

Environmental legislation has changed the character of the judiciary both in Brazil and India, empowering judges to interpret the constitution and defend social rights, allowing them to play an innovative role in environmental governance. Geetanjoy Sahu (2007: 3) argues that, recently, the Indian judiciary has expanded this role beyond the arbitrage of conflicts, ensuring that decision-makers create and government bodies implement policies in accordance with the principles established by the Indian Constitution. This judicial intervention in environmental governance has created a growing jurisprudence that has expanded knowledge and furthered the debate on the environment in a process that mutually reinforces itself.

This section explores the influence of the judiciary on the political process of solid waste management. Despite the extensive legal literature examining the judiciary and environmental legislation, its role as both a key actor and as an institutional space for public participation has not been analysed in depth in the field of social sciences. This section first discusses the influence of the Indian judiciary on the political process of the MSW Rules, then it debates the role of the public prosecutor in Brazil, and it concludes with thoughts about the impact of the judiciary on public participation.

India's Public Interest Litigation (PIL)

The first question concerns how the Indian judiciary is able to influence public participation. The Indian legal system is founded on common law, whereby judges base their decisions on a binding jurisprudence. This means that the lower courts must follow the decisions of the Supreme Court, creating a jurisprudence that evolves and enriches itself over time. Sahu (2008: 9) explains that the environmental jurisprudence created by the Indian Supreme Court since the 1980s has expanded the dimensions of the fundamental rights of the Constitution. He explains that, unlike the Brazilian case, where the Constitution[91] includes an article dedicated to 'the rights on the environment' and methods that enable citizens to participate in the protection of the environment, in the Indian Constitution, the environment[92] per se is not addressed. For this reason, the Supreme Court has reinterpreted the principle of the 'right to life' in the Constitution.[93] Sahu (2008: 5) explains that in the late 1970s Justices P. N. Bhagwati and V. R. Krishna Iyer began to implement judicial protection of the fundamental rights of individuals and communities in such a way as to give a legal voice to the underprivileged so that the courts could assist them by extending the legislation beyond such issues as child labour, violence against women and the right to education to encompass environmental practices.

Public interest litigation (PIL), the most significant innovation of Indian jurisprudence, simplifies the judicial process, dispensing with technicalities, so that

[91] The author also mentions the same characteristic in the constitutions of Spain, Portugal and Equator.
[92] Sahu (2007: 140) explains that articles 48A and 51A(g), which specifically interpret the environment as forests, lakes, rivers and wildlife, are not enforceable by any court, according to article 37, since they are under the Directive Principles of State Policy (Part IV) and Fundamental Duties (Part IVA); while articles 13, 32 and 226 empower the Supreme and High Courts to review the legislation on the fundamental rights of citizens (articles 14-32).
[93] Constitution of India, Part III, Art.21, 'Protection of life and personal liberty': 'No person shall be deprived of his life or personal liberty except according to procedure established by law.'

the poor can access the courts and petitions can be filed in the name of individuals, third parties or groups (Sahu, 2007: 142). Understanding the way PIL has been legally interpreted is crucial to an analysis of the role of the Indian judiciary in the waste issue. Sahu (2008: 5) explains that, over time, the focus of the judges shifted from the plaintiff to the subject of the petition, due to the perception of the environment as a bundle of diffuse rights, thus liberating them from the legal concept of *locus standi.*[94] Previously, the petitioner had to prove they had been directly affected by any claimed harm. The environmental legislation changed this perception, since the parties affected might be unidentifiable and not have suffered any personal injury, as in the case of the effect on a community of pollution caused by improper waste collection. Contrary to the Brazilian system, where only associations, public prosecutors and public institutions can file public civil actions, in India, the petitioner must generally have 'legitimacy in the cause', which means they have been directly affected.[95] The petitioner, however, can approach the court in the name of public and general interest, or in the name of a third party, albeit without personal gain. As a result, scholars, journalists and interest groups have filed PILs in the name of public interest, with the aim of protecting the environment, communities and social groups (Sahu, 2007: 142). Indian environmental jurisprudence has also incorporated principles of international environmental law, empowering the judges to refer to scientific and technical experts, investigate causes, suggest solutions, guide policy amendments, summon authorities

[94] The legal term, *locus standi*, means that the petitioner accessing the court must prove they have been directly harmed.

[95] The new Brazilian Civil Procedure Code (Law 13,105/2015), which has recently been approved, maintains the settings of the previous code (Law 5.869/1973). Article 17 determines that in order to approach the court, the petitioner must show the legitimacy of his/her interest. Ordinary legitimacy is one that advocates its self-interest in court. According to article 18, no one can claim rights in the name of a third party, unless authorised by law.

to produce explanations and enforce implementation, all in the name of public interest (Sahu, 2007: 16; Rajamani, 2007: 294; Sharma, 2008: 57).

PIL, therefore, has encouraged the population to access the judiciary as it means that any citizen can use the courts if they are subject to human rights violations. Upendra Baxi (2000 cited in Rajamani, 2007: 293) points out that this has had a major impact in the country at a time when the reputations of political parties, politicians and bureaucrats is steadily declining due to corruption scandals. By contrast, the judiciary has gained an image of integrity and impartiality; it is seen as the only institutional power that protects citizen's rights against adverse government decisions. (Baxi, 2000 cited in Rajamani, 2007: 293) states: 'The Supreme Court of India has assumed the mantle of a "Supreme Court for Indians".'

The role of the Indian judiciary in MSWM

This description of how PIL works is an essential introduction to the role of the judiciary in the debate about waste in India. The Indian judiciary has definitely shaped waste reforms in India over the last two decades: some of the key Indian legislation on solid waste management has been due to intervention by the judicial system, and some of the most significant government guidelines are the result of PILs filed in India's Supreme and High Courts. For example, Chaturvedi and Gidwani (2011: 134) explain that the Bio-Medical Waste (M&H) Rules published in 1998 were the result of a petition filed by Dr. B. L. Wadhera in 1996 against improper dumping of hospital waste in public landfills. In the same year, Almitra Patel filed another petition in the Supreme Court, which resulted in the MSW (Management and Handling) Rules 2000. These authors explain that legal processes such as these have produced significant changes in waste management in the country. The former court case marked a critical

moment when high-ranking officials were called on to provide explanations for the inefficiency of their administrations, revealing the incapacity of local governments to deal with waste, and initiating, in turn, the privatisation of solid waste management system in Delhi. Meanwhile, the latter has been instrumental in the creation of the most important Indian legislation on waste so far.

Important documents, such as the *Manual on Solid Waste Management System 2000* and the *Inter-Ministerial Task Force Report 2005*, mentioned in section 5.2, were also results of the same process. Once again, in 2013, due to another PIL in the High Court of Karnataka, the MoEF was forced to withdraw the Amendment Rules 2013, drafted with the objective of replacing the existing MSW Rules 2000. Among these prominent legal rulings at the national level, there have been several other cases of PILs at state and municipal levels. Ranjith Annepu (2013: 3) mentions examples of High Court actions against the illegal dumping of waste by local authorities in Bangalore, Mumbai and state of Haryana. Rajamani (2007: 295) states that, nowadays, the judiciary is active in almost all areas of environmental governance in India. The Indian MSW Rules, therefore, have evolved, to a great extent, because of judicial pressure.

Dr. Maley, one of the leading experts on solid waste managment in India, defends this judicial activism.[96] However, he points out that the judiciary has also prevented the introduction of some important initiatives, because every time there is a proposed solution to a problem, even if well intentioned, a new PIL is filed to halt the process. According to Dr. Maley, in recent times, there have been numerous legal

[96] Interview recorded (39'35") at his office in Mumbai, 3 February 2014.

interventions by NGOs and other organisations trying to advance their case in any way possible, and as a result, actions on waste management grind to a standstill.

Nevertheless, the Indian Supreme Court (central level) and the High Court (state level) have been very effective in monitoring and correcting the actions of the public administration and legislature, reviewing and nullifying unconstitutional laws and acts. According to Sahu (2007: 11), two different judicial currents of thought have emerged from this process: those of *active* judges and those of *activist* judges. Active judges strictly follow the law as written in the constitution, and their conservative thought affirms the power and sovereignty of the state; more progressive judges, on the other hand, tend to interpret environmental rights as comprising one of the fundamental rights of the citizen, expanding the horizons of social and environmental rights (Sahu, 2007: 12). However, judicial activism has faced constant criticism since it first entered the political arena, particularly as it influences public policies, which, it is claimed, are solely the responsibility of the elected representatives and government bureaucrats in the legislative and executive branches (Hague and Harrop, 2010: 259). Rajamani (2007: 318) presents the arguments of Justices Chandrachub and Pathak, who maintain that when the judiciary exceeds the limits of its legislative competences, straying into territory that should remain under the authority of the elected representatives, it undermines the fine balance between the three branches of governance that comprise the pillars of democracy.

Critiques of judicial activism

Although the activist character of the Indian judiciary has also been criticised by public officials who argue that it is usurping the government's position, Justice Balakrishnnan (2008) claims that the judiciary is probably the most respected power

in India, and the majority of the population relies on the law to protect their interests. Ramesh Ramanathan (2007: 675) states that the lack of participatory spaces in Indian policy-making, both at local and central government level, is acute. He claims that government officials are aware of the complexity of bureaucratic procedures and the way that high-ranking officials, members of the elite and celebrities are able to use their economic and social positions to circumvent the inefficient public service infrastructure: 'None of them can individually survive in the city without the coping mechanisms that their particular position offers them: their networks, their identities' (Ramanathan, 2007: 675).

In this urban scenario, where even some of the elite struggles to access basic public services, the courts become the only route for the ordinary citizen. Due to a lack of institutional participatory spaces and democratic channels (Gill, 2010: 239), the judiciary has become a 'platform for public action' (Annepu, 2013: 3), and sometimes it is the most effective channel of mediation between the state and society. Raghav Sharma (2008: 52 and 71) also highlights the importance of judicial activism in protecting and improving the quality of the environment in an emerging economy oriented towards fast-paced industrial growth. Rajamani (2007: 295) states that the courts have strengthened the possibilities of democracy in India, promoting policies to improve the environment; however, the practice of using public interest legislation has raised doubts about the real extent of public participation.

For example, the formulation of the MSW (M&H) Rules 2000 shows that, although the judiciary has forced the government to acknowledge the importance of public interest in its policies, this process does not guarantee the participation of society in the actual policymaking. Due to the complexity of environmental cases, the court

relies heavily on the interpretations of the scientific community (Sahu, 2007: 154); the courts appoint independent expert committees, comprising scientific and technical experts, to study the cases and provide the judges with information on which to base their conclusions. (Section 2.2 in the literature review discusses the role of experts in government decisions, mainly in the case of India.) Sahu (2007: 155) argues the idea that this produces unbiased rulings is disingenuous, since it configures the problem in a determinant manner that ultimately leads to certain conclusions.

The law is thus legitimated by scientific knowledge; however, the relationship between science, law and political decision-making is complex (Sahu, 2007: 156). In general, the courts rely on experts from the most respected government bodies, such as the MoEF, CPCB and the National Environmental Engineering Research Institute (NEERI). However, particularly in the case of waste management, where the decisions are invariably contentious as they involve various political and economic interests, some of these experts are not free from political interests themselves – some have professional and economic links with or have worked as consultants for well-established corporate players in the market. Moreover, in addition to the inherent fallibility of science (due to the continuous evolution of knowledge about the environment), the potential for data inaccuracy and the limitations of test models must be taken into account. This is problematic as the law requires a simple resolution to a dispute, within a limited timeframe.

Moreover, Rajamani (2007: 303) argues that the poor and the illiterate are unlikely to access the courts. Despite the fact that PIL dispenses with legal technicalities and lawyers' expertise, there are other costs involved in the process. Also, most PILs are not the result of social mobilisation but of distinct interests based on particular cases

(Rajamani, 2007: 306). Kaveri Gill (2010: 208 and 239) also claims that PIL, which was originally introduced to protect the disadvantaged sections of society and give the poor a voice, has been appropriated by the middle and upper classes to push their own 'bourgeois' interests in urban governance. Rajamani (2007: 303) claims that judges are, in general, intellectuals with their own middle-class viewpoints, values and interests, which prevent their final rulings from according with the agenda of the urban poor. As Gill (2010: 238) argues, the state and the judiciary share the same class interests in pushing 'the green agenda' –the environmental quality of urban spaces – above 'the brown agenda' – that is, the provision of basic public services and public health. Therefore, although the Indian judiciary has played a key role in solid waste management, influencing both the participatory process and policymaking, the evidence shows that the upper classes have benefited from, rather than been disadvantaged by, this process.

The role of the Brazilian judiciary in MSWM

Research carried out by Barcellos (2014: 39) shows a similar trend in Brazil, where lawsuits tend to be concentrated in the wealthier cities rather than in the poorer ones. In her survey on the impact of public civil action (ACP) on sanitation, Barcellos shows that, over a period of ten years, the 258 lawsuits in place were concentrated in only 177 municipalities. She claims that even if all of these cities were part of the 2,495 Brazilian municipalities without sanitation (sewerage and treatment), this would mean that only 7% of these cases addressed the most disenfranchised (Barcellos, 2014: 38).

Based on Brazil's extensive legislative framework for environmental protection, the judiciary and the public prosecutor have played a crucial role in the solid waste

management issue.[97] The judiciary has been used to solve irregularities in the environmental licensing and bidding process, and also in the conflicts over the competence of the official environmental body. The 1988 Constitution gave the public prosecutor the power to promote public investigations and public civil actions to protect public and social property, the environment, and other collective interests.[98] The public prosecutor has played a significant role in forcing the municipalities and the operators of municipal solid waste management and larger waste generators to improve waste management, and putting pressure on environmental bodies to monitor their activities.

Among other mechanisms for environmental protection, the public prosecutor has two instruments of direct action: public civil action (ACP) and the Conduct Adjustment Terms (TAC). As Cristiana Losenkann (2012: 194) explains, the public prosecutor acts through the ACP on behalf of the state in defence of society – even in actions against the government – rectifying policy decisions that are contrary to public interests. Through the TAC, an extra-judicial agreement between the public body and the violator for the regularisation of activities and restoration of environmental damage, the public prosecutor has put pressure on the municipalities, contractors and other actors to apply best practice and technological improvements to their waste management systems (PPIAF, 2011: 16).

However, opponents such as the Public-Private Infrastructure Advisory Facility (PPIAF Report 2011: 17), a donor group associated with the World Bank, claim that,

[97] In Brazil, the key policies for environmental protection are the National Policy on Environment (Law 6.838/81), the law establishing civil public action (Law 7,347/85), article 225 of the Federal Constitution of 1988, and environmental crime law (Law 9,605/98).
[98] Brazilian Federal Constitution, Article 129, III.

in many cases, due to excessive conservatism, judges have assumed a repressive role, which harms enterprises. The PPIAF report highlights the key role played by 'Specialised Chambers on the Environment',[99] comprising magistrates with wide expertise on environmental legislation, on the solutions of conflicts involving environmental issues.

Losenkann (2012: 195) claims that, despite the wide potential for the promotion of justice and public participation, the ACP has been little used in practice. The ACP demands legal and technical expertise, and therefore, although it contains the potential for participation, it is not open to all of society; on the contrary, it restricts access to justice to the more institutionalised groups and those with knowledge of the legislation. Barcellos' survey (2014: 42) shows the potential possessed by the ACP to improve sanitation, particularly as the courts have favoured the plaintiffs in 76% of cases; however, these cases still represent minimal coverage for the poor. She claims that the judiciary need to do more to defend public rights and assure the provision of collective goods in order to address the problems of those most in need.

Unlike the Indian process, where the judiciary has acted almost as a channel for communication between state and society, and where public interest litigation has been simplified to facilitate the ordinary citizen's access to state protection, in Brazil, where there are other spaces for public participation, the judiciary and the public prosecutor concentrate on the solution of conflicts and the effective improvement of waste management service provision.

[99] These are known as the Câmaras Especializadas em Meio Ambiente in Portuguese.

Comparing both countries, it is clear, however, that there is a similarly unequal access to justice and participation in both systems. Boaventura Santos (2003: 21) emphasises the class divisions inherent in access to the state, claiming that it signifies the end of the democratic 'social contract' and the rise of 'social fascism'. In his view, this is a contemporary phenomenon, mainly seen in the peripheral countries, where the democratic regime is characterised by unequal social relationships and the potentially irreversible exclusion of certain individuals and groups in society. Santos argues that the state is complicit in this 'pluralist fascism' generated by the societies of emerging economies. Among the different forms in which social fascism manifests itself, he describes social stratification in the state-society relationship and the division of urban spaces into two zones: civilised and savage spaces (Santos, 2003: 21). In the civilised, wealthy zones – for example, enclaves of the rich in India and private condominiums in Brazil – the state protects the private space and democratic rights of the more privileged citizens; in the savage zones, however, in the slums and urban peripheries, the 'Hobbesian state' is the 'predator', incapable of assisting individuals and assuring their civil rights (Santos, 2003: 21). He differentiates civil society by three categories of access to the state: intimate, estranged and uncivil (Santos, 2003: 24). 'Intimate civil society', differentiated by 'hyper-inclusion', comprise those individuals or groups with full access to public goods, who enjoy complete socio-political, economic and cultural rights and full public participation; those who comprise 'uncivil civil society', characterised by 'hyper-exclusion', where social fascism occurs in totality, are invisible to the state and do not belong to society; while the intermediate layer, the 'estranged civil society', comprise the middle and lower-middle classes with scarce access to the provision of the state.

6.5 Irregularities in the MSWM sector

The history of municipal solid waste management in São Paulo city in Brazil, from the late-1980s to mid-2000s, has been marked by several corruption scandals. After recurrent emergency contracts and allegations of irregularities in the bidding process under the tenure of mayors from different political parties, in 2002, the Legislative Assembly established a parliamentary commission of enquiry[100] to investigate the infamous case of the 'Cartel of Contractors',[101] where a group of nine large companies, which had dominated the contracts for cleaning services in the city for decades, were accused of irregularities and buying favours in exchange for election campaign donations (TI, 2010). Some of these contractors had previously been under investigation in 1999 as part of the scandal of the 'Mafia of the City Hall Tax Inspectors',[102] a corrupt network of public officials taking bribes and falsifying costs, which was uncovered by the state prosecutor (Mug, 2002).

In response these scandals, in 2002, Mayor Marta Suplicy introduced the Domestic Solid Waste Tax (TRSD),[103] which separated out the fraction of public tax supporting municipal solid waste management from the existing Urban Building and Land Tax (IPTU), in order to render the provision of public services more transparent and to increase public awareness in the battle to reduce waste and increase recycling in the city (Ferreira, 2003). However, the tax generated protests from the social movements, led by opposition parties, with allegations of municipal corruption and fraud. In the

[100] Well-known in São Paulo as the '*CPI do Lixo*'.
[101] In Portuguese: Cartel das Empreiteiras.
[102] In Portuguese: Máfia dos Fiscais da Prefeitura.
[103] Known as the 'garbage tax' (*Taxa do Lixo*), the tax was self-declared, and varied between R$ 6,14 (USD 1,45) to R$ 61,36 (USD 15,36) per month, according to the volume of waste generated by the property type. According to São Paulo Agora (2003), while in place, the tax helped to increase recycling rates, as it forced the population to reduce waste generation and use recycling options in order to reduce tax payments.

end, after a noisy political battle in the municipal council and the mass media, the Chief Justice revoked the tax in 2005 (Soares, 2005). In 2004, he also cancelled the previous contracts due to irregularities in the public bidding process (São Paulo Agora, 2004). Although, the cases mentioned above are specific to the city of São Paulo, Brazil's major industrial and financial hub, such irregularities are common in other municipalities across the country.

Corruption in municipal solid waste management

The first question we need to answer is why there is such irregularity and corruption surrounding solid waste management. André Trigueiro (2012) argues that problems such as weak monitoring, lack of transparency and biased bidding procedures, common in municipal solid waste management, attract corrupt practices. He explains that, in general, solid waste is charged according to weight – the cost per ton of transport – and this varies according to specific types of solid waste (household, C&D, hazardous and others types of waste).[104] Due to weak monitoring processes, there are weighing irregularities, clandestine escape routes, enabling lorries to evade inspection, and dumping in illegal landfills. Trigueiro explains that the mayor is in charge of setting up the solid waste management system in their city; however, due to a misconception that waste is not an issue that attracts votes, many of mayors fear to increase public costs and are thus unable to solve the corruption and deficiencies they inherit from their predecessors. In addition, in Brazil, as mentioned above, the larger contractors in the sector, such as the transport sector and banking institutions, are major contributors to the election campaigns of local officials (Novaes, 2013).

[104] Triguerio explains that in 2012, a ton of household waste cost around R$ 40 (USD 10), while a ton of hazardous waste cost around R$ 1,000 (USD 250).

Trigueiro (2012) calls attention to the fact that, due to misinformation, incompetence and, in some cases, malicious practices, some mayors oppose any environmentally sound solid waste management policy (recycling, composting and other treatment systems), preferring to take advantage of illegal practices committed by their unscrupulous corporate allies. In fact, the search for a political solution to these irregularities was one of the main reasons for the enactment of the National Policy on Solid Waste (PNRS).

Curiously, despite all the differences between Brazil and India, in one variable at least they are similar: in 2015, both countries occupied the 76th position in a ranking of 168 countries in Transparency International's Corruption Perception Index, scoring 38 points each.[105]

Empirical research

This section explores some of the irregularities, discovered through the fieldwork, that are prevalent in the solid waste management sector in both countries. These irregularities were raised as a constant complaint throughout the interviews. Some of these cases are well known by practitioners, bureaucrats and the media, while others are not apparent to the ordinary citizen as they are not reported in official documents and very few reach the pages of the newspapers or judicial proceedings. These hidden abuses have become part of the political milieu in this sector, and are known popularly as 'business as usual'. In fact, the majority of irregularities are 'legal', due to the lack of legislation preventing infringement or the weak monitoring mechanisms, so that corrupt agents are able find legal loopholes.

[105] Available at: https://www.transparency.org/country/

During the course of the fieldwork, it became evident that this subject demands a thorough investigation; however, this research was not designed to explore the extent of corruption in waste management. Nevertheless, an understanding of these practices is crucial for the debate about public or interest group participation. On the one hand, particularism hinders political participation, while on the other, proponents claim that public participation aims to improve transparency and accountability in governance. However, there is no data to measure the impact the irregularities have on public service delivery and public participation. The cases discussed in this section are based on the narratives of practitioners in the sector, collected during the fieldwork, and show examples of corruption at all levels of governance. The names and organisations are anonymised due to the lack of legal action in these cases; therefore, the section focuses on the practices and the political milieu, rather than the perpetrators, in order to analyse how these structural deviations impact the political process. Despite the limitations of the data and the research design, this debate is crucial, as some of these practices directly impact the public participation process, hindering the provision of services and imposing the burden of additional costs on the general population. Despite the fact that the literature claims that citizen pressure and social control play a crucial role in holding the government and its institutions to account, ensuring they follow through on their commitment to improve the quality of public service provision, the evidence shows that public participation does not guarantee that these political vices are eliminated.

Recurrent crises vs. systemic irregularities

As with any other public sector, municipal solid waste management faces some recurrent crises. During the fieldwork, two specific cases emerged in India and Brazil

that illustrated the outcome of irregularities at the local level. Since 2000, the municipal corporation of Thiruvananthapuram, state capital of Kerala in India, was disposing the city's solid waste in a dumpsite in the neighbouring city of Vilappil, 15km away from the capital. In August 2012, in protest against the environmental degradation and the deterioration in the health of Vilappil's population, due to leachate contamination of its rivers and groundwater, the residents decided to close the dumpsite (EPW, 2016). Ranjith Annepu (2013) explains that the municipal corporation abdicated responsibility for collecting Thiruvananthapuram's waste without letting its residents know, so they started to throw their garbage in bushes, rivers and community areas across the city. According to EPW (2016), the case was still under judicial review at the National Green Tribunal in 2016.

When I visited the city of Sorocaba, in Brazil, approximately 100km away from the state capital of São Paulo, in December in 2013, piles of waste had remained on the streets for more than a week without collection, and the municipal authorities of Sorocaba had been forced to sign an emergency contract to resolve the crisis. The newspaper *Cruzeiro do Sul* (2013) explains that the crisis was the result of a poorly drafted tendering process held in 2010: the contract delegated all the services to the same contractor, leaving the municipal authority with no control over the subcontracting of other services by the company. After months of lack of payment, the subcontracted company, Proactiva Ambiental, took the contractor that held the concession, Gomes Lourenço, to court, closing the commercial landfill, Iperó, and creating a chaotic situation for the city's inhabitants.[106]

[106] A video on Youtube shows waste workers of the concessionary company dumping waste clandestinely on the streets during the night: https://www.youtube.com/watch?v=pDIZ9EF1qV

Citizens' access to public services

Pranab Bardhan (1997: 1321) defines corruption as the 'use of public office for private gains'. In general, it refers to politicians and bureaucrats who take advantage of their official position to enrich themselves or finance their campaigns; businessmen who seek to gain contracts, influence policies, accelerate or block administrative processes, and control the bidding for and granting of licences through illicit practices; and citizens who try to avoid taxes or penalties. However, it is important to emphasise that it is easy to blame the bureaucracy for every ill, generalising the incompetence of some civil servants and the usury of big companies. After meeting a variety of businessmen and visiting government bodies at different levels in various states in both countries, I perceived that some professionals are frustrated with the obstacles these irregularities pose; these are engaged and skilled professionals trying their best to overcome these barriers and carry out their duties. There seemed little difference between the civil servants in their offices in the municipality of Maceió in Brazil and those in Pune's municipal corporation in India. They demonstrated hard work and a commitment to overcoming constraints (for example, a lack of adequate equipment and an unceasing plethora of paperwork) to provide public services.

As Akhil Gupta (2012: 23) explains, the problem is the fact that good intentions are subverted by bureaucratic procedures. He calls attention to the structural violence of the state, calling it a 'crime without a criminal' (Gupta, 2012: 21), where issues such as corruption and exclusion cannot be attributed to a particular, identifiable agent, but are the consequence of the structural system of power, where violence is constant rather than intentionally perpetrated. Girish Kumar et al. (2009: 105) state that corruption is not only found in the higher ranks of the bureaucracy, but civil servants, local elected representatives and middlemen all establish systems of patronage and

brokerage, bargaining with the population over access to public goods. When people pays bribes or commissions, they do so because it is the only way they can access essential services that should be free. Gupta (2012: 33) argues that systemic violence structures the daily practices of the bureaucracy, and the poor are those who suffer the most: they are denied access to services and programmes that were specifically designed for them; they are forced to deal with corruption in their daily life and made to pay for public goods that should be free (Gupta, 2012: 76).

Kumar et al. (2009: 105) argue that India's system of tax collection displays incompetence and inefficiency at all levels of government – the payment of fees for public services is regularly replaced by illegal payments, which leads to a low level of revenue collection, impacting in turn the quality of public services. When public resources are diverted for other purposes, investments in infrastructure are clearly affected and society loses out (Singh, 2007: 16); corruption makes public infrastructure and service provision more expensive and inefficient (Bardhan, 1997: 1328). Therefore, as Nirvikar Singh (2007: 48) stresses, poor accountability leads to corruption. In order to improve accountability, it is necessary to introduce monitoring, transparency and disclosure of public information, but this can only occur with legal support through the institutional framework.

Structural violence

The examples above show some of the outcomes of misguided contractual processes, but there are other structural deviations that are part of the political context. For example, one reason for the lack of capacity at the local level, already debated above, is the political milieu. In Brazil, a frequent complaint among government staff, which is most likely echoed across the country, is the constant discontinuation of public

programmes after elections. Civil servants interviewed complained that when new governments come to power, they always expect to face a shortage of resources. It is common practice that former civil servants destroy all information relating to the previous administration before handing the mandate to their successors. In this way, a great part of the progress and investments of the previous government is lost after each new election; instead of a gradual and straightforward evolution, solid waste management, as well as other programmes, become continuous cycles, maintained by the electoral processes. The new government and its staff generally need to start new programmes from scratch, following their new political agenda.

In general, municipalities have poor inventories and thus never have total control of their municipal assets, including their equipment and furniture. At the end of one term of office, former employees often take with them what they can carry, from computers to telephones and chairs. These types of practices were confirmed by respondents at different levels of governance and in different cities during the fieldwork. Moreover, there are also conflicting interests, with opposition parties vying for power within the different levels of government. Civil servants complain that members of opposition parties often play a damaging role, discrediting and obstructing the work carried out by the parties in power; it is usually difficult to implement programmes at a local level when the party of the municipality has divergent political interests to those of the party in power at state level. For example, when I visited the superintendent of Urban Cleaning (SLUM) in the city of Maceió, in the state of Alagoas in Brazil, in 2013, the director was dealing with a particularly

flagrant case of sabotage.[107] While the SLUM was establishing a neighbourhood clean-up task force[108] in a community, members of the opposition party were spotted by the local news outlet dumping garbage into the areas already cleared, in order to damage the image of the local government.

The Secretary of State for the Environment and Water Resources (SEMARH)[109] of the state of Alagoas confirms that municipalities are completely unprepared for the implementation of the PNRS, as they lack technical staff and equipment. In many cases, the political will of the local mayors is the key problem. For example, their bargaining power lies in the fact that they can deliver the vote in their constituencies, and parliament provides funding in exchange for votes. Therefore, in addition to exempting the population from paying taxes, these mayors also place trusted allies in public positions in exchange for political favours, regardless of their qualifications for the job, thus weakening the capacity of the municipality. Valmir Penedo, a local authority engineer for the Department of Public Works, explains that the department needs a technician, but there is no budget to hire a gazetted officer, because the position is occupied by unskilled employees, hired according to political interests, who in many cases do not even go to work.[110] I also found this sort of cronyism in India at all levels of governance, where the responsibility for licencing, compliance or monitoring processes is passed between members of public and private organisations with kinship ties or personal links to each other.

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[107] Interviewed at the SLUM headquarters in Maceió, 18 December 2013
[108] In Portuguese: *mutirão.*
[109] Interviewed at the SEMARH headquarters in Maceió, 19 December 2013.
[110] Interviewed at the Penedo City Hall, Brazil, 23 December 2013.

The 'revolving door' in the Indian bureaucracy

Probably one of the most egregious aspects that deserves more extensive investigation is the close relationship of government officials with the private sector in India. When searching for potential interviewees, conducting interviews or participating in policy formulation, it was interesting to note that the technocrats working in governmental bodies frequently had links with private companies. Some informants confirmed a common practice in the bureaucracy, in which, after retiring from public office, high-ranking officials and civil servants move directly into key positions in private companies operating in the same sector. Amiya Sahu, Director of the National Solid Waste Association of India (NSWAI), explains that, from time to time, public officials ease into pre-retirement by joining private companies and, after a few years, return to their government posts.[111] Also, in many instances, company executives occupy advisory positions in government policymaking, acting as consultants or members of research institutes while working in the corporate sector. In the literature, this phenomenon is commonly called the 'revolving door'. Transparency International (2010: 2) defines this practice as the movement of public officials between public office and private organisations, exploiting their public positions to advance their private interests.

Supporters of this practice claim that it strengthens the political system, benefiting both public and private sectors by fostering innovation and expertise; however, it also raises concerns about conflicts of interest and favouritism undermining the legitimacy of policy decisions. Conflicts of interest arise when public officials take advantage of

[111] Interviewed at the NSWAI offices in Mumbai, 27 February 2014.

their current, previous or future public office (their contacts and insider information) to influence decision-making for personal gain. Transparency International (2010: 2) calls attention to the risk of policies which clearly advance the interests of private clients to the detriment of the public. In such a situation, without a more open and participative policymaking process, it is those individuals and groups with direct access to the government who ultimately influence policy-making.

The presence of private interests in government is the probable explanation for the gap between the proposals of government-financed schemes put before public debates on municipal solid waste management and the very different reality on the ground. This was confirmed in interviews conducted for this research with practitioners in the sector, such as Ravi Agarwal (Toxic Link) in Delhi, Ranjit Gadgil (Parisar) in Pune, Amiya Sahu (NSWAI) in Mumbai and Myriam Shankar (Solid Waste Management Roundtable or SWMRT) in Bangalore, among others, who suggest that the main question Indian citizens should ask themselves is: who writes the policies and what are the conflicts of interest involved in the policymaking process?

In Brazil, according to Transparency International (2010: 7), the government established legislation[112] and a code of conduct, following a series of scandals, to prevent this sort of conflict of interest. The Brazilian legislative framework curbs these practices with strict rules and heavy penalties. M.K. Venu (2015) stresses that India urgently needs such a legislative framework to enforce a similar code of conduct. The Janaagraha report (2012: 31) confirms that the Indian legal system does not have the legislative mechanisms in place that could set boundaries, prevent

[112] Decree 4,187/2002 regulates the opportunities for officials to exercise activities or provide services after dismissal from public office, and Law 12,813/2013 imposes a quarantine period.

potential abuses and impose ethical behaviour on private companies. This sort of regulation is crucial at a time of increasing interaction between the government and the corporate sector in processes such as the procurement of public contracts and concessions, the creation of PPPs and the implementation of privatisations, this issue will be scrutinised in depth in section 7.3.

The Janaagraha report (2012: 32) also reveals that the private sector lobby constantly seeks to find loopholes in the legislation, areas of ambiguity and weak regulation that it can exploit. Although this underhand and unethical behaviour cannot be generalised to all firms and interest groups, it reduces competition and skews the market in favour of those who undertake these predatory practices. Ethical conduct is essential to ensure fair competition in the private sector and to improve the performance of public administration, ensuring transparency and accountability (Janaagraha, 2012: 32). This begs the question of whether particularism is solely a problem of the Global South?

International players

In partial answer to this question, it is clear that some of the corruption described above is also driven by international donors and multinational corporations, who take advantage of the loopholes, fluidity and lack of knowledge apparent in an emerging market still in formation. For example, Eduardo Soriano, general coordinator of Energy and Mineral Resources at the Brazilian Ministry of Science, Technology and Innovation (MCTI), claims that he frequently receives several unrealistic projects:

'There are companies selling the same project to several cities, and mayors frequently come to visit me with their 'magical solutions', which are simply not viable.'[113]

Soriano's criticisms are aligned with research produced by the Great Western Mining Corporation (GWMO) (UNEP and ISWA, 2015: 133), which shows that, in Brazil, local mayors are regularly invited to visit state-of-the-art facilities in highly industrialised countries, whose expensive technologies are devised for northern environmental conditions, with the waste composition, and operational and maintenance capacities, of high-income societies. The public officials then attempt to implement these technologies in their tropical municipalities, which are still struggling to provide basic services for their populations. For example, the mayor of Penedo, a town of some 63,000 inhabitants in the northeast of Brazil says: 'We are already looking for a power plant to convert waste into energy. This is very common in Europe, the US and Japan, and naturally, here in Penedo, I will follow the same pathway.'[114] Soriano criticises this attitude: 'Unfortunately, a lot of money will be thrown away: facilities will be halted or inadequately built, and the cost will be passed on to the next administration. Because this is our political culture.'

Section summary

This section mentions only those irregularities reported by the interviewees in this research, and is far from covering all the modalities of corruption that exist in solid waste management sectors in India and Brazil. The bidding process for the outsourced concessions and contracts is probably the main source of corruption. However, the

[113] Interviewed at the MCTI headquarters in Brasilia, 23 October 2013.

[114] Interview recorded (20'30") at the Penedo City Hall, 13 December 2013, State of Alagoas.

problem is systemic and well-known to practitioners in the sector. Nevertheless, the subject would merit a further exploration, using specific research tools to explore these cases in more depth.

Corruption and collusion has a negative impact on public participation. Sofia Olsson (2014: 2) explains that citizens become disengaged when they feel they have little influence on politics. In Brazil, Ribeiro of CETESB claims that well-designed processes which include social control are certainly able to increase transparency and hold governments and companies to account for their actions to a greater degree; however, public participation does not guarantee less corrupt political processes, and in some cases, can even aggravate the problem. In India, Joël Ruet and Stéphanie Lama-Rewal (2009: 5) claim that fighting against corruption is a crucial feature of 'good governance', but even new actors have taken advantage of the deficiencies of public service provision, subverting the participatory process through patronage. Therefore, to some extent, corruption is also part of the democratic system. The literature review (Chapter 2) discussed the idea that democracy is not synonymous with development. Indeed, as Phillipe Schmitter and Terry Karl (1991: 85) claim, there is a false notion that democratic participation will resolve all irregularities; in fact, they suggest that democracy does not necessarily produce good governance and more efficient administrative systems. Neither does the electoral process change such conduct; rather, it has often led to the continued election of corrupt politicians. However, despite this, these authors claim that democratic control still promises the public a better chance of achieving the goal of transparency and accountability than do autocratic regimes (Schmitter and Karl, 1991: 87).

6.6 Chapter summary

Public participation, in theory, provides alternative institutional arenas in which citizens and interest groups can debate policies, exchange information and provide inputs to the solution of national and local problems. It also has the potential to improve the transparency and accountability of political processes. The Brazilian and Indian models attest to the differences that can be seen in processes that incorporate open participatory forums and those that rely on more closed decision-making proceedings. However, this chapter has illustrated that in the apparently more pluralist processes in Brazil, powerful interest groups have been able to take advantage of these participatory processes and their lack of regulation, capitalising on the fragility of government institutions and the venality or political ambition of government officials to advance policies that privilege their economic interests.

Thus, the investigation of public participatory forums presented in this chapter has revealed that these public spaces, instead of representing forums in which citizens can participate in government decisions, have for the most part provided opportunities for neo-pluralist interests (as defined in Chapter 2) to dominate the proceedings. Taking the example of the CNMA and the Sectoral Agreements in Brazil, the chapter has shown that not all participants' claims prevail in these debates; rather, as these forums for discussion have evolved, associations of those with partisan interests in specific issues have emerged. Some more organised groups are able to raise and sustain their claims, mobilising other supporters to join their cause. Consequently, access to information and expertise play a crucial role in determining which voices are heard. The ability to engage in several rounds of debates requires information exchange, control of the means of persuasion and sufficient resources, which only the most organised groups can afford – a facet of collective action discussed by Olson (1971).

The point this chapter has emphasised is that, although these participatory spaces (as defined by Gaventa) have, in principle, been established to enable the ordinary citizen to debate policies that affect their lives, they are in reality exploited by interest groups and policy experts. In addition, interest group lobbies are not only able to exert pressure in these participatory forums, but along the entire course of the decision-making process.

This chapter examined case studies of four influential political spaces of state-interest group interaction. The cases discussed in sections 6.2, 6.3 and 6.4 illustrated the level of participation in the political debates on waste management in both India and Brazil. In the example of Brazil, the government has invested in institutional spaces which bring interests groups together to debate alternatives for the implementation of waste management policies. Meanwhile, the process in India over the last two decades, from when the first PIL introduced the MSW Rules 2000 up to the introduction of the SBA, has been driven by legal interventions promoted by interest groups. This has clearly been the result of the limited space for public contestation in the country.

According to the categorisation of interest groups by Grant Jordan et al. (2004), the groups and individuals participating in the 4th CNMA were 'policy participants'. Although the forum provided opportunities for groups to debate, put forward proposals and vote on the issue, the chapter section on the conference has shown that it is not clear whether the final documents that emerged guaranteed any effective policy outcome. Even some of the government employees interviewed for this research confirmed that they have not had access to any of these documents. Nonetheless, many interviewees also stressed the importance of the forum for the articulation of demands and exchange of information among interest groups and

government institutions at the three levels of governance involved in solid waste management. In this sense, it was undoubtedly an exercise in democratic education. By contrast, as this chapter illustrated, the interest groups in the Sectoral Agreements could be classified as 'pressure participants', since they discussed the proposal for a national recycling system, and the final report that emerged from the negotiations received government endorsement. As such, it represents a legally valid agreement between the state and the parties involved. In this case, powerful corporate groups actively participated, influencing the policy outcomes, as the profitability of their operations relied on these agreements.

This chapter also argued that the gap between the proposals of the Indian Waste Rules, drawn up centrally, and the reality of their implementation in the cities is the result of the lack of participatory discussions; the central government policymakers failed to anticipate the diversity of interests involved or recognise the potential for alternative strategies for waste management represented by other groups across the country. As some interviewees emphasised, solid waste management was not a priority for the government at this stage. Recently, the SBA and the new MSW Rules 2016 have gained momentum and signalled some changes to this process, creating new opportunities for more pluralist debates around the issue. However, as the chapter warned, it is not clear yet how much participatory space the political and economic coalitions of elite forces will allow.

Moreover, in addition to irregularities in participatory processes such as the Indian National Consultation Programme, this research found potential conflicts of interest among the experts and consultants invited to participate in India's waste management policymaking process. Pranab Bardhan (1998) stresses that tight coalitions of

corporate interests and bureaucrats have dominated policy areas, ensuring that decisions remain under their control. Further research is needed to investigate whether public servants at different levels of governance have economic interests in corporate groups, compromising their impartiality. The 'revolving door' – the exchange of officials between government and business – which is forbidden in many countries (see section 6.5), is common practice in the Indian bureaucracy. These matters have been criticised by Indian scholars for decades: Atul Kohli (1993), for example, calls attention to the technocratic rule-making process, which is conducted behind closed doors, with limited public scrutiny. It is no surprise that in this technocratic environment, where conflicts of interest are ignored, there is little space for the informal sector.

However, the chapter also pointed out that the decision-making processes and legal systems in Brazil and India show something more striking. In both cases, the wealthy groups in society are the main beneficiaries of these participatory processes. In Brazil's Sectoral Agreements on Packaging (probably the most important piece of policy for the successful implementation of the PNRS), the most powerful group of industrialists won the political battle, and their proposal, which covers only a small part of the national problem, was accepted, disproportionately benefiting their members' operations. Although many interviewees highlighted the educational importance of these sectoral debates, and the potential they offer for sharing information amongst all levels of society, in the end, they clearly have become a channel for neo-pluralist interests. Meanwhile, within the judiciary, scholars in both countries (Rajamani, 2007; Barcellos, 2014; Ramanathan, 2007) have concluded that the upper and middle classes have taken advantage of legal tools designed to protect the poor.

In addition to the high levels of inequality in terms of access to public resources, the political systems in both countries display a range of irregularities, as section 6.5 revealed. Although this research was not designed to specifically investigate irregularities and systemic corruption, the findings of this chapter have shown that these practices have a strong negative influence on decisions concerning the governance of solid waste management. They affect the quality of the services provided to the public, the economic development of certain regions or cities and even the health of democracy in these countries, since they allow the misappropriation of public goods by certain groups (Santos, 2003); it appears that only a privileged minority has full access to democracy (Santos, 2003; O'Donnell, 1996). The chapter argued that some of these malpractices are part of the culture of the bureaucracy and its relationship with the private sector, while others are informally institutionalised in the political systems. These sorts of permanent and pervasive irregularities are what Guillermo O'Donnell (1996) claims separate newer, 'uneven' democracies from older ones (see Chapter 2, section 2.2, for a full description of this term). The key difference is the fact that in long-established democracies 'rules are truly followed and public-oriented government prevails', with little space between the formal rules and official behaviour (O'Donnell, 1996). Conversely, particularism and informal rules are real obstacles to democracy and development in countries such as India and Brazil, since they legitimise the abuse of the relationship between government officials and interest groups.

The question this chapter has raised is whether the legal regulation of interest group participation would, to some degree, curb the power of corporate pressure groups to sway policy decisions. In distinction to the US, the UK or France, where lobbying is regulated by law, neither Brazil nor India have specific legislation regulating the

participation of interest groups in decision-making or their relationship with public officials. However, both countries have introduced bills[115] seeking to regulate the activity of interest groups in federal public administration in an attempt to enhance transparency and accountability. The following extract from 'The Disclosure of Lobbying Activities Bill' (208/2015), proposed in the lower house of parliament (Lok Sabha) in 2015, shows that Indian parliamentarians are not unaware of the influence of pressure group lobbying on government decisions:

> *There is a growing fear among the public that lobbyists, especially corporate lobbyists, are gaining undue powers to influence public policy and that decisions arising from such lobbying activities are detrimental to the interests of the exchequer and the public at large.*

By institutionalising and regulating lobbying practices, the law aims to ensure the equal treatment of pressure groups and equal access to decision-makers in the administrative or legislative process. Future research will be needed to analyse the impact of these policies on the disproportionate power such interest groups wield over government decision-making.

The next chapter discusses the key actors operating in the waste management sector, and analyses their strategies, and their capacity, for influencing the decision-making process.

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[115] In Brazil, Bill 1,202/2007 regulates the lobbying activities of pressure groups, while in India, 'The Disclosure of Lobbying Activities' (Bill 208/2015) was introduced in 2015.

Chapter 7 Influential MSWM Interest Groups in Brazil and India

7.1 Introduction

As discussed in the previous chapters, the historical political processes and the institutional participatory spaces created around the management of solid waste in Brazil and India have given rise to different forms of political participation, which in turn have shaped the waste reforms in these countries in distinct ways. This chapter explores the organisation of key interest groups involved in waste management in these countries and their capacity to influence government decisions.

The chapter shows that the MSWM sector is extremely politicised, and participants need to invest substantial resources and forge coalitions that will enhance their power to compete successfully. The democratic process is, therefore, characterised by the competition for power, and the state is the arena where the conflicting interests compete. The government possesses the ability to mediate, monitor and enforce measures to produce some balance in this dispute and thus ensure the equitable provision of public services such as waste management. However, this chapter reveals that key pressure groups in the sector take advantage of the opportunities that public participation provides to influence government policies.

The chapter is organised in four sections which analyse the interaction of the key interest groups shaping the political processes in four main cases. It explores:

- representative associations in the MSWM sector in Brazil;
- the provision of waste management services in India;
- the participation of international elites in the domestic debate in both countries;
- and the situation of informal waste pickers in India and Brazil.

This subject division reflects the key characteristics of solid waste management in each country. Using this structure, the chapter aims to explore the identity and nature of the interest groups involved in waste management, their actions and strategies, and their capacity to influence government decisions.

The presence of participatory spaces in Brazil has helped promote the aggregation of the demands, and therefore the political power, of influential interest groups in the waste management sector, while the characteristics of the Indian political context (the asymmetric structure of the legislative process, the technocratic nature of decision-making, which limits pluralist debate, and the historical evolution of these debates) has led to a fragmentation of demands, hindering any substantive changes to central government decisions. These characteristics are illustrated in section 7.2, which discusses the three main interest groups' involvement in the debates around the introduction of the National Policy on Solid Waste (PNRS) in Brazil, and section 7.3, which explains the informal nature of waste management in India, and its challenges.

However, concentrating solely on these internal characteristics runs the risk of failing to recognise that solid waste management is also greatly influenced by external forces. An analysis of the role of international organisations in the domestic political debate is crucial to an understanding of interest group participation in these countries. In the solid waste management sector, there is a myriad of foreign organisations affecting the operation of domestic interest groups and government agencies, from the national to the local level. In fact, these external influences help to flatten out the differences between the Brazilian and Indian political systems, as they promote a uniform system of information, practices and technologies to solve the often very different problems in these two distinct cultures.

A further, essential element in this picture is the presence of informal waste pickers. They are at the centre of the debates about the challenges of waste management in developing countries; however, they have achieved quite different political results in the waste reforms in Brazil and India. Section 7.5 investigates the causes of these differences and the impact of the political participation of waste pickers on government decisions.

7.2 Representative business associations in Brazil

One key differential when considering Brazilian and Indian waste reforms is the definition of responsibility for the generation of solid waste. The Indian Waste Rules are based on a set of hierarchical responsibilities: sections 4 to 18 of the MSW Rules 2016 outline a series of duties that are to be shared between the waste generators and the waste authorities, among them the relevant ministries, the urban development departments of the local states and the UTs, ULBs, CPCB, SPCB[116] and other official bodies (MoEFCC, 2016). In contrast (as discussed earlier in section 6.3), the Brazilian PNRS demands that all waste generators share responsibility for the product's entire lifecycle and find solutions to the problem of solid waste, either individually or as part of a network (PNRS, 2010: Art.3, XVII). For this reason, before enforcing this duty, the law calls on specific productive sectors to offer their solutions via the Sectoral Agreements on Reverse Logistics. The PNRS, therefore, has initiated a widespread debate, involving all the interest groups in the sector, in a complex process of negotiation to search for nation-wide solutions.

[116] Union Territories (UT); Urban Local Bodies (ULB); Central Pollution Control Board (CPCB); and State Pollution Control Board (SPCB), respectively.

The specific conceptual basis of the Brazilian legislation, and the institutional spaces created by the state apparatus, have allowed a variety of interest groups and collective bodies to exert control over the political process, the most powerful of these being:

- the SWM sector;
- the industrial sector;
- and local government entities.

This section will explore the role and impact of these key interest groups in the Brazilian waste policy context. Alongside these coalitions, the leaders of the National Movement of *Catadores* of Recyclables (MNCR) have also actively participated in the debates. This specific interest group will be analysed separately in section 7.5, in order to provide a comparison with the situation of waste pickers in India.

Due to specific historical circumstances, discussed in Chapters 4 and 5, the Brazilian government has established institutional channels of participation (the National Conference on the Environment (CNMA) and the Sectoral Agreements), where decisions over waste management are debated by those with an interest in the policy outcomes. These measures have provided opportunities for coalitions, alliances and agreements between interest groups – Lee Alston et al. (2016) employ the term 'dominant networks' (see Chapter 2) to describe the coalitions between elite interest groups and the state that operate in the political realm in order to influence or change waste policy. As discussed in section 5.3, the PNRS emerged from one such extensive participatory process, where different coalitions were formed to promote certain interests, including the powerful industrial lobby, which mobilised to prevent the introduction of extended producer responsibility (EPR) in Brazil. This is the crucial difference between Brazil and India in the waste reform area: in Brazil, the

government debates potential solutions with market players and civil society in public forums that encourage the formation of dominant networks; in India, decisions are made inside government by appointed experts, and such coalitions are less evident, as there are few spaces for interest group participation.

India also has several prominent interest groups in the sector, formed among economic associations. However, the lack of participatory spaces in which to debate central government decision-making was evident in the interviews conducted for this research; interviewees repeatedly emphasised that waste policies are formulated in the ministry, and only a few high-ranking officials, experts and invited guests participate in the internal debates and have access to the negotiations. Expert groups such as the Centre for Public Health, the Environmental Engineering Organisation (CPHEEO) and the Energy Research Institute (TERI) – NGOs with business interests – play a significant role in decision-making, both directly by participating in the expert committees and indirectly by advising the government and providing studies and reports. Over the last sixteen years, these experts have acted as advisors to the government – for example, over the proposals of amendments to the MSW Rules. Recently, due to the amount of public interest raised by the government's Clean India Mission (or SBA), organisations such as the FICCI, CII, IBA and the German organisation, Gesellschaft für Internationale Zusammenarbeit (GIZ), have organised workshops and debates aimed at organising the demands of a variety of interest groups.

In Brazil, coalitions of interest groups have articulated and lobbied for their demands across several institutional spaces, both during the formulation of the PNRS (section 5.3) and also in the debates of the CNMA and the Sectoral Agreements (sections 6.2

and 6.3). These debates have generated a long round of discussions across the country, an event without parallel in India, where, in the recent past, the separate policy debates of academics, public administrators or businessmen have appeared disconnected from one another. Thus, these participatory spaces, and their potential for interaction between the government and interest groups, represent a crucial difference between the Brazilian and Indian political processes of waste management reform. The following subsections investigate the main interest groups involved in the Brazilian participatory process, their claims and strategies. The positions taken by the three main groups listed above provide a glimpse of the challenges the implementation of a nation-wide waste management policy faces, including the disproportionate influence these groups wield over government decisions.

The MSWM sector

Until very recently, the *Panorama of Solid Waste in Brazil*, updated annually since 2003 by the Brazilian Association of Urban Cleansing and Waste (ABRELPE), was probably the most reliable national survey of solid waste management in the country. Before the enactment of the PNRS, the last official data about sanitary conditions across the country was the *National Survey of Basic Sanitation*, published by the Brazilian Institute of Geography and Statistics (IBGE) in 2008. Nowadays, the Brazilian National Information System on Sanitation (SNIS), published by the Ministry of Cities, provides official data on the current conditions of solid waste infrastructure across the country, including the 2015 report, *A Diagnosis of Municipal Solid Waste Management* (SNIS, 2015). Thus, it is the private sector that has been the main conduit for information about the situation of waste management in the country.

In Brazil, the SWM sector has forced the waste issue onto the government's and society's agenda, in a historical process dating from the early twentieth century and involving those concerned with sanitation in such major metropolises as São Paulo and Rio de Janeiro. This movement gained strength from the 1960s on, as it was able to take advantage of the expertise emanating from the new university courses dedicated to sanitation (see section 4.3). Nowadays, in addition to the ABRELPE (mentioned above), other business sector associations have aggregated their interests in specific niches of the solid waste management market. The most influential are the Brazilian Association of Sanitary and Environmental Engineering (ABES), the Brazilian Association of Solid Waste and Public Cleaning (ABLP) and the Brazilian Association of Solid Waste Treatment Companies (ABETRE). Despite their particular interests, they act as a cohesive pressure group, which aims to keep the waste management issue in the public eye and on the government agenda. As mentioned earlier, solid waste management commands a large part of the municipalities' budgets, and some of the members of these associations are major contractors of public service provision.

However, as Carlos Silva, president of ABRELPE, puts it: 'In most municipalities, this [SWM] is not a vote-winning issue. It is not perceived as a matter of priority. It is better to launch a school or a new emergency care unit,[117] or even pave the street, than deal with the waste issue.'[118] Valmir,[119] a municipal engineer in Penedo, explains that, in Brazil, sanitary infrastructures are pejoratively called 'buried infrastructure' (or

[117] The *Unidades de Pronto-Atendimento* (UPA) is the official designation for stationary pre-hospital care facilities, according to the SUS (Brazilian Unified Health System).
[118] Interviewed at the AMLURB headquarter in São Paulo, 5 December 2013.
[119] Interviewed at the Penedo City Hall, Brazil, 23 December 2013.

obras enterradas) in civil engineering jargon – the term is used to describe crucial but less visible urban public works demanding high capital investment, such as sewerage, drainage and landfills, that compete with more visible and popular public infrastructure such as hospitals and schools. As Silva states, in general, mayors prefer to prioritise the more visible public goods than these invisible, buried facilities.

Silva also complains:

> *If the local waste authorities do not have the appropriate technical background and knowledge to develop a SMW system in accordance to his or her specific local situation, that city is doomed to failure. The process can only be developed to a rudimentary stage, because the knowledge of the contractor is limited to the basics, which is basically to take the dustbin lorry, collect the waste and dispose of it in any site. SWM is highly technical. Unfortunately, in Brazil, it is a political issue. Firstly, because the municipalities do not have the technicians and specialists available, and also because, in most municipalities, it does not help bring in votes. SWM is not a priority. Where it is not treated technically, but enters the political sphere, the solutions will certainly not be properly put in place like they should be.*[120]

Thus, representatives of these sectoral associations are active in using both official and business events across the country and the media to publicise the sector's demands. These institutions provide information and consultation, and also lobby the authorities at central, state and local level, in order to influence policy decision-

[120] Interviewed at the ABRELPE offices in São Paulo, 5 December 2013.

making. They are one of the main entities responsible for the advancement of the subject on Brazil's political agenda.

The industrial sector

As mentioned above, the PNRS invites the industrial sector to offer solutions to the problem of post-consumer solid waste. Beatriz Carneiro, general manager of sustainable development at the Ministry of Development, Industry and Foreign Trade (MDIC), explains that the government does not have the expertise to establish reverse logistics (see section 6.3) for all production chains: 'It is not the government's proposal to impose by decree, mainly because only the industrial sector knows the details of its own production chain. The goal is not to impose, but to reach an agreement which guarantees its implementation.'[121]

However, this process poses enormous challenges. The industry across the country is keen on extracting and transforming natural resources into products, and then delivering these products to the consumer; however, in regard to the post-consumer waste generated by this process, the government is requesting that it rethink these logistics in reverse, reintroducing the waste into their productive stream. This a challenging exercise for any sector. The industrial sector claims that these reverse logistics gives rise to new costs that must be added to the final price of the product. Ricardo Young, former president of the Institute of Business and Social Responsibility (ETHOS), an influential NGO that, since 1998, has helped the industrial sector introduce 'social responsibility' business models, summarises the sector's complaints:

[121] Interview via the Internet, 29 May 2014.

> *The industry is keen to produce, but not to recycle. Reverse logistics is a business process of reverse management. The business is responsible for recovering the product, disassembling and re-packing the parts, and finally reselling them on the secondary market. The industrial sector does not have this expertise, and it entails an additional cost to the product, and the recycled resale on the secondary market does not yet cover that cost. We do not have a compensation system to cover this additional cost. Reverse logistics internalises the costs, which are now pervasive in society and have to be privatised. Which is fine from the point of view of sustainability, but not from the perspective of market competitiveness – and this issue must to be considered. As a result, business will be burdened; the costs will have to be transferred to the consumer, thus creating an inflationary [cycle]. Instead, the government should provide tax incentives for medium and long-term commercial strategies. The law should be associated with fiscal compensation.*[122]

Despite these technical and financial problems, there are also numerous competitive economic interests and rivalry within the industry. For example, Paula Bernardes, manager of ABIVIDRO, explains that during the UN's Rio Earth Summit (Eco92), transnational corporations, such as Nestlé, Unilever, Coca-Cola and Procter & Gamble, formed the organisation, Business Commitment for Recycling (CEMPRE),[123] with the purpose of organising the Brazilian recycling system. However, she claims that this powerful economic group, representing major market

[122] Interviewed at the São Paulo's Legislative Assembly, 4 December 2013
[123] Interview via the Internet, 28 May 2014.

forces, put pressure on the decision-making process in order to guarantee that the EPR model would not be implemented in Brazil. Bernardes argues that this sums up the dilemma of the Brazilian waste strategy: 'We have a fragile government unable to face up to the power of capital, which is significantly different to the structure of European governments. This is what lies behind the [problem].'

Trade and business associations, such as the National Conference of Industry (CNI) and the Federation of Industries of the State of São Paulo (FIESP), have also organised events, published documents and actively participated in the debates for the formulation and implementation of waste policies that directly affect the industrial sector. In India, business associations such as the Confederation of Indian Industry (CII) and the Federation of Indian Chambers of Commerce and Industry (FICCI) have carried out an extensive survey and produced a subsequent report entitled, *The Status of Municipal Solid Waste Management in Indian Cities and the Potential of Landfill Gas to Energy Projects in India*, as well as organising debates, such as the 'Conference on Waste Resources', promoted by IBA in Delhi in 2014, and the 'National Consultation Program', conducted in partnership with the MoEFCC in 2015. However, the policy formulation process and the Indian MSW Rules do not directly involve these actors in the debates in the same way as the Brazilian PNRS, and the debates about the implementation of EPR in India have evolved more recently, and have yet to reach a clear resolution.

Ricardo Young, current member of the Environmental Parliamentary Front in São Paulo's legislative assembly, explains that reverse logistics demands a new level of interaction between the government, local authorities and the interest groups involved in the process It is an enormous challenge that requires negotiations between all the

actors involved in the search for solutions, such as fiscal policies compatible with the additional costs imposed on the industry by reverse logistics. The organisation of an economically sustainable recycling chain demands an industrial approach, and needs to include the *catadores*. In Young's view, increasing waste generation is very much a contemporary problem, and local governments in emerging economies are struggling to adapt to this new reality.

Local government

Under the Brazilian Constitution, the local authorities are responsible for public service provision. In order to pressure the municipalities into implementing the national waste policies – as their success is contingent on the actions of the municipalities – the federal government has established tight targets for compliance. The PNRS and the Administrative Improbity Law have empowered the public prosecutor to bring pressure to bear on local authorities, particularly the mayors, to meet the legislation's targets. However, local governments face several obstacles to implementing these measures: a lack of specialised staff, essential equipment and financial resources, among other administrative and political constraints. When new, incoming mayors assume office, they automatically inherit the arrears and liabilities accumulated by their predecessors. Therefore, representative associations of local governments claim that the central government targets are unrealistic, and raise these concerns in deliberative events, as well in the courts and in Congress.

As discussed above (section 5.3), the majority of local governments are not prepared for the PNRS. Young, for example, states that 'the modernisation of the

municipalities to deal with the SWM is the key problem, because very few local authorities can understand what sustainability means'.[124] In addition, as Ricardo Abramovay et al. (2013) argue, it is unrealistic to expect that local governments bear the burden of all the costs of solid waste management. Silvano Silvério, president of the Municipal Authority of Urban Cleaning of the city of São Paulo (Amlurb), explains:

> *We cannot structure a reverse logistics system of packaging, for instance, which comprises about 70% of the dry sections of household waste, and also [waste] from the industrial and private sectors, traders and importers, without including the local governments in the debate. The representatives of local government entities are in dialogue with the MMA to create a feasible and realistic proposal that takes into account the perspective of the municipal governments.*[125]

For example, as sanitary landfills are expensive – their equipment demands an economy of scale – they are only viable for cities of over 100,000 inhabitants. However, 89% of Brazilian municipalities have less than 50,000 inhabitants and 94.5% have less than 100,000. In order to solve this problem, the PNRS established 'municipal consortiums' (Article 8), in which two or more local authorities join forces to share the costs and increase the economy of scale (Article 11) when implementing the legislation. In 2013, there were 166 inter-municipal consortiums with SWM projects, comprising a total of 1,864 municipalities, which amounts to one third of the country (SNIS, 2015: 2).

[124] Interviewed in São Paulo's legislative assembly, 4 December 2013.
[125] Interviewed in São Paulo, 5 December 2013.

The tight deadlines have triggered the main entities involved to lobby for their interests during the implementation. For instance, some associations in this area are providing expertise and working with the government to provide viable solutions by forming municipal consortiums. The five largest, most active and non-partisan NGOs defending the interests and claims of the local authorities are the National Confederation of Municipalities (CNM); the National Front of Mayors (FNP); the National Municipal Association for the Environment (ANAMMA); the Brazilian National Association of Municipal Sanitation Services (ASSEMAE); and the Brazilian Association of Municipalities (ABM). All possess different interests and a varying structural capacity to influence the debate. For example, the FNP comprises the mayors of large municipalities and is technically oriented, while the CNM defends the interests of the middling and small municipalities, and is more politically oriented. While some municipalities are well-structured and prosperous, others are deeply in debt and compromised by clientelism and corruption, and still others have mayors who are almost illiterate and lack any capacity to manage the city. Therefore, these organisations, which are run by experts who lobby for the municipalities' interests at central and state levels, are responsible for enhancing the managerial capacities of local authorities, and have played an important role in aggregating the claims and demands of their associates, sharing information and training, and exerting influence on national policy-making. Acting as pressure groups, they have unified and amplified the voice of local authorities at central government level, managing, for example, to postpone the targets to close all dumpsites.

In addition to their own meetings, all these interest groups have participated in other forums for debate. For example, during the RWM Brasil 2013 trade show, the Local Governments for Sustainability (ICLEI/Brazil) organised a roundtable, at the UK

Trade & Investment (UKTI) stall, for local government representatives to share their experiences and discuss the challenges they face in implementing the PNRS, presenting their case before international experts.



Figure 16: Seminar in the RWM business fair in São Paulo, Brazil, 5 November 2013 (Source: Author's photo)



Figure 17: RWM business fair in São Paulo, Brazil (Source: Author's photo)

In 2014, during the International Solid Waste Association Conference (ISWA), the Municipal Authority of Urban Cleansing in the city of São Paulo (AMLURB) and ABRELPE held a debate with local government representatives to discuss the implementation of reverse logistics, and other issues. One of the challenges raised in these debates is the relationship between the municipal authorities and the organisations of the *catadores*. For example, local governments claim that there are a great number of conflicts between their role in solid waste management, the industrial sector's proposals for reverse logistics and the prioritisation of *catadores*' cooperatives. They argue that they are paying for something that should essentially be the responsibility of the industrial sector, and that the proposals of the industrial sector benefit only the industry. Also, the PNRS mixes social policy, environmental issues and waste management engineering processes. A representative of the municipality of Manaus, in the state of Amazonia, for example, explains that *catadores* demand that the local authorities pay them fixed salaries:

> *How is it possible? The government can hardly even pay all the charges and now we have a new [organisation] knocking on our door... The municipality is unable to pay the co-operatives. Now, they want to receive a fixed monthly salary, social security, labour benefits and an area shed for storage and equipment. The cooperative is not discussing quantities of recyclables, but fixed wages. This means a contract with a new agent, and the Federal Audit Court (TCU) is demanding the municipalities [take] action.*[126]

[126] A debate between local government representatives, organised by the Municipal Authority of Urban Cleaning (AMLURB) and ABRELPE at the ISWA 2014 World Congress, São Paulo, held on 8-11 September 2014.

Municipalities' representatives claim that packaging is a benefit to the industry and the consumers. If society wants this benefit, the householder must pay for the service of recycling their packaging. According to the law, the municipality is obliged to provide recycling services, but the sale of recyclables on the market does not cover the costs. The local authorities argue that the policy must also be linked to the purchase of recyclables by the industry, and if the municipality provides recycling services, the costs must be met by industry.

As can be seen from the discussions above, the implementation of the PNRS requires extensive debates among all the interest groups involved, as they have particular and often divergent demands. The participatory process has provided the opportunity for interest groups to meet and debate the challenges of these policies, in the attempt to negotiate solutions. During the fieldwork for this research, the representatives of these entities were observed presenting their positions at several business fairs, forums and meetings, such as the RWM Brasil, ISWA 2014 World Conference, Recycle CEMPRE and FIMAI,[127] and in institutional forums such as the 4th CNMA and the Thematic Technical Groups (GTTs) of the sectoral agreements on reverse logistics. Despite their political and technical divergences, the representative associations of all these groups, in general, have been unanimous in their criticism of the government's delay in approving important measures. Diógenes Del Bel, director of ABETRE, complains: 'How do you ask a businessman to wait weeks, sometimes months, for feedback? The slowness of the public sector is unacceptable in the business sector.'

[127] IX Seminar on Waste, Recycle CEMPRE and Resource Efficiency and Waste Management Solutions (RWM Brazil), held between 1-2 October 2013 and 2014 and 8-9 September 2014, respectively; XV International Industrial Environment and Sustainability Fair (FIMAI), São Paulo, held on 5-7 November 2013.

These coalitions have been important in aggregating the demands of the main groups responsible for the implementation of the PNRS. The participatory process reveals that the top-down policies of central government need engagement and discussion among interest groups at the bottom of the government hierarchy to better understand how they can be implemented. The participatory process provides some sort of transparency on some government proceedings, since the participants can access public authorities directly. It provides opportunities for the interest groups involved to seek out and negotiate with other parties (government officials, *catadores* and representatives of civil society). Certainly, the involvement of so many interest groups makes the decision-making slower and more complex, but it has shaped solid waste management reform in Brazil, expanding the knowledge about the implications of waste management and public service provision within government and business sectors, society and the informal sector. In general, the majority of interviewees in this research stressed that, despite the complexities and delays, this dialogue between central government, local governments and non-state actors is a fundamental learning process that is essential to the evolution of the whole political system.

7.3 The provision of public MSWM services in India

Introduction

Anand Bhal, economic advisor at the MoUD, points out that 'SWM seems like such a technocratic function, but in India there are many social dimensions'.[128] He claims that although the waste management system is still not in place across the country, the government continues to enact laws that do not represent the reality on the ground.

[128] Interviewed at the MoUD headquarters in New Delhi, 12 March 2014.

For this reason, although this research focuses mainly on the waste policies proposed by central government, the following section explores the impact of these decisions at the local level. Recently, the government's SBA campaign has enlarged the concept of public participation in municipal solid waste management, inviting the ordinary citizen to engage with its 'mission' (section 5.2); this section, therefore, explores the role of the different actors (ULBs, community organisations, the private sector, middle classes and the informal sector) involved in waste management in India.

Urban infrastructure

In both Brazil and India, local governments face severe constraints on the provision of public services to the whole population under their jurisdiction. There are problems of low tax returns, and lack of equipment and trained staff. In many cases, the ULBs do not have even the basic infrastructure in place to formulate a minimum 'municipal plan' that would enable them to access the federal grants available for policy implementation. One remarkable difference between Brazil and India, however, is the variety of actors involved in municipal solid waste management on the ground. As discussed in section 4.2, in Brazil, the majority of municipalities provide solid waste management services using their own employees and equipment, or delegate the services to private companies through outsourcing or concessions. The overall index of regular collection covers about 98.4% of the urban population.[129]

The literature and official documents, discussed in section 4.2, show a different reality in India, both in terms of the variety of groups involved in municipal solid waste

[129] According to SNIS (2015), this coverage varies from 96.7% in the southwest region to 83.7% in the north of the country.

management and also in the variation of models across the country. Travelling in India, it was interesting to observe the impact of the asymmetric features of the MSW Rules in practice: each city's municipal waste management process has its own characteristics, in terms of the type of departments in charge, the systems of collection and the actors involved. For example:

- In Delhi, the door-to-door collections are largely carried out by the informal sector, while in several of the slums and unauthorised settlements, waste is left on the streets and in empty lots. Delhi has a distinctive characteristic that distinguishes it from all other Indian cities: it comprises all three levels of government – the central government, the National Capital Territory of Delhi (NCTD) and the Municipal Corporation of Delhi (MCD). Urban territory administration is also divided between two local bodies: the Delhi Cantonment Board (responsible for the area of the central secretariat and diplomatic enclaves) and the Municipal Corporation of Delhi (MCD). The MCD is further divided into three zones: the SDMC, NDMC and EDMC.130 Each of these municipal corporations has its own mayor, commissioner and assembly. This administrative structure generates a complex overlay of functions, with a multiplicity of agencies and actors involved in waste collection.
- Pune is possibly the most progressive example of urban waste management in India. The Pune Municipal Corporation (PMC) has an agreement with Solid Waste Collection and Handling (SWaCH), a labour union of waste pickers, for the provision of DTDC (dry and wet) waste in fifteen wards in the city, covering some four million households (SWaCH, 2013). Since 2007, the PMC has implemented a

[130] According to the Swachh Survekshan, the New Delhi Municipal Corporation (NDMC) is the 4th cleanest city in India; South Delhi Municipal Corporation (SDMC) is the 39th; the North Delhi Municipal Corporation (NDMC) the 43rd and the East Delhi Municipal Corporation (EDMC) the 52nd. Pune is ranked 11th and Ahmedabad 14th.

participatory budget and established channels of dialogue between municipal officials and interest groups such as the Pune Housing Group (PHG) and the Pune Citizens Environment Forum (PCEF).[131] Avinash Madhale, programme coordinator of the Centre for Environment Education (CEE) (an educational organisation, supported by the MoEFCC, that is committed to promoting environmental awareness and sustainable development), explains that the PCEF represents the interface between civil society and the local authorities, enabling the exchange of information, and the planning and monitoring of public affairs, and this has been crucial to advancing key social and environmental issues.[132]

- In Ahmedabad, meanwhile, collection is largely privatised across the city's wards. The Ahmedabad Municipal Corporation (AMC) has probably one of the most well-structured municipal solid waste management departments in the country, equipped with machinery and expertise. The AMC works with six larger transfer stations, where the vehicles are monitored through information communication technology (ICT), and has dedicated collection points and recycling treatment centres for the construction industry. According to Prashant Pandya, deputy director of SWM, the city is investing in the objective of 'zero waste' by 2031, and was involved in public consultations at the time of this research. Recently, the AMC introduced the 'Swachhta Jan Model', a pilot initiative, involving waste pickers, to collect segregated waste in four wards in the city.

P.U. Asnani (2006: 170) provides an overview of the many different models of solid waste management implemented in different cities across India, including some where

[131] Website: http:/ /pcef.blogspot.com/2008/01/rce-pune.html
[132] Interviewed at the CEE offices in Pune, 27 March 2014.

different parts of the process are provided by municipal corporations with their own personnel and equipment, and others where contracts are agreed with private sector companies or awarded to NGOs, residents' welfare associations and organisations of waste pickers. However, these examples are taken from the larger cities; Chapter 4 has shown that the majority of ULBs are unable to provide their populations with public waste collection and disposal services. As a result, the issues of uncollected waste and the disposal of waste in dumpsites is acute across India. The following subsections provide a brief overview of the different actors involved in waste management in Indian cities.

Urban Local Bodies (ULBs)

Size of population is certainly a factor in the capacity of Indian urban local bodies (ULBs) to provide comprehensive municipal solid waste management services. However, Ramesh Ramanathan (2007) argues that the process of federal decentralisation initiated by the Constitutional Amendments Act 74th (CAA) has not delivered the participation the ULBs demand. As mentioned earlier, the third tier of urban governance in India was introduced in 1994 with two CAAs; the 73rd CAA established the basis for self-governance in rural areas (the 'panshayati raj'); and the 74^{th,} self-governance for urban local bodies. However, Ramanathan (2007: 274) explains that these parallel processes have achieved different results. He gives the example of the different proportion of representatives per citizen in two local governments: one elected representative in an urban government represents ten times more citizens than the does same position in rural areas. According to his survey, in Bangalore in 2007, for example, while one elected representative in the rural area represents 380 citizens, in the urban areas this ratio increases to 3,800 citizens.

Therefore, he argues, an average urban citizen is a hundred times more distant from their representative than the rural citizen, an issue that tends to be increasingly aggravated by the rapid growth of the urban population (Ramanathan, 2007: 274).

Furthermore, in the meetings of the *gram sabha*, the local village self-government organisations, every citizen has the right to vote on decisions concerning proposed projects in the region; while in the ward committee, a similar meeting held in the urban areas under the aegis of the municipal corporation, this participatory process is hindered by limited citizen involvement, questionable appointment processes and the ambiguous mandate of their representatives. Ramanathan (2007: 274) argues that these differences arise partly from the historical processes that resulted in the formulation of these amendments. He explains that the 73rd AAC was the culmination of the ideologies of three generations of Gandhians and decades of debates on national committees, while the 74th AAC lacked the same attention and had to be formulated in a few months during Rajiv Gandhi's term of office to compensate for the lacuna of the third tier of urban governance in the Indian federal structure. Therefore, the urban amendment lacks the spirit and rich debate of the rural amendment formulation. Ramanathan (2007: 675) claims that the proximity of citizens to their local governments is crucial both to improved urban governance and strengthened federalism, but the ULBs currently lack leadership, weakening the bottom-up structure of the federal system. In addition, Loraine Kennedy (2009: 60) states that neither the size nor the specific functions of the ward committees were established in the 74th AAC, and each state has made its own rules, resulting in a large diversity of models.

Ebony Bertorelli of the Janaagraha Centre for Citizenship and Democracy in Bangalore further explains that there is an overlap of intergovernmental institutions involved in urban affairs.[133] For example, there are a variety of parastatal organisations (governmental and quasi-governmental bodies) running municipal affairs while answering directly to the state government. The majority of these bodies do not communicate with each other or with the municipal corporations – for example, the electricity board and the water board have little contact. Bertolli argues: 'There is always a huge amount of overlapping, fragmentation and messy communication, which often means things get sliced and diced without [even] a minimal cohesive structure.'

The private sector

In recent years, there has been an increase in the participation of private companies in municipal solid waste management. The Indian government has encouraged public-private partnership (PPP) projects for public service delivery across the country. PPPs or public-civic groups are agreements between the government and the private sector to mobilise resources for the development of projects, with popular participation. For example, the Janaagraha report (2012: 4) shows several cases of successful PPP projects in cities such as Hyderabad and Guwahati (the entire SWM system); Bangalore, Ahmedabad and Nagpur (door-to-door collections); and Delhi, Coimbatore, Kolkata and Chennai (waste treatment and disposal).

However, large corporations, such as Infrastructure Leasing & Financial Services Limited (IL&FS) and Veolia, two of the major contractors in India, complain of

[133] Interview recorded (38') at the Janaagraha offices in Bangalore, 1 April 2014.

predatory competition in the market. Patrick Rousseau, president of Veolia Water India, believes that the tendering processes are unrealistic:[134] competitors put in bids with impractical prices, win the contracts and after one or two years abandon the projects, claiming lack of economic sustainability; ultimately, both the government and society lose out. Rousseau claims that this problem is repeated across the country. The French multinational has, for example, recently stopped competing in the solid waste management sector in India, restricting their operations to water and sanitation. Rousseau complains that it is impossible to compete with local private players:

> *After seven years of providing services in Chennai, we lost the tender in 2007, abandoning the sector in India. We cannot compete with a local contractor that offers a proposal with 50% of our price. We have strong corporate policies, with payroll taxes, standards to manage the landfills and the health and safe working conditions of our employees. There are no rules for serious private companies in this market in this country.*

Avinash Madhave, CEE/Pune, explains that some tendering processes are manipulated and that not all organisations receive the same opportunities to participate in the bidding process.[135] Even with central government's efforts to encourage PPPs, several projects are not economically viable, and substantial investments are subsequently lost. A report by the Department of Economic Affairs (DEA) (2009: 2), published by the Ministry of Finance in a bid to attract investment into the sector and assist PPP initiatives, acknowledges that 'the urban sector is regarded as a high-risk sector, due to institutional complexity deriving from the

[134] Interviewed at the Veolia offices in New Delhi, 18 March 2014.
[135] Iinterviewed at the CEE in Pune, 27 March 2013.

multiplicity of agents involved in service delivery'. In recent years, new operators in the market, such as waste-to-energy (WtE) organisations, have been lobbying to change the policies so that the waste can be collected unsegregated, contrary to the wishes of the majority of players on the ground.

In general, privatisation, which means the delegation of services to private companies (Kennedy, 2009: 56), had a negative connotation among interviewees in India, mainly because, in seeking to modernise their waste management processes, local authorities tend to displace existing players and grassroots systems, delivering the responsibilities of waste management to private players.

Civil society

The deficiency of services provided by the state and the private sector, especially in underprivileged areas, has led to the emergence of new forms of public participation in the management of public affairs. According to research carried out by Joël Ruet and Stéphanie Lama-Rewal (2009), the failure of the Indian ULBs in the provision of public service provision legitimises the presence of community-based organisations (CBOs), such as NGOs and residents' welfare associations (RWAs), in public affairs. CBOs have a greater capacity for action than the government because they have emerged from the initiative of residents who know their own local problems and have the capacity to improve the conditions of their localities, empowering communities through slum improvement awareness programmes and poverty alleviation through targeted service delivery. Some CSOs assume an institutionalised form, while others are more informal. However, Madhave argues that the problem with this situation is that in some cities, where civil society is not strong, an NGO that decides to fill the

gap left by the ULB becomes a private contractor and starts to assume public responsibilities, but without accountability or ULB control.

The middle classes

The Indian middle classes have been one of the key driving forces in the improvement of the quality of life in the cities. As discussed in section 6.4, in general, the middle classes enjoy higher levels of education, access to professional occupations and better urban infrastructure than the poor. Therefore, they are more willing and able to articulate their demands in relation to urban governance. Section 6.4 has mentioned the term 'bourgeois environmentalism' (Baviskar, 2002 cited in Gill, 2010: 190), where the new middle classes have aggressively promoted their 'green agenda' to improve their urban spaces. Other scholars have employed terms such as the 'middle-classisation' of public demands (Mooji and Lama-Rewal, 2009: 81) to describe the phenomenon of the upper and middle classes advancing their environmental discourse and shaping the urban landscape according to their aspirations for aesthetic beautification and entertainment opportunities, and the cleanliness and safety of their urban environments (Gill, 2010: 191).

In recent years, the urban areas of Indian metropolises have been redesigned to accommodate real-estate projects, with shopping malls, tower blocks, multiplex cinemas and restaurants (Mooji and Lama-Rewal, 2009: 81; Gill, 2010: 191), while the poor and the working classes are displaced towards the urban peripheries, where they strive to access even basic services. The high-consuming upper classes become richer and their areas become markedly 'differentiated' (Deshpande, cited in Mooji and Lama-Rewal, 2009: 83) from the those inhabited by the poorer part of the population. For example, Manisha Anantharaman (2015) has studied the impact of

this process in Bangalore, a city that in two decades has changed from a tranquil town to a megalopolis synonymous with investment and business, home to the headquarters of the major information and technology firms. Her study explores the new trends adopted by the emerging upper classes, based on Western eco-friendly lifestyles, including habits of such as recycling. This phenomenon is quite similar to the trends in wealthier regions of Brazilian cities, where recycling practices are symbols of improved urban spaces and are associated with European lifestyles.

The most active middle-class CBOs shaping Indian urban governance are residents' welfare associations (RWAs). Loraine Kennedy (2009: 67) explains that RWAs are voluntary neighbourhood organisations, formed by householders and usually managed by retired professionals, who leverage their contacts with the bureaucracy to improve services inside the walls of their gated enclaves. Debolina Kundu (2011: 23) claims that the much of the ULBs' service provision has been delegated to RWAs, and this in turn has accentuated inequalities across the cities. She gives the example of the Bhagidari scheme (a citizen-government partnership) in Delhi, where the RWA is responsible for distributing bills, collecting taxes, advocating for residents' interests, coordinating services with different governmental bodies and maintaining public services, such as waste collection and the cleansing of road and community areas, inside the gated enclaves (Kundu, 2011: 24).

Poorer communities do not have the same capacity to raise their demands in urban governance, and the ward committees (WDCs) have been ineffectual at representing their needs. In general, slums and low-income settlements do not have the same capacity or access to resources needed to organise themselves in pursuit of their aims. In addition, as Girish Kumar et al. (2009: 105) explain, citizens know that accessing

public services routinely means paying bribes as part of a system of client patronage, where MPs, bureaucrats and local elected representatives act as gatekeepers of the provision of goods and services. Most citizens are aware that the rich enclaves receive public services through the RWAs, which have direct channels of communication with the local bureaucracy and are thus able to expedite their provision to their wealthy constituencies. Therefore, Kundu (2011: 25) and Ruet et al. (2009) claim that RWAs and wealthy enclaves have created a geography of discrimination and institutionalised disparities inside the city, particularly in terms of access to public services. The RWAs exert a strong influence on the organisation of waste collection, and in general, each RWA has an agreement with a group of waste pickers in the area, who collect the waste from the doorsteps on a daily basis. Mikkey, a restaurant owner in Delhi, claims:

> *Inside the gates of the enclaves, in general, the RWA has its own agreements with waste-pickers' organisations. Those outside the gates have to negotiate directly with waste-pickers' leaders. If we do not want to pay the waste pickers, we have to deliver our waste to the waste dealer's shop or find some place to throw [it away].*

He claims also that although very few householders pay property tax to the municipal corporation, some residents still call this scheme, 'the mafia of waste.' [136]

The informal sector

Unlike Brazil, the majority of primary waste collection in India is carried out by the informal sector: the cities contain a high number of people working informally,

[136] Interviewed on the street in New Delhi, 20 February 2014.

collecting, segregating and moving waste from the streets to dumpsites. This section gives only a brief introduction to the issue of the informal sector in India, as the subject is thoroughly discussed in section 7.5, where it is compared to the informal process in Brazil.

The *Manual on Municipal Solid Waste Management* (MoUD, 2014: 171) separates the informal sector into two categories: the *kadabi* system and 'ragpickers' (waste pickers). According to the manual, about 70% of recyclable materials are handled by the *kadabi* system, which comprises itinerant dealers in waste and junk, who buy only the valuable recycling materials (plastic, cardboard, glass and metal) from householders, while the waste pickers carry out the primary collection, transporting the waste from the doorstep to the collection points, and sorting the dry from the wet waste discarded by householders and shops. The waste pickers charge householders a fee, and complement their income by selling the products to middlemen.

Vaishali Nandan of GIZ explains that there are several other players who extract valuable resources along the waste stream, all with minimal coordination by the ULBs.[137] She describes the competing processes for waste resources, giving the example of the *kabadiwallas*:

> *These informal entrepreneurs are not ragpickers. They come to buy the valuable recyclable materials from householders before the ragpickers. So, even before it enters the waste stream, if you look at the characteristics of the waste, you will not find newspapers, cardboard, metals or plastic of good quality. It will never enter into the waste stream, because the householder*

[137] Interviewed at the GIZ offices in New Delhi, 9 April 2014.

> *has already sold it for a certain price. We have a system where every day somebody is walking around in the colony, collecting and selling these materials. Everything goes, even a bottle, because the PET[138] bottle has a price. Even if it is a little PET of 15 paissa (Rs 0.15). The householder is ready to store it up and give it away, at a price.*

The major criticism in the literature is the fact that these informal players are, in most cases, excluded from official municipal solid waste management, and neither the legislation, in the main, nor the local authorities recognise their role as part of the system.

The *Manual on Municipal Solid Waste Management* (MoUD, 2014: 171) sets out advice for local authorities to ensure the integration of informal workers in the formal solid waste management system by identifying the numbers of informal workers in the city, organising their inclusion with support of NGOs, ensuring their labour rights (social security, welfare benefits and healthcare), and providing facilities (toilets and storage space) and personal protective equipment (PPE). It is interesting to note that the manual (MoUD, 2014: 171) states clearly that these measures should be supported by local bye-laws, but leaves the responsibility of integrating waste pickers in municipal solid waste management to the RWAs, CBOs, NGOs and the private sector (MoUD, 2014: 170). However, these measures need to be ensured at the national level, since, as this research argues, municipal solid waste management is a competitive market dominated by influential economic interests; otherwise, any

[138] Abbreviation of polyethylene terephthalate, a common plastic used in beverage bottles.

improvement in the somewhat conflictual relationship between ULBs and waste pickers will have to rely on the political will and efforts of the local authorities.

Section summary

For decades, the MSW Rules have failed to deliver the promised benefits due to a lack of understanding of the potentialities of all the interest groups involved in the waste management process, and the fact that the policymakers continue to establish financial schemes for waste management that suit their own interests and those of their clients. As long as the government fails to involve all the players in the sector, formal and informal, in the political process, the dissonance between government proposals and the reality on the ground will persist.

Solid waste management in India, therefore, differs from the Western models, and if the Clean India Campaign (or SBA) is to succeed it demands an innovative mindset that takes these differences into account. The campaign has gained the support of ordinary citizens and raised the expectations of all the groups involved in waste management, particularly the informal workers, many of whom have gone unrecognised for decades. In addition, government organisations and NGOs are organising debates and establishing participatory spaces, in order to involve interest groups in the search for answers to the myriad problems faced by local authorities seeking to deliver waste management services across the country. In Brazil, as discussed earlier, these sorts of participatory forums have been crucial to the integration of interest groups into the process of finding solutions, as well as to the creation of public support for the improvement of the legislation.

7.4 The participation of international organisations in the domestic debate

As can be seen in Fig. 5 (section 4.3), which compares the historical evolution of the waste management policy frameworks in Brazil and India, despite all their socioeconomic and cultural differences, the introduction of government measures in these countries has followed a very similar timeline. Of course, this almost simultaneous evolution is not a coincidence: the evolution of solid waste management policies in both countries has been strongly influenced by the participation of international interest groups in their domestic debates. Despite the evidence of this, however, the literature on public participation generally concentrates on the domestic social movements and interest groups; it pays little attention to the activities of external forces and their effect on internal politics. This section, however, explores the influence of some of the key international players in the domestic debates on waste management in Brazil and India, and the channels of interaction between international and domestic interest groups in the sector.

Solid waste management has become a global industry. Never before in history have human beings produced such enormous amounts of waste on a daily basis. *The Global Waste Management Outlook* (GWMO, 2015: 52) estimates that roughly two billion tonnes of urban solid waste are generated every year,[139] and between 2013 and 2014, the municipal solid waste management sector received investments of USD 85 billion, largely for waste-to-energy (WtE) projects (GWMO, 2015: 79). The emerging economies represent a booming market for the global SWM sector, where India alone

[139] This number is only a rough estimation, as that large parts of the world do not have reliable control of their waste streams. Also, the estimated figures are as high as seven to ten billion tonnes per year, as urban waste landfill comprises not just municipal solid waste (MSW), but also commercial and industrial waste (C&I) and construction and demolition waste (C&D), especially in lower- and middle-income countries.

represents 5% of the abovementioned investments (GWMO, 2015: 79). A key feature of these countries is the rise of an aspirational middle class, with increased purchasing power and levels of consumption (GWMO, 2015: 59), and which demands public services of greater quality, improved urban spaces and environmental protection. However, local governments in emerging economies face serious constraints in coping with this consumption frenzy and the vertiginous production of waste: according to ABRELPE (2013: 108), Brazil needs to find waste disposal solutions for at least 3,300 cities.

Despite the socioeconomic and cultural differences, and the various challenges of implementation, waste management in both Brazil and India are undergoing similar changes in terms of legislation, technical and human processes, and the technologies for waste treatment. Nowadays, environmental protection, best practice and models for sanitation and waste management are established by a variety of state and non-state international organisations. International bodies, business concerns, experts and academics, by disseminating information and proposed solutions on a global scale, contribute to the spread of a uniform terminology throughout the world. Sands (2003: 71) argues that the history of the international environmental law has evolved with active participation of state and non-state actors. Since the early international treaties on the environment, such as Stockholm and UNCED, mentioned in section 4.3, subsequent international agreements and documents focused on environmental issues have been ratified, legitimating the participation of state and non-state interest groups at international, national, regional and local levels.

At a global level, the United Nations Environment Programme (UNEP) is the UN's main body for the promotion of the international coordination of activities, providing

technical and legislative guidance and sharing scientific knowledge and information on the condition of the global environment (Sands, 2003: 83). At this level, specific sectors have institutionalised associations to defend their interests in the global arena. At present, the International Solid Waste Management (ISWA) is the leading NGO promoting the solid waste management sector worldwide. In 2014, this organisation had representatives in ninety-six countries and links with government authorities, intergovernmental organisations, the industrial sector, the scientific community and interest groups around the world. According to the ISWA report, in that year, the institution promoted sixty-two international events, including conferences, training programmes and study tours; nine working groups and scientific and technical committees; the publication of the academic journal, *Waste Management & Research*; and funded and developed projects in cooperation with UN agencies such as the United Nations Industrial Development Organisation (UNIDO) and the United Nations Framework Convention on Climate Change (UNFCCC). In 2015, ISWA initiated the publication of an annual report, *Global Waste Management Outlook* (GWMO), in partnership with UNEP and several leading global experts, scientists and academics. This document aims to provide a credible overview, as well as in-depth analysis and recommendations for policymakers and practitioners, on the current state of solid waste management worldwide (ISWA Report, 2014: 22). The studies were conducted by a community of international researchers, sharing the expertise of practitioners based in different countries. A second phase of this research has been organised by the United Nations Environmental Assembly (UNEA) to explore regional cases of waste management practices. In summary, the figures above indicate the influence of these international associations; in many cases, they have helped to

advance decision-making and professionalise solid waste management practices worldwide.

These global organisations establish partnerships with organisations operating at the national level. ISWA has affiliate members in Brazil, the Brazilian Association of Urban Cleansing and Waste (ABRELPE), and in India, the National Solid Waste Association of India (NSWAI). In 2014, ABRELPE organised the ISWA World Congress (ISWA 2014) in São Paulo, a five-day event with fifty-five sessions and around 220 speeches, which ran in parallel with a trade fair and an international forum (ISWA, 2014: 14). Fig. 18 shows the closing ceremony of the event. Later, in 2015, ISWA and ABRELPE worked together with the municipality of São Paulo to develop its City Assessment and Action Plan.[140]



Figure 18: ISWA2014 World Conference, São Paulo, Brazil, 8 September 2014 (Source: Author's photo)

[140] ISWA's newsletter: *Global News*, Issue 39, February 2016.

Business fairs and international forums contribute to the spread of information and the fostering of relationships between international and domestic interest groups. During the three-day event, around a thousand participants (public officials, business and experts) from 64 countries met to share experiences on solid waste management. In India, NSWAI promoted the conference, 'Safe Disposal of Municipal Solid Waste', in the SNDT Women's University, Mumbai, attended by academics and representatives of ULBs (Figure 19). The CEOs of these institutions are respected in this sector and are actively engaged with policymaking and implementation – for example, Carlos Silva, director of ABRELPE, participates closely with government bodies and business entities to promote solid waste management practices, while Amiya Sahu,[141] founder of the National Solid Waste Association of India (NSWAI), helped formulate the MSW Rules 2000, and continues to be very active in waste management politics.



Figure 19: NSWAI conference, 'Safe Disposal of Municipal Solid Waste', held at the SNDT Women's University, Mumbai, on 26 February 2014 (Source: Author's photo)

[141] Interviewed at the NSWAI offices in Mumbai on 27 February 2014.

However, conferences and workshops are not participatory spaces, they are not decision-making forums open to ordinary citizens discuss policy alternatives. In fact they are performative spaces designed and controlled to promote and reinforce powerful interests (Turnhout et al., 2010).

In addition to the sectoral associations mentioned above, there are also important intergovernmental organisations with branches and operations in both countries, along with specific projects dedicated to SWM, such as German international development agency GIZ, the UK Trade & Investment (UKTI) and the International Council for Local Environmental Initiatives (ICLEI). These institutions are involved in the political process at all levels of governance, and take part in gathering information, publishing reports and providing assistance with the political and managerial processes in these countries. Vaishali Nandan,[142] a senior technical expert at GIZ, explains that the agency provides technical support to the Indian government; creates development programmes for areas such as sanitation, climate change and fiscal reforms; and establishes links and promotes cooperation between domestic and international institutions, including public bodies, industries, research centres and NGOs. In India, the majority of events and actions on waste management have received support from GIZ – for instance, it helped prepare the recent *Manual on Municipal Solid Waste Management 2014*, in partnership with the MoUD (MoUD, 2014b). However, at the same time as these organisations provide assistance, they also facilitate the efforts of companies in their home countries to sell their products in

[142] Interviewed at the GIZ offices in New Delhi on 9 April 2014.

these still under-served markets. It is no coincidence that Germany is selling incinerators to both Brazil and India.

In Brazil, the *Guidance Manual for Preparation of Solid Waste Management Plans of the MMA* was developed in partnership with the International Council for Local Environmental Initiatives/Brazil (ICLEI) and the British Embassy (ICLEI, 2012). The ICLEI is an international organisation, with some 1,200 associated local governments around the world, focused on sustainable development (ICLEI, 2012: 12), and branches in both Brazil and India. During the RWM Brazil, the ICLEI organised a meeting at the UKTI stand, with representatives from several Brazilian municipalities and a representative of the British Waste & Resources Action Programme (WRAP) to debate the challenges of implementing the PNRS.

In addition, there is also the increasing participation of international consultants such as Price Waterhouse Coopers (PwC), who provide assistance and help compile market reports on urban sector infrastructure – for example, the reports on the waste management sector in Brazil, published by the Union of the Urban Cleaning Companies of the State of São Paulo and the Brazilian Association of Solid Waste and Public Cleaning (Selur/ABLP, 2011), and on investment opportunities in Indian 'smart cities'.[143] These documents assist in opening up new markets to donor agencies, such as the World Bank and the Inter-American Development Bank (IDB), which provide the funding for international corporations to make large-scale business investments to foster modernisation in these countries.

[143] PwC website: http://www.pwc.com/gx/en/industries/government-public-services/public-sector-research-centre/publications.html

In addition, the grassroots social movements, Women in Informal Employment: Globalizing and Organizing (WIEGO) and the Global Anti-Incinerator Alliance (GAIA), are among some of the NGOs that have expanded their international networks, advocating sustainable ideologies, connecting interest groups, and exchanging information and practices between countries (GWMO, 2015: 170).

These figures show that the solid waste management sector has become a global institutional force; international interest groups in the sector wield significant influence, participating actively in the decision-making processes in India and Brazil, influencing the formulation of public policy and introducing global models of waste management practice to these countries.

Conferences and business fairs

Nowadays, the most advanced technologies on waste management and sustainable development are the property of international corporations based in the EU, US, Singapore and other industrialised countries. The development of this technology began in some of these countries in the 1970s. At present, Brazil and India represent a huge market for these international interest groups and investors. Business fairs and conferences are the main institutional spaces in which partnerships between domestic and international interest groups are forged, commercial technology sold and management processes introduced.

Business seminars have become fashionable in recent years, although they are increasingly expensive, resembling closed clubs of businessmen. In these business fairs, industries and consultants establish contacts in order to sell equipment and services. While some giant global corporations, such as Veolia, have clients in Brazil

and India, other companies prefer to establish partnerships with domestic players, as the waste management sector is an extremely politicised environment. Opinions of international businessmen about the waste management market in Brazil and India vary. From the point of view of some of the representatives of international companies gathered at these business fairs,[144] the Brazilian industry is underdeveloped and represents huge market opportunities. The PNRS assigns economic value to waste, creating opportunities for financial returns in a way that is very familiar to international investor mindset. Others, such as those interviewed in Brazil for this research, claim that the Indian market poses a greater risk: the Indian waste management industrial sector competes in the market with impracticable prices, and its low gross domestic product (GDP) and the lack of revenue from ULBs undermines the economic sustainability of its SWM projects.

The latest state-of-the-art technologies always attract attention in these international exhibitions: traders, experts and even academics present the successful examples of the most industrialised countries as an option for less developed countries. For example, in the conference, 'Safe Disposal of Municipal Solid Waste',[145] organised by NSWAI, speakers presented high-tech solutions implemented in Finland as a solution for Mumbai. Of course, such technology may be serviceable in India, but not without significant modifications, taking into account the social, economic, cultural, climactic and geographical differences. One evident example of the transfer of technology from the North to the South is the case of waste-to-energy (WtE). Nowadays, there is strong pressure for the implementation of WtE projects in both

[144] Interviews with representatives of international companies conducted during the RWM business fair in São Paulo, 1-2 October 2013.
[145] SNDT Women's University, Juhu, Mumbai, 26 February 2014.

India and Brazil; incineration has become the focus for major enterprises and represents the major part of investment in the solid waste management sector in emerging countries (GWMO, 2015: 79).

The WtE process is interesting as a case study of public participation, since few communities will accept an incinerator in their backyard and there are always strong protests against the installation of such plants; however, industry lobbies counteract this local opposition at the national policy level, pushing for the implementation of these projects. In India, the purchase of large Chinese incinerators has been presented as an economic solution for the country's metropolises: despite all the problems related to low calorific power due to the large percentage of organic material in Indian waste, local authorities have been opting for incineration plants. Tarun Rokadiya,[146] general manager of Abellon Clean Energy Limited, explains that because municipal solid waste management cannot produce projects that are economically sustainable, as the tax revenues are very small, the sector has lobbied for a change in policy so that entrepreneurs can sell the energy generated by the mass burning of urban solid waste to the government to compensate for the costs of incineration.[147]

The PIL against the MSW Rules 2013 is evidence of the lack of citizen participation in decision-making in India. The activists were forced to use the courts to halt the bill. If approved, the new legislation would had changed the waste collection process in

[146] Interviewed at the Abellon offices in Ahmedabad, 6 March 2014.

[147] According to some interviewees in the business fairs, it is cheaper to build an incinerator plant in India than in Brazil. In India, the system of environmental protection is simpler; the Indian legislation is out-of-date, as it was launched before the European directives, thus allowing higher emission levels. The lobby for WtE has reclassified the energy generated from the burning of waste as a renewable energy. Without an institutional space for dialogue, it is more difficult for ordinary citizens to access, for example, lobbies in parallel sectors, such the energy sector, in the case of WtE. Therefore, only those with access to the decision-makers enjoy the advantage, without any participatory debate.

the country, allowing some private players to collect the dry and wet waste together in a mixed state. This is a procedure that is only suitable for incineration – a technology that favours only a small number of players who have access to the decision-makers, to the detriment of the rest of the formal and informal players in the sector, whose subsistence is, in most cases, entirely based on the income extracted from recycling.

Among this enormous exchange of business opportunities and technology between the most industrialised Northern countries and the Southern transition economies, there is little South-to-South exchange of experiences. The only solid waste management business interaction between these two countries encountered during the fieldwork was the joint venture, 'Antony Lara Enviro Solutions', undertaken by two major industrial groups from India and Brazil, who are building the sanitary landfill, Kanjur, in Mumbai.[148]

Thus, the debate on MSWM in both countries must take into account the participation of international pressure groups, which have exerted significant influence on the decision-making processes in both countries in terms of transfer of knowledge and technologies, and lobbying power. For example, as discussed in section 5.3, the strong lobby for retreated tyres inside the Brazilian Congress presented an obstacle to the formulation of a national waste policy until 2006, when the Brazilian proposal to ban the importation this sort of waste from developed countries was voted on at a global level in the Conference of the Parties (COP8) at the WTO. As Valverde states, the retreated tyres lobby managed to halt the formulation of a Brazilian waste policy for

[148] I was welcomed in Mumbai by Jose Jacob, owner of the Kanjur landfill and the Indian partner of the joint venture, on 28 January 2014; I tried to contact his Brazilian counterpart, the owner of Lara Central de Tratamentos de Resíduos, but without success.

many years. Nowadays, however, the market has changed, society is more engaged and new legislation has empowered the judiciary and government agencies to enforce the law. In addition, some business groups are beginning to recognise the waste hierarchy and the potential of 'take-back' programmes as a market strategy, creating opportunities for innovation and the entry of new players into the system.

The influence of international interest groups in the domestic debate divides opinions. On the one hand, proponents of a more open market advocate the participation of international interest groups in the domestic market, claiming that this will prevent the monopolies of a few economic elites dominating the provision of public services. On the other hand, as discussed in Chapter 2, post-developmental theory, which emerged in the 1990s, mainly through the works of Arturo Escobar (1995), strongly criticises the large-scale Western programmes propagated by politicians and international donor agencies. The Colombian scholar shows how the discourse of economic modernisation, based on the transfer of large investments and technology from the North, creates dependency and eventually leads to neo-colonialism. In fact, the economic model based on Western living standards, characterised by increasing levels of production, consumption and urbanisation, has, in many cases, led to poverty and pollution in the South (Escobar, 1995: 14). As he points out, 'the dominance of this knowledge system has dictated the marginalisation and disqualification of non-Western knowledge systems' (Escobar, 1995: 13), and 'science and expert discourses such as development produce powerful truths, ways of creating and intervening in the world' (Escobar, 1995: 20).

However, in the eyes of businessmen, entrepreneurs and governments, these investments, business opportunities and international partnerships are crucial for the

development of solid waste management processes in these countries. Also, many grassroots movements and NGOs currently operate by employing similar strategies, partnering with international pressure groups, thus blurring the boundaries between public/private and formal/informal activities.

7.5 A case study of waste pickers in Brazil and India

If solid waste management is treated purely as a 'techo-legal process', to use Rajamani's expression (2007: 306), however, it fails to take into account the presence of the waste pickers. The issue of waste management in developing countries demonstrates that, in addition to the problem of handling and finding appropriate destinations for the increasing amount of waste generated, there is also the sensitive issue of the sector's army of informal workers (Un-Habitat, 2010). This is a topic that divides opinions due to its complex social and economic dimensions. In general, scholars, activists and NGOs advocate for the inclusion of waste pickers into the formal waste management system, while the corporate concerns in the sector and the authorities often have difficulty integrating them. In addition, these workers are frequently marginalised, due to their unhygienic and risky working conditions, and to racial and caste discrimination.

Anyone who visits a major city in Brazil or India will notice the presence of informal waste pickers. They are responsible for collecting, transporting, sorting and separating recyclable material from the majority of the waste generated in the urban areas. In Brazil, the *Bolsa Família*, a Brazilian conditional cash-transfer programme for low-income families, registered some 800,000 waste pickers across the country in 2012 (Gonçalves, 2012: 41). In India, Annepu (2012: 76) estimates that 2.86 million people work in informal waste collection and recycling, which represents 0.75% of India's

urban population. Waste picking is the only alternative for a population excluded from the labour market – migrants, low-skilled workers, the elderly, disabled and children, most of them residents of the slums, viaducts and streets of the metropolis, some of them illiterate and without identification documents. The majority of this population, therefore, works informally, dragging sacks of waste or transporting recyclables in pushcarts through the streets, or scraping a living by scavenging on dumpsites.

This section explores the participation of this particular social group in the solid waste management sectors in Brazil and India, and their ability as individuals, social movements and interest groups to influence the decision-making process in these two political contexts. The section is divided into four parts: a review of the struggle of waste pickers for inclusion in the waste management system; the differences between waste pickers in Brazil and in India; their forms of organisation for political and economic participation, such as labour unions, cooperatives and NGOs; and the difference in achievements of waste pickers in these two countries.

The struggle for recognition

As the previous sections have shown, waste management is an extremely politicised issue. In Brazil, the PNRS, and the institutional participatory spaces it has created, have allowed the more institutionalised interest groups to influence the political process. In India, the sector has an array of formal and informal actors providing services at the local level, but (as this research has revealed) few institutional spaces in which non-state actors may gain access to the decision-making process at the central level. In both countries, as elsewhere, the contract for public service provision of solid waste management is especially competitive, since it can represent up to 15%

of the municipal budget (UN-Habitat, 2010; 21). In addition, the profitability of the market and the competition for waste resources has been growing worldwide as a result of increasing levels of waste generation. This is especially the case in emerging countries, due to the rise of a new middle class, with new consumption patterns, coupled with the scarcity of urban space to dedicate to landfill. The competition for contracts, and the rapid evolution of technologies and managerial processes, have put pressure on the market – and consequently on the conditions of the waste pickers. In this competitive, dynamic and increasingly high-tech environment, waste pickers struggle to survive. The only way to make their voices heard and to justify their inclusion in the waste management system is through collective organisation and institutionalisation, in accordance with the rules of the political system and the market. However, before entering into a discussion on the participation of waste pickers, it is necessary to first determine the reason why waste pickers should be integrated into the waste management system.

In Brazil, the waste pickers' cause helped bring the issue of waste to the attention of society. To the ordinary citizen, solid waste is almost invisible – most people want all types of waste kept out of sight. Therefore, the image of human beings earning a living by picking through mountains of waste in deplorable conditions has been enough to put the waste issue on the public agenda. However, when the issue enters the political arena, it is a struggle to maintain that waste pickers or *catadores* should have special rights or any type of priority in terms of waste resources and service provision, in the face of such strong competition. Some critics regard the appropriation of the image of waste pickers, mentioned above, as a political ploy: they claim that the *catadores* have been exploited for political purposes, and that only their leaders and other highly articulate individuals have ever benefitted from this process.

In general, the business sector is opposed to the logic that underpins the public policies that attempt to address informal working and underemployment. João Gianesi Neto, vice president of the Brazilian Association of Solid Waste and Public Cleaning (ABLP), claims that social issues should not be mixed with technical and managerial processes in the PNRS.[149] He claims that the social element of the legislation is poorly defined, asserting that 'the *catador* must be in considered in the legislation, but not prioritised', and that it is naive to assume that *catadores* can solve the problems of the enormous amount of waste generated today. Ricardo Young, a councillor in the legislative assembly of São Paulo and former president of the ETHOS Institute, elaborates the view of the industry:

> *The work of the catadores should be regarded as a transitional or immediate survival job. But you cannot think of this sort of work as a structuring element of the recycling chain, because it is very fragile, not only socially, but also from the point of view of consistency. A recycling chain demands constant re-feeding of secure and reliable volumes [of waste], because the whole production relies on it. Recycling cooperatives have proved fragile. From the social perspective, there is no doubt that they present a solution: cooperatives have gotten a lot of people out of poverty, also creating the conditions for individuals to leave the waste chain. But, then, their inconsistency prevents a more industrialised approach, which this [sector] eventually demands.*[150]

[149] Interviewed at the ABLP offices in São Paulo, 10 October 2013.
[150] Interviewed in São Paulo, 4 December 2013.

Flávio Ribeiro of CETESB also claims that the PNRS is still only partially successful as a social policy, as it does not generate real autonomy for the *catadores*:

> *It is necessary to seek new forms of social and economic inclusion. The ideal scenario is to take the individual out of poverty, to empower him and create conditions so that the catador can free himself from a condition of dependency. Once this trajectory is completed, the individual has to leave that condition and compete in the market. The government cannot bear the weight of maintaining special conditions for this individual to the detriment of other agents'.*[151]

In Ribeiro's view, ideally, cooperatives should become enterprises and compete in the market; however, he believes there is political exploitation involved. He claims that the final target of the PNRS is not social inclusion, but the establishment of the cooperatives themselves. Therefore, the problem lies in the fact that the PNRS encourages the proliferation of underemployment and reliance on assistance from the state, which gives rise to exploitation for political purposes.

On the other hand, supporters claim that, due to their socio-economic conditions, waste pickers and their families are one of the most vulnerable groups in the population: they are exposed to the risks caused by solid waste, such as disease and pollution, because they work with hazardous materials, live in precarious dwellings and have little power to demand healthcare and other resources (Chintan, 2011: 37). Some waste pickers have never had access to education, and some do not even possess identity documents. In addition, alcoholism, drug addiction and mental illness

[151] Interview recorded (1:10'55") at the CETESB headquarters in São Paulo, 6 January 2014.

are frequent problems, making their social integration, including holding down regular jobs, more difficult.

The informal sector of waste collection and recycling, therefore, provides a livelihood for a large percentage of the poor in urban centres who would otherwise have no access to the labour market. Also, leading researchers in the field (Scheinberg et al., 2006, Wilson et al., 2006, Dias, 2010a) argue that the inclusion of waste pickers contributes to the sustainability of municipal solid waste management in low-income and transitional countries. The survey of UN-Habitat (2010: XXIII) on SWM in developing countries shows that the informal sector complements local governments' capacity to deliver public services, saving almost 15% of the municipal solid waste management budget, by collecting, recycling and composting part of the waste that otherwise would fall to the responsibility of the municipality (UN-Habitat, 2010: 21 and XXVI), with all the added costs, and health and environmental impacts.

However, as Bharati Chaturvedi (2008 cited in Scheinberg et al., 2011: 195) explains, without their political participation, the pressure of stronger political and economic forces may lead to the criminalisation of waste pickers' activities and their further marginalisation. Therefore, ignoring or removing the informal sector may create competition for waste resources between the existing informal sector, contractors and waste authorities, and to an increase in municipal waste management-related costs to taxpayers (UN-Habitat, 2010: 132). Moreover, Anne Schienberg et al. (2011: 197) claim that in emerging economies, for the most part, the informal sector is linked into the formal sector and the recycling chain, filling specific niches in the waste stream. Even some formally employed waste workers sometimes work informally to complement their income.

Thus, the proposal to include waste pickers within the formal waste management system provokes a complex debate. The integration of all interest groups in waste management and planning is also recognised as a key feature of the Integrated Solid Waste Management (ISWM) approach, which is now generally accepted worldwide. This approach entails not only introducing the most up-to-date technology, but also taking into account all the particular local strengths, when planning a solid waste management system for a specific city or region (UN-Habitat, 2010: 214). All interest groups must be included in the processes of planning, implementing and monitoring, where the best option is the recognition and integration of formal and informal sectors in the process (UN-Habitat, 2010: XXIII). Sonia Dias (2009: 101) defines 'integration' as any formal arrangement (agreement, contract or commitment) between waste pickers' organisations and the municipality that guarantees their inclusion in the legalisation for the provision of services related to waste management. The legislation is a key starting point in the recognition and establishment of the role of waste pickers as economic actors in the sector (Dias, 2009: 102).

Nevertheless, legislation alone is not enough to guarantee the waste pickers' integration into the waste management system. The following section compares the different modes of participation for waste pickers in Brazilian and Indian waste management scenarios, exploring the engagement of individuals with interest groups, and the capacity of such interest groups to shape waste policies that will affect their lives. The section aims to understand how waste pickers' participation in the political debate has been shaped in each country, and how this participation has influenced the outcomes, in particular their inclusion in the waste management system.

The differences between waste pickers in Brazil and India

Despite certain common features mentioned earlier, the Brazilian and the Indian waste pickers' situations are quite distinct. According to Lakshmi Narayan, co-founder of Solid Waste Collection and Handling (SWaCH), the famous Indian waste-pickers' labour union, the main difference between Latin American and South Asian waste pickers is the fact that the former are fighting to maintain their labour rights and their access to recyclables, while the latter are regarded primarily as waste collectors, in addition to their role in recycling per se.[152] In Brazil, urban waste collection has, over the decades, been a public service provided by the municipalities, while in several Indian cities, waste pickers fill the gaps in local authority service provision, collecting dry and wet household waste directly from citizens' doorsteps and sweeping the streets. Figs 8 and 9 in section 4.2 shows the primary collection by waste pickers and a collection point in New Delhi, where the waste is deposited to await secondary collection by the local authority.

The role of religion

Another crucial difference is the attitude towards poverty and waste of the two main religions in these countries, which permeate societies in which 88.9% of Brazilians are Christians (IBGE, 2010) and 79.8% of Indians are Hindus (Census of India, 2011). In Brazil, there are no religious cleavages, and the problem is almost exclusively linked to racial and class divisions. According to research carried out by

[152] Interviewed in a park in Pune, 28/3/2014.

IPEA (2013: 44), based on the 2010 census,[153] two-thirds of *catadores* are black (66.1%) and one third are women (33.1%), and the rate of illiteracy is quite high (20.5%), in comparison to the general illiteracy rate in Brazil of 9.4%. In fact, historically, the support of the left-wing branch of the Catholic church was crucial to strengthening social movements in the 1980s and 1990s. Márcia Hirata (2011) explains that the Catholic international organisation, Caritas, was established in São Paulo to help organise homeless people living in the city centre, providing land for shelters and mediating between the government and social movements to form the first cooperative of *catadores*.[154]

The caste system

In India, the Hindu caste system is by far the major barrier for Indian waste pickers. This is a millenary hierarchical system, where individuals in society are divided according to their race and the occupation of their ancestors.[155] The large majority of waste workers are members of minority communities, such as Dalits or other so-called 'backward castes'.[156] Kaveri Gill (2010: 7) explains that the occupational rigidity of caste status prevents these minorities from accessing formal work opportunities, and the lower social ranks – the scheduled castes (SCs), scheduled tribes (STs), Muslim minorities and 'untouchables' – are considered 'a permanently

[153] According to the IPEA (2013: 42), the labour activity categorised as 'collector of waste and recyclable materials, sorter of waste and sweepers' was first included in the census data in 2010, classifying a total of 387,910 individuals across the country. Researchers state that this figure is set too low, once the facts that the census is self-declaratory and some respondents also have other work are taken into account.

[154] Recently, theologian Leonardo Boff (interviewed in Brasilia during the Waste and Citizenship Festival on 29 October 2013), a famous promoter of liberation theology in the 1970s and advocate for the poor, an ecologist and a Marxist, was one of the guest speakers in the 'Waste & Citizenship Festival', held in Brasilia in 2013.

[155] The term 'caste' comes from the Portuguese, *casta*. The social stratification of the caste system was established during the British Raj, dividing society hierarchically, according to race and origin: Brahmins, Kshatriyas, Vaishyas, and Shudras and excluded castes, the Dalits, in addition to scheduled castes (Dalits) and scheduled tribes (Adivasi). Article 15 of the Indian Constitution establishes that discrimination against Dalits is illegal, and there are now specific policies and quotas implemented in schools and public employment.

[156] Dalits are the 'untouchables', classified officially as 'schedule castes' (SC).

polluted people' due to 'the hereditary pollution work assigned to their castes' in the past (Gill, 2010: 91). Gill (2010) identifies several academic studies (for example, Searle-Chatterjee, 1979; Huysman, 1994; Deliège, 1994, 1997; Strefland, 1979) that show how the caste system has historically ascribed lower caste status to waste workers. In her survey of the informal urban economy, Gill (2010: 94) shows that even among informal waste workers there are hierarchical differentiations between those handling dry waste and trading in recyclable materials and those working with degraded materials such as night soil, animal carcasses and sweepings. Barbara Hariss-White's (2016) research, in a city in the state of Tamil Nadu, shows that 40% of waste workers are Dalits, 30% are scheduled tribes and the rest are members of backward castes; the private sector of recyclables is dominated by Nadars[157] and the second-hand market by Muslims.

In addition to the different cultures and beliefs, there are also the questions of regionalism and gender. Most waste pickers in Indian metropolises are migrants from rural areas or other neighbouring countries. In her research on waste pickers in Brazil and India, Dias (2009: 107) shows that Bangladeshi migrants and Dalit women are even subjugated by other waste pickers on the streets of Delhi. Therefore, the caste system both prevents individuals struggling against their social conditions and impedes collective struggle. Gill (2010: 91) states that the caste system separates 'untouchables from the rest of Indian society'. As discussed in section 5.2, some critics show that the Clean Indian Mission (SBA) cannot achieve success while this cultural discrimination still exists.

[157] A specific and prominent 'untouchable' caste in the state of Tamil Nadu.

Jean Drèze (2012) argues that the caste system is an instrument of power used by the upper castes that dominate the main positions in public, private and social institutions. He gives as an example a case study in the city of Allahabad, in the state of Uttar Pradesh, which explores caste hierarchy in terms of positions of power and influence (POPIs). The sample shows that POPIs in the city are dominated by two upper castes (Brahmins and Kshatriyas): they occupy 1,000 positions in twenty-five public institutions, which means that 75% of the main positions are in the hands of two upper castes in a state where they represent only 20% of the population. Even worse, the upper castes dominate 80% of POPIs in NGOs and trade union leadership positions, 90% of the executive committees of legal associations, and comprise 100% of office-holders in the press club, while there are no Dalits in those institutions, except for the university because of the mandatory quota system.

The first conclusion of this comparison between the waste pickers' conditions in Latin America and South Asia is the fact that, despite decades of campaigns and social movements, waste pickers in India continue to be stigmatised and marginalised, and excluded from the political processes of solid waste management. An Indian high-ranking commissioner or director of a corporate contractor would not debate policies with a waste picker in the same forum: in general, they come from different castes, and cultural and religious tradition does not allow for this sort of proximity. In Brazil, by contrast, the implementation of the national waste policy is currently debated in several conferences and business fairs across the country. In many of these events, the leaders of the National Movement of Catadores (MNCR) sits at the same table with representatives of government authorities, industries and other players to discuss the feasibility of proposed strategies. The engagement of *catadores* in these events is critical to ensuring the improvement of their socioeconomic conditions. Comparing

the political participation of waste pickers in India and Brazil, the negative effects of the caste system is extremely clear. This begs the question of how Indian waste pickers can participate in the democratic process if they cannot dialogue with the decision-makers.

Recognition and waste management policies

One example of the differences evident in Brazil and India is the way waste pickers are regarded in the waste legislation in these countries. A key feature of the Brazilian waste policy is the recognition of solid waste as an economic good of social value that generates income and citizenship (PNRS, Art.6th, VIII). Recognising this means prioritising the inclusion of waste pickers in the municipal collection of recyclable waste and reverse logistics programmes (PNRS, Art.36th, VI, §1st). The PNRS establishes that, in order to access federal resources, municipal governments should deploy segregated waste collection, with the participation of *catadores*, organised in cooperatives or other forms of association. Moreover, the legislation allows financial incentives for projects developed in partnership with cooperatives that enhance the consolidation of shared responsibility for the product's lifecycle and the operation of reverse logistics. The government provides lines of credit for infrastructure and equipment (treadmills, presses and trucks) for cooperatives via institutions such as the Federal Savings Bank (CEF), the Ministry of Cities and the National Health Foundation (FUNASA) in the Ministry of Health. Along with the enactment of the PNRS, the government has established the Pro-Catador Programme (Decree 7,405/10) and the Inter-ministerial Committee for Social and Economic Inclusion of Catadores (CIISC), in order to integrate federal government actions that improve the working conditions of *catadores*, such as the expansion of socioeconomic opportunities and

structures for productive organisations and recycling trading chains. Despite criticism of the mix of technical managerial processes and social issues in the PNRS, this legislation provides mechanisms to ensure the integration of this interest group in the waste management system.

Meanwhile, in India, the MSW (M&H) Rules 2000 do not recognise the informal recycling sector. Chaturvedi and Gidwani (2011: 134) stress that 'the Solid Waste Rules emphasises the need for recycling. However, they do not acknowledge the right to livelihood of [the] informal sector recycling workers anywhere in their mandate.' The waste pickers were only legally recognised in the National Environmental Policy in 2006; however, it seems that this national legislation is the exception that proves the rule, as the MSW Rules 2000 remain the guiding principles for the sector and the local authorities. These authors claim that the absence of recognition of the informal sector in the court's judgement on the PIL 888, and consequently in the waste rules, has had a detrimental effect on policy decisions.

The new MSW Rules 2016 finally mentioned waste pickers. The guidelines for SBA (MoUD, 2014a: 15) mentions in Article 2.5.5 that ULBs should prioritise upgrading the conditions of the informal sector (waste pickers), enumerate them and integrate them into the formal system of municipal waste management. However, although they are mentioned, there are no clear measures on to how to integrate waste pickers. The waste pickers of different regions of the country have been left to rely on the political will of their own state legislators and the administrations of the ULBs. Narayan of SWaCH claims that their mention in the policy has been purely tokenistic: 'It is wrong to mention them [waste pickers] and define them without providing very clear

guidelines on how they should be included. The words "waste pickers" are written in the Rules, but they are not integrated in the process at all.'[158]

Although waste pickers have been recognised in the national legislation, in many cases, they are not officially recognised by local authorities. Not only academics have criticised the negligence of the MoEF, even government reports published over the last decade have shown that the role of the informal sector in SWM has not been addressed appropriately by government officials. CAG (2007: 33) states that, even though India is a signatory of Agenda 21, which recommends that the government support the inclusion of the informal sector in waste management, the MoEF does not recognise waste pickers as agents in the recycling and reduction of waste, and up to 2007, only four pieces of state legislation have recognised these groups' contribution to the recycling process. M. Ramachandran, a former minister in the Indian government, in a letter to the Chief Secretary in 2010, stressed that waste pickers "are often ignored in urban project planning, although their activities are vital to the life of the city" (MoUD, 2013: Appendix).[159]

This striking difference in outcomes is also the result of the historical process of political organisation in the different countries. In Brazil, India and elsewhere, waste pickers as individuals are extremely vulnerable and can only be politically heard when organised collectively as a pressure group. However, their social and political organisation relies on their capacity to subsist economically. Among the different forms of formal and informal associations, trade unions, cooperatives and NGOs are their three main institutional forms of organisation. Basically, the first refers to

[158] Interviewed in a park in Pune, 28 March 2014.
[159] Interviewed in a restaurant in Delhi, 19 March 2014.

representation, the second to the organisation of production, and the third assumes a variety of formats and purposes.

Labour unions, cooperatives and other forms of organisation

In India, the trade unions work as membership-based associations, organising workforce demands collectively, representing and protecting the waste pickers' interests politically. The first union for women waste pickers, the Self-Employed Women's Association (SEWA), was established in 1972 in the city of Ahmedabad, with the support of union leader and social activist Baba Adhav.[160] It grew out of the Textile Labour Association (TLA), a union of textile workers dating from 1920. In Pune, the trade union, Kagad Kach Patra Kaghtakari Panchayat (KKPKP), was founded in 1993 and currently has some 9,000 members, 80% of them women from 'backward castes'. Meanwhile, the trade union, Solid Waste Collection and Handling (SWaCH), founded in 2006, has 1,500 members and provides services for the Pune Municipal Corporation (PMC). (Figs 20 and 21 show one of the two KKPKP cooperatives in Pune.) These organisations are regarded, worldwide, as an illustration of a successful social movement. However, as Ravi Agarwala (2013: 2) states, despite the fact that 93% of the Indian labour force comprises informal workers, the work of the trade unions and caste movements, such as that of the All India Backward and Minority Communities Employees Federation (Bamcef) in the 1970s, has never achieved a unified voice and has been unable to improve labour regulations. Moreover, after the economic reforms that began in 1991, state regulations on capital, labour and social welfare have been superseded by the logic of neoliberalism.

[160] Interviewed in his office in Pune, 28 March 2014.



Figure 20: KKPKP cooperative in Pune, India (Source: Author's photo)



Figure 21: KKPKP co-operative in Pune, India (Source: Author's photo)

In Brazil, waste pickers' trade unions play a crucial role in helping regulate the waste market. They gained strength during the 1980s during the period of democratisation (Barbosa et al., 2014: 62); in 1988. the Brazilian federal constitution established the foundations for citizen participation and free initiatives, and incentives for the

development of cooperativism. Dias[161] states that the waste pickers quickly learned to take advantage of the changed political scene, and the activism and organisation of social movements and labour unions, to fight for progressive policies. Arguably, among all the BRIC countries, the Brazilian structure of tripartism has demonstrated the most progressive in terms of policies involving workers in the country's development (Balestro, 2015). This ideology has provided a critical framework for the debate on waste policies in Brazil. According to the International Labour Organisation (ILO) (cited in Abramo et al., 2013: 213), tripartism establishes a social dialogue between the three key actors involved in the promotion of decent working conditions: labour, employment and government. This dialogue comprises negotiation, consultation and the sharing of information between these actors for all public policies and subjects of common interest. Therefore, Ishikawa (cited in Abramo et al. 2013: 216) states that the government has a key role in establishing the juridical and political framework and the institutional space for dialogue between the parties and in ensuring that the agreements reached result in real policies.

The Brazilian legislation on sanitation and solid waste management has prioritised the inclusion of *catadores*, organised in cooperatives and other forms of associations. According to the legislation, which determines their functions (Art. 2, Law 12,690/2012), labour cooperatives are non-profit companies for the provision of services, where all the participants work for the common good and engage in the self-management of the organisation, in order to gain better qualifications, income, socioeconomic status and general working conditions. The Brazilian cooperative

[161] Interviewed over the phone, 24 March 2014.

model offers *catadores* better healthcare and safer working conditions, as well more productive ways of collecting, sorting and selling their products, and greater opportunities for political engagement in the formulation of public policies on recycling. Flávio Ribeiro[162] of CETESB suggests that the economic example of cooperatives is possibly the only current alternative to the capitalist productive model:

> *If there is an alternative in the market to existing private enterprise, which is exclusively for profit, it goes through the co-operatives, whether they are of catadores, small producers, farmers, or any other groups. However, what is happening today is disastrous, with accusations of money laundering and the cover-up of organised crime. The proposal sounds great, but personal interests have distorted the ideal.*

Historically, cooperatives of waste pickers in Brazil have their origins in the social movements of the mid-1980s (Hirata, 2011: 9, Magni and Günther, 2014: 103), when a group of homeless people, living under the Glicério viaduct in the centre of São Paulo, realised that cooperativism would give them more strength and help them attain greater gains from the sale of collected material (Hirata, 2011: 13). Out of these early experiences the first legally recognised cooperative was formed in 1989 – the Cooperative of Autonomous Collectors of Paper, Scrap and Recyclable Materials (COOPAMARE) – working in partnership with the municipal government. Other cooperatives then proliferated across the country, such as the Association of Collectors of Paper, Cardboard and Recyclable Material (ASMARE), which was formed in the city of Belo Horizonte in 1990.

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[162] Interviewed via telephone, 22 March 2016.

Recognition of the *catadores'* cooperatives as productive agents in the recycling chain, therefore, began in 1990 at a local level in the cities of Belo Horizonte and Porto Alegre, and later reached state level, beginning with the state of Minas Gerais and spreading to the Federal District in 2004 (Dias, 2011: 2). In the following decades, other key policies were enacted, granting the cooperatives greater legitimacy. In 2002, the informal recycling of waste materials was classified as a profession in the Brazilian Occupation Classification (CBO) produced by the Ministry of Labour and Employment. In 2006, Decree No. 5940 determined that the federal public administration should collect and send recyclable materials to cooperatives of *catadores*, and in 2007, the Policy on Basic Sanitation exempted them from bidding for public service contracts for recyclable waste collection. Therefore, the evolution of the *catadores'* social movements into the political pressure groups of today has a historical context.

The support of the legislation is an emblematic difference between the waste pickers' labour conditions in India and Brazil. For example, in India, Yamin Parikh, vice-president of SEWA, and Varsha Mehta, a member of SEWA, explain that, between 2004 and 2009, it ran a pilot project with the Ahmedabad Municipal Corporation (AMC), providing door-to-door-collection (DTDC) of household waste in six wards in the city.[163] However, in 2009, the AMC put out the waste collection services to tender. Participation in the bid was subject to payment of an initial deposit. SEWA, the majority of whose affiliates are illiterate, lower-caste women, did not have the

[163] Interviewed at the SEWA offices in Ahmedabad, 7 March 2014.

cash and were unable to participate in the bid. Consequently, the organisation lost the concession.

Some of the political achievements in Brazil are the result of the engagement and mobilisation of the MNCR, which, since 2002, has been the main representative group of the *catadores*. As discussed earlier, the formulation of the PNRS was extensively debated in several public hearings and conferences, which representatives of the MNCR attended. Representatives of *catadores* have also participated in conferences and business fairs: for example, during the 4th CNMA, which I attended in the course of the fieldwork for this research, the *catadores* seemed to be the most organised and active group. In the prelude to the event, the MNCR announced their entrance with a demonstration, chanting their slogans and waving their flags, commanding the attention of the whole auditorium. Figure 22 shows a meeting of the MNCR to discuss proposals during one of the working group sessions, and its strategy for the ballot in the plenary: 'Comrades, let's organise. We need the support of all during the poll.' The group is politically articulate and influential in the decision-making process at a central level and in some major cities across the country. Behind the scenes, both opponents and proponents interviewed said that the PNRS was only approved by President Lula on condition that the gains of the *catadores* were translated into law. Indeed, the former president, Lula, and the recent president, Dilma Rousseff, received the *catadores*' representatives in their offices and participated in their meetings.

Alongside this political participation, the MNCR has recently promoted major events to bring the *catadores* together. The week following the 4th CNMA, its members met again in the 12th Waste & Citizenship Festival in Brasilia, which received some 2,000

leaders and representatives of *catadores* from across the country. The MNCR also promoted the Expo Catador, a business fair exhibiting equipment and facilitating the exchange of experiences, which received more than 8,000 visitors in 2013, including representatives from fourteen countries. Dias (2009) argues that such events have been responsible for engaging and catalysing the demands of different groups throughout the country. In this way, *catadores* have taken advantage of the participatory process in Brazil to raise their demands. Currently, the MNCR is seeking to institute special insurance cover for those working as *catadores* as part of the general social security system.



Figure 22: Meeting of the MNCR during the 4th CNMA to organise their demands (Source: Author's photo)



Figure 23: Waste and Citizenship Festival, Brasilia, 25 October 2013 (Source: Author's photo)

However, even with progressive policies and the support of organisations, academics and civil society, the condition of the *catadores* can be fragile when faced with powerful economic and political interests. In addition to their own organisations, waste pickers rely on the support of NGOs and activists. During the fieldwork, it was possible to observe a rich variety of NGOs and CBOs, who support and advocate for the waste pickers' cause in both India and Brazil, and in the international arena. To mention just two local NGOs engaged in the organisation and support of specific local groups of waste pickers, there is the Centre of Studies and Support of Development, Employment and Citizenship (CEADEC),[164] which supports the Sorocaba Recycling Cooperative (Coreso), and the Centre of Education São Bartolomeu (CEASB),[165] supporting the Cooperative of Catadores of Vila Emater II (Coopvila). Rita de Cássia Viana, president of CEADEC, explains that in some cases, cooperatives that are

[164] Interviewed at CORESO in Sorocaba, 6 December 2013.
[165] Centro de Educação Ambiental São Bartolomeu

supported by NGOs have achieved better results and have improved their infrastructure in comparison to those associated with the municipalities.[166] For example, the cooperative CORESO has machinery to recycle plastic and used cooking oil, while COOPVILA has better building installations and the *catadores* have better wages than those in cooperatives working in partnership with the local authorities. Figs 24 and 25 show a cooperative working with the NGO (COOPVILA) and one working with the municipality (COOPLUN). In addition, organisations such as the Brazilian Dê uma Mão para o Futuro,[167] set up by the Brazilian Association of Personal Cosmetics, Toiletry and Fragrance (ABIHPEC), represent initiatives by the industrial sector to develop a network of businesses and *catadores'* cooperatives, in order to find solutions to the problem of post-consumer packaging waste.



Figure 24: Catadora Ivanilda Gomes at the entrance of the COOPVILA, Maceió, Brazil (Source: Author's photo)

[166] Centro de studos e apoio ao desenvolvimento, emprego e cidadania
[167] 'Lend the Future a Hand'



Figure 25: COOPLUN, Maceió, Brazil (Source: Author's photo)

There are also larger organisations providing information and lobbying at government level. In India, NGOs like Chintan Environmental Research and Action Group and Toxic Links have been actively advocating for waste pickers at central, state and local government levels for more than a decade. At a global level, international NGOs such as Women in Informal Employment: Globalizing and Organizing (WIEGO)[168] and the Global Alliance of Waste Pickers provide a network for the exchange of information and experiences between social movements worldwide, and also act on international agreements at the global level.

Currently, the major threat to waste pickers in Brazil, India and elsewhere is what is known colloquially as 'the lobby for incineration'. Waste-to-energy (WtE) is a capital-intensive approach that burns and destroys recyclable materials, and is intent on replacing the more labour-intensive approach of the waste pickers, negatively

[168] WIEGO website: http://wiego.org

impacting their livelihoods. Currently, the flagship issue facing Brazilian *catadores* and Indian waste pickers is the fight against the granting of concessions by public services and the WtE industry. The Global Anti-Incinerator Alliance (GAIA)[169] is a global network, comprising more than 800 associations in around ninety countries, against incineration. Without organisation, waste pickers are incapable of facing down these powerful economic interests.

Comparing outcomes in Brazil and India

Kazuo Nakano,[170] director of the Department of Urban Development of the Municipal Secretariat for Urban Development of São Paulo (SMDU), explains that the MNCR exerted strong pressure to insert the prioritisation of *catadores* and reverse logistics in the law on waste management. He stresses that the fact that *catadores* are contemplated at all in the legislation is highly significant; nevertheless, as he says, discourse is one thing, putting good intentions into operation is something else altogether. Five years after the implementation of the Brazilian waste policy, some municipalities hired cooperatives and closed their dumpsites, promoting the socioeconomic inclusion of their *catadores*. According to the Brazilian *National Survey on Basic Sanitation* (IBGE) in 2008, 26.8% of waste authorities had recognised the existence of waste pickers. The Ciclosoft survey (CEMPRE, 2014) shows that 927 municipalities in Brazil (17% of the country) have implemented some sort of recycling programme, of which 76% involve cooperatives of *catadores* in their processes. Ronei Alves, one of the leaders of the MNCR, highlights that these achievements are the result of the engagement with local groups of *catadores* and the

[169] GAIA website: http://www.no-burn.org/index.php
[170] Interviewed at the SMDU headquarters in São Paulo, 4 October 2013.

political will of the municipal authorities, but the inclusion of *catadores* in the legislation does not guarantee their inclusion as such in the formal market.[171] In addition to the lack of knowledge and organisation among certain groups of *catadores*, access to waste resources and contracts for the provision of public services are now the target of major industrial corporations and politicians.

Hence, the fact that the MNCR lacks both the structure and the financial resources necessary to achieve representation for all *catadores* in every municipality in Brazil is problematic. Further complicating the issue, *catadores* are part of an informal collection of unskilled workers, and not all of them share the same aims. The labour market of the *catador* is unstable, and in periods of economic improvement, workers often migrate to other jobs that offer better wages and working conditions, such as construction. Moreover, the economic conditions of the *catadores* working in small towns and regions far from recycling centres differ from those working in larger industrialised cities, where the prevalence of recyclable waste and the market for the sale of recycled material compensates their efforts. The fieldwork observation of the cooperatives of COOPERE in the city of São Paulo (Figs 26 and 27) and COOPLUN in Maceió (Figs 25 and 28), conducted for this research, shows a large difference in terms of equipment and infrastructure. Despite the fact that the latter has a certain level of infrastructure, including a shed to work in and other facilities, the waste pickers still work on the floor, with unsafe equipment. Access to materials and a market is a key factor in the economic sustainability of such cooperatives. There are some cases in less developed cities, where the cooperatives have been given trucks by

[171] Interview via telephone on 2 May 2014.

the local authorities to collect recyclables, but they do not make enough profit to pay for either a driver or fuel. Figure 28 shows the case of COOPLUN in Maceió, where the vehicle is not in use due to lack of diesel.



Figure 25: COOPERE, São Paulo, Brazil (Source: Author's photo)



Figure 26: COOPERE, São Paulo, Brazil (Source: Author's photo)



Figure 27: COOPLUN, Maceió, Brazil (Source: Author's photo)

Despite the progressive policy framework and the efforts of the MNCR, the large majority of Brazilian *catadores* remain unorganised and still work in precarious and dangerous conditions in the streets and on dumpsites. Notwithstanding all the efforts of the Indian and Brazilian organisations championing the waste pickers' cause, a large number of the unorganised waste pickers gathering street and dumpsite waste are unaware of these organisations – some *catadores* interviewed on the streets in Brazil stated that they had never heard of the MNCR. Similarly, in India, small enterprises and family associations of waste collectors, who offer their services directly to householders and RWAs, have never heard of Chintam, KKPKP or SEWA.

In addition, many waste pickers working in the streets prefer to work independently, for a number of reasons. Many are not affiliated to any of these organisations by choice, arguing that they can earn more money by selling the collected material directly to the junkshops. In São Paulo, an individual unorganised *catador* told me

that he earns approximately R$1,600 (USD 420) per month, while the wage of a cooperate *catador* may vary between R$1,200 (USD 315) per month in São Paulo and R$250 (USD 66) per month in a mid-sized city. The unorganised *catador* claims that he receives payment according to the amount of the material collected, in contrast to the monthly payments received by the *catadors* in cooperatives. Furthermore, the he does not have to follow a set work schedule, having the freedom and flexibility to take other temporary informal jobs to complement his income. Carlos Alexandre and Rodrigo Alves, two *catadores* in São Paulo, explain that they have sometimes worked in co-operatives, but they do not like this type of job: 'Here, in the street with my handcart, I do not work with dirty waste, like in the co-operatives; I just work with clean and valuable materials. This is work for men; cooperative work is for women and elderly people.' Francisco Inácio, a member of COOPIRES,[172] claims this kind of disinformation is problematic, because most of these *catadors* are not conscious of the advantages and importance of political participation and the value of work in the community.[173] He claims that the majority of *catadores* are exploited and have, as a result, become wary of any sort of organisation. However, these unorganised workers do not have access to the benefit of the law, as the PNRS only covers those *catadores* working in cooperatives or other forms of associations.

In Delhi, a waste picker receives around 70 (£0.71) to 100 rupees (£1.01) every month per residence to collect the household waste, and around 500 (£5.07) from small shops and restaurants, according to Shashi Pandit, leader of the NGO, All India Kabadi Mazdoor Mahasangh (AIKMM). In India, every migrant is a small

[172] COOPIRES, or Coop Material Reciclável de Ribeirão Pires, is a recycling co-operative in the district of Ribeirão Pires in the state of São Paulo.
[173] Interviewed in the 4th CNMA in Brasilia, 24 October 2013.

entrepreneur, including the garbage man: he or she collects the waste from a number of houses and delivers it to the collection point, which is generally run as a family business. More often than not, men collect the waste, which the women and children then sort. Some waste-picker families earn around 1,000 rupees (£10.15) per month. sorting the waste for middlemen (waste-buyers). The rest of the waste, which is not recycled, is burned. Waste picker Suman Lankeshwar, a member of SWaCH for more than a decade, explains that she now individually collects the waste of some 200 huts in the Indira Vasahat Aundh slum area.[174] She earns between 20 (£0.20) and Rs 50 (£0.51) per hut each month, and also sells the recyclable material, making around Rs 50 per day (£0.51). Some more organised entrepreneurs have a better structure. Somnath Thiral, another member of SWaCH, uses his truck to collect and deliver the waste material of 160 flats of fifteen wealthier condominiums to his relatives to be segregated every day.[175] He receives around Rs 50 to 100 per flat per month**.** This enterprise generates an income of around Rs 50 to 60,000 (£507.50 to £609). He claims: 'Nobody segregates the waste in these flats. It does not matter if society segregates it or not, I just want to work.'

The involvement of waste pickers in the waste industry varies across India from state to state and city to city. Travelling to different cities in India and talking to different organisations and practitioners in the field, it is clear that there are several perspectives but no one voice coordinating the different demands in a single model. One of the best examples illustrating this variation is the case of the KKPKP in Pune. Lakshmi Narayan of SWaCh explains, for instance, that the KKPKP is involved in

[174] Interviewed on the street in Pune, 27 March 2014, with the support of SWaCH.
[175] Interviewed in Balewudi area, Pune, 27 March 2014, with the support of SWaCH.

two different models in two neighbouring cities. In Pune, waste pickers run two scrap shops (Figs 20 and 21), providing door-to-door collections for householders through the SWaCH cooperative, in agreement with the Pune Municipal Corporation (PMC), while in the neighbouring city, the Pimpri Chinchwad Municipal Corporation (PCMC) contracted a private company to provide waste management services. In the case of Pune, which has a distinguished record of progressive policies, SWaCH fights for waste pickers' rights as formal workers: they must be prioritised in hiring and receive the benefits of formal employment, such as access to the minimum wage and statutory benefits. According to Avinash Madhale, programme coordinator of the Centre for Environment Education (CEE) of the Nehru Foundation for Development, this characteristic of the city is the result of the evolution of the industrial sector there, as well the intellectual currents and particular social characteristics of Pune.[176] In early 2015, a parliamentary standing commission visited Pune to learn about the SWaCH model (Khape, 2014). The commission was impressed by the service provided by the cooperative and, in its report, it recommended that the model be included in the SBA as an example to be replicated across the country (LS, 2014). However, Narayan claims that although SWaCH has good channels – and a successful history – of negotiation with the authorities, the relationship with the municipal corporation is never an easy process. With every incoming administration, they have to reaffirm their proposals.

According to Prashant Pandya, deputy director of SWM of the Ahmedabad Municipal Corporation (AMC), in November 2014, the AMC engaged waste pickers for door-to-

[176] Interviewed at the CEE offices in Pune, 27 March 2014.

door collections in two zones of the city.[177] According to the AMC's report (2016: 11), due to this programme's positive results, the 'Swachhata Jan Model' (SJM) was implemented in three wards of the city in October 2015, and in another four in February 2016, with the aim of providing a collection service to 35,000 residences. The income generated by the dry waste sorted and sold in the centre will be shared among waste pickers. In fact, activist groups of waste collectors have campaigned in residential areas to try and change social behaviours.

The recognition of the *catador* as a key player in recycling in the Brazilian waste management system has generated innovative examples of partnerships between cooperatives, business sectors and the authorities. One example, is the contract agreed between the city of São Paulo and a private contractor in 2014, with the involvement of a waste pickers' cooperative, which stipulated that the recycling centre would be managed by fifty-four *catadores*. Another is the Green Stock Exchange Rio de Janeiro (BVRio, 2014), which has created reverse logistics credits (RLC), in partnership with the MNCR, to trade on the stock market.

SWaCh's Narayan admires the Latin American waste pickers' achievements; however, she has a few concerns about the results. At first glance, with a more progressive policy and successful outcomes, the Brazilian SWM political process appears more inclusive and participatory than the Indian one, but a thorough analysis shows a more complex reality. Narayan explains that Indian waste pickers are not well organised across the country as in Brazil. In her view, the Indian process is different, and though a number of organisations of waste pickers have fought hard

[177] Interviewed via email, 22 February 2016.

over the last decades to reach some sort of consensus, attaining a unified voice is almost impossible in the short term. She highlights that the Indian process has to be slower and more gradual, as we cannot keep pace with Brazil'. She adds:

> *You need waste pickers organised in other cities... Language can be a problem in India, but there has been very little effort to bring waste pickers together across the country into a common forum. Debating issues collectively poses different challenges. Where will the money for this come from? Organisations of waste pickers barely have the money to organise the waste pickers in their own cities. Even if you are talking about organising a meeting in another nearby city, the cost is not the kind of money that is available, and all the more so for holding national-level meetings. Even the cost of travel would be very difficult for these waste pickers.*

By contrast, as mentioned previously, there are several financial institutions and programmes in Brazil that provide cooperatives with financial incentives and infrastructure.

Narayan claims that, possibly, the Indian process has not been as successful because the focus has been on apprising waste pickers of their collective rights, rather than how to organise and change their conditions: '[Only] those who are more organised and articulate, and have the ability to control the entire movement, can ensure that the benefits of cooperative movements reach everyone.'

The problem with the Latin American cooperative model, Narayan claims, is the fact that it covers a small number of waste pickers. According to the Brazilian PNRS, in

order to access the benefits of the law, *catadores* must be organised in cooperatives or other forms of associations. She points out:

> *The total percentage of waste pickers working in cooperatives [which are covered by the law], compared with those [who are] unorganised and outside of the cooperatives [working informally in the streets and on dumpsites], is very small. If you look at the number of waste pickers whose lives have actually changed, who are organised, they are only a small proportion of the whole. This makes a huge difference.*

She claims that in most places in India, the transition has been far more gradual, but many are glad of this.

> *Nowadays, the waste pickers are slightly better off than they previously were, but it is not as though their conditions have changed dramatically. Hence, I also think that the struggle to get larger numbers into the process means that you will never have that rapid pace of growth, since you are building a much larger base. To attain that pace of change is very difficult.*

However, waste pickers are not legally recognised in the legislation or by the authorities in large parts of the country in India, and several official documents on waste management do not even mention their existence. It is not for lack of activism or of the engagement of scholars, advocacy groups and activists that waste pickers are distanced from Indian legislators. For decades, academics have demanded the inclusion of waste pickers in the waste system in India. This is a constant complaint voiced in the majority of the research and debates involving academics.

Narayan claims:

> *Even though people know about the SWaCH of KKPKP model, it makes a significant difference whether the bureaucrats and politicians of the state government and central government are physically overseeing it out there, in the street. It is not the same [as sitting] somewhere and hearing about the model. This makes a huge difference.*

In India, the caste system definitely halts the access of waste pickers to the democratic process, and as a consequence, a large amount of people are kept out of the formal labour market and denied the resources essential to improving their lives. The origins of this obstacle do not lie with the government alone, they are also social. The middle classes demand greener and cleaner urban spaces, but the thorny question is whether they are willing to promote the social inclusion of Dalits, and how much social mobility the upper castes will be willing to accept.

In Brazil, the socioeconomic inclusion of *catadores* is openly declared as a policy objective; the social and economic relevance of this labour category is officially recognised in the policy framework. Although only 10% of *catadores* are currently organised in cooperatives in Brazil, the number of cooperatives is increasing across the country, and groups such as the MNCR participate in policymaking, proposing solutions for the impasse of the informal sector. Although it is not easy to generalise about the situation of the *catadores*, given that the majority of them are still living very precariously, the example of Ana Lúcia, a *catadora* from the state of Espírito Santo, illustrates the significance of social inclusion:

> *Our struggle has carried on for more than fifty years. My father was a catador. In the past, we were unable to reach this level. We were alone on the dumpsites and in the streets, and everyone had to fend for themselves.*

> *Today, we are in the cooperative recycling warehouse. We are 'actors.' The focus is on us. Today, we are on top. The public prosecutors are on our side and we have lawyers.*

[…]

> *I used to work pushing a cart on the streets and selling my work to the middleman. Now, I have been working for five years in the cooperative. Today my son is about to graduate and he will then study law, and my daughter is also studying. During this time, I have saved money so they could have the opportunity to study. I have my own house. Everything I have, I attained with through waste picking.*[178]

The waste pickers' cooperatives, therefore, have lifted people out of extreme poverty, and some have attained a far better economic level. In addition, the inclusion of *catadores* in the waste management process (including reverse logistics) in mechanised centres in the city of São Paulo and in BVRio has generated innovative business opportunities. Such experiences have resulted in significant contributions to the Brazilian economy.

7.6 Chapter summary

This chapter has shown that, in order to ensure their voices are heard and to advance their interests in these competitive and highly politicised environments, interest groups need to establish alliances – lobbying, supporting and negotiating with other groups and decision-makers. Participatory institutional processes are democratic

[178] Interviewed during the 4th CNMA, 26 October 2013.

spaces that allow non-state actors to intervene in the political debate; however, if they are dominated by interest groups, these democratic processes become based solely on lobbying and competition between the most powerful pressure groups, determining how democracy itself operates in these sectoral areas.

The case studies in this chapter have offered specific examples of the impact of interest group participation on the solid waste management sector in Brazil and India. Despite the pluralist character of the Brazilian case, it has revealed that policy decision-making in this sector is dominated by powerful political and economic elites. The extensive debates during the formulation of the PNRS, and the subsequent forums of the CNMA, the Sectoral Agreements and the discussions on the goal of the complete closure of all dumpsites in the country, created opportunities for representative entities of local governments, businesses and other associations to interact with each other, discuss their conflicts and form coalitions to influence government decisions. All of these debates, however, have been extremely technical, examining the environmental legislative framework, the specific technologies of implementation and the cost-benefit analyses, and for this reason, have been led by technical experts, lawyers and the public authorities in charge of the system. Many of these negotiations have ended up mediated by the judiciary.

In the context of participatory spaces such as these, the concept of dominant networks (Alston et al., 2016; Wallis, 2015; Bardhan, 2008) contradicts the idea of the independent pluralism of ideas (Dahl, 1989), since the political competition between different groups demands the aggregation of forces around certain topics in order to advance specific interests. Only the most powerful groups have the expertise, access to information and financial resources to influence the policy agenda. There are no

balanced and fair outcomes – all of the decisions are political and economic, benefiting just a few groups. Even the social and economic inclusion of the *catadores* is the result of political disputes amongst the more powerful players; some politicians and interest groups have taken advantage of the condition of the waste pickers to foster their own political and economic ambitions. Meanwhile, in the case of the Indian MSW Rules, dominant coalitions have used the policy process to protect their entrenched political and economic privileges.

This chapter has also confirmed Mancur Olson's (1971) theory of the unequal, competing pressures and capacities of what he terms 'latent' and 'privileged' groups. By applying Marissa Golden's (1998) findings (on the rule-making processes in the US) to both the Brazilian and Indian debates on waste reform, the chapter revealed that there is a near-absence of groups advocating for the interests of the users of the system – that is, the ordinary citizens. In the case of waste management, the citizen is defined as either a consumer or a householder. The individual, as a householder, is affected by the quality of the public service and pays directly or indirectly for its costs in the form of fees or taxes, while the consumer pays for the costs of recycling in the final price of the product. During the fieldwork for this research, I did not observe groups of citizens raising these subjects in those decision-making processes I had the chance to participate in. The few cases that did arise were related either to 'not-in-my-backyard' (nimby) concerns, where groups of local citizens affected by the installation of facilities near their communities mobilised to pressure the government to solve their immediate problem, or to the introduction of new taxes or a rise in waste management fees.

Foreign lobbies and environmentalism

Due to globalisation and the current debates on the environmental crisis and climate change, solid waste management has become a global concern. The sector is the beneficiary of increasing investments by international organisations and the support of the international scientific community, which promotes equivalent practices and technologies throughout the world, including in developing countries. Brazil and India have a long tradition of external entities influencing government decisions, from international humanitarian and sanitation aid in India to global financial institutions, such as the World Bank and the IMF, intervening during the economic crises in the 1980s in Brazil (Gozetto and Thomas, 2014: 16). The current governments in these countries have passed measures to attract foreign investment in a bid to foster economic development. As this chapter has shown, in both India and Brazil, several international interest groups have gathered and exchanged information, created partnerships with domestic players and directly lobbied the national governments, consequently influencing their decisions.

The impact of foreign lobby groups on domestic decision-making in these countries cannot be ignored, particularly in the waste management sector. Some proponents claim that this influence is a key driver behind the improvement of the current critical situation of waste management. John Dryzek and Patrick Dunleavy (2009) explain that, although environmental theory does not offer an explanation of how the democratic system operates and how decisions are taken that could counterbalance traditional theories of democracy, it provides an understanding of the logic behind the forces influencing state decisions. In fact, in many cases in the domestic system, government bodies and interest groups rely heavily on international organisations for knowledge, investment and technology (that is, the supply of experts, money and

equipment). The discussions in the domestic waste management sector are also strongly influenced by these international debates. The majority of ideas discussed in business forums and the specialist media by policy experts are quite often based on technologies and methods implemented in the industrialised countries, which are then presented as solutions for these developing economies. In addition, the financial mechanisms proposed by the legislation are a staple of international players, since the policies have been designed by global experts. In sum, this chapter has shown that international interest groups have exerted significant influence on government decisions, shaping the political and economic practices in these countries.

Social inclusion

The inclusion of waste pickers in solid waste management in the developing world has been extensively debated in the social sciences (Wilson et al., 2006, Scheinberg et al., 2006, Dias, 2010b). As this chapter has argued, their political participation is a key example of the importance of public participation in government decisions. Institutional spaces have provided an opportunity for the leaders of these groups to defend their rights, interact with other interest groups and present proposals for the solution of waste management problems. However, the cases of the Brazilian *catadores* and the Indian waste pickers differ in several aspects, and they show quite distinct political outcomes. In Brazil, the *catadores* have the chance to debate their interests actively with other interest groups in numerous political forums; in India, although recent legislation has recognised the role of the informal sector in the management of solid waste, it is still unclear whether these legal mechanisms will ensure the inclusion of waste pickers in the formal sector.

As Sonia Dias (2009) emphasises, social movements in Brazil took the opportunity of new democratic legislation and the emergence of trade union movements in the late 1980s to learn how to mobilise resources and gain the support of politicians and interest groups. Consequently, the *catadores* became, over the decades, a significant interest group in its own right in the waste management sector. Although there are a variety of *catadores*' organisations, one central group has assumed leadership and now has the political cohesion to claim a voice in government decisions. However, although they have gained in strength, *catadores* still rely on other influential organisations and the authorities' political will to enable them to participate in the political debate. As discussed in section 7.4, *catadores* have always had the support of the Workers' Party, from its origins at the municipal level in the 1980s to its assumption of power at central government level. However, political participation does not mean social inclusion, and these political spaces are not impartial and consensual. As some interviewees in this chapter have claimed, *catadores* are not easily accepted into the formal waste management sector and, to some extent, their inclusion in the final text of the waste reform bill was a political condition imposed by the former president, Lula da Silva. Opponents have labelled this policy 'populist', and syndicalism is indeed the basis of the Workers' Party; nonetheless, *catadores* have definitely shaped the PNRS, and both proponents and opponents of the policy agree that it addresses both social and technical issues within the same framework.

By contrast, as this chapter has shown, Indian waste pickers still face constraints when it comes to collective action: the prejudices of the caste system and years of marginalisation by local authorities have seriously affected their capacity to organise in pursuit of their claims. Closed participatory spaces, such as the National Consultation meeting in Bangalore, hinder a more pluralist debate. Although waste

pickers are mentioned in the MSW Rules 2016, these policies are not the result of an extensive debate involving the views of the waste pickers. Indian waste pickers need to take advantage of the current favourable moment ushered in by the SBA, where the issue of solid waste has been raised as a government priority; they need to use the new forums that have been established to encourage pluralist discussions around the struggle for their social and economic rights. The participatory institutional spaces that have emerged around the issue of waste management are the political arenas where tensions can be negotiated and interests advanced, and the nature of these political processes means that waste pickers have to organise among themselves in order to compete with other, far more powerful pressure groups if they wish to further their demands.

Chapter 8 Conclusion

The purpose of the current study has been to determine how interest group participation shapes government decisions on the provision of solid waste management services in two emerging economies: India and Brazil. It has explored their influence from two perspectives (the specific sectoral context and the wider political ramifications), and argues, firstly, that the channels for public participation, which should empower citizens to determine the terms of delivery of this public good, have been appropriated by pressure groups that are often associated with the large corporate concerns in the sector. This means that some unaccountable and unrepresentative powerful economic elites (or 'dominant coalitions'), who possess financial power but lack the electoral endorsement needed to formally exercise political power, have nevertheless been able to use the channels of public participation to capture and shape the agenda of the democratic state. Secondly, it concludes that corporate interests tend to define the distribution of public goods in these two countries in ways that are specific to each country. The investigation, therefore, has looked more deeply at the issue to reveal how the predominance of private involvement in decision-making impacts democracy, equality and development in these countries.

The research investigated public participation in Brazil since the National Policy on Solid Waste (PNRS) was announced as an inclusive national policy, emerging out of an extensive participatory process. In India, by contrast, from the enactment of the Waste Rules 2000 onwards, waste management policy has appeared far more technocratic, with limited public consultation. However, these two different political scenarios display a striking similarity in one critical respect: although they represent

quite distinct formal policymaking proceedings, key pressure groups dominate the decision-making process and take advantage of participatory mechanisms to advance their private interests in both contexts. Analysing how powerful interest groups take advantage of democratic channels to influence government decisions helps us understand how democracy works in these emerging economies.

Comparative analysis

In light of the research question, this study has shown that interest groups have been able to dominate the decision-making process of waste management reforms in both Brazil and India. However, as Chapters 5 and 6 showed, the decision-making proceedings and the activities of these groups can vary from one democratic system to another. A key issue in this comparative analysis is the difference between the amount of public consultation: there is a distinct lack of public involvement in the Indian ministerial decrees on waste management in comparison to the participatory debates promoted by the Brazilian policy-making procedure carried out by the legislative branch of the government. The structure of the decision-making processes determines how interest groups participate in the policies and how their activity influences the outcomes. In Brazil, where the legislature played a central role in drafting the waste management bills, the law has included more opportunities for pressure groups to participate in the decision-making process, exchanging information and putting forward different perspectives. However, in the Indian system, the decision-making was concentrated in the executive branch, which provided very few opportunities for an open public discussion of the bill or the inclusion of any interested parties other than the consultants involved in the rule-making process.

In Brazil, pressure group participation has been used as a political strategy to push the solid waste management issue up the government agenda and advance the PNRS in Congress. The evidence in section 5.2 has shown that the discourse of public participation has been used to overcome existing barriers inside the political system. According to the technical co-ordinator of the committee rapporteur, other bills on the subject have sunk in the past, and only a pluralist debate could reconcile antagonistic lobbies enough to enable negotiations to proceed. As a result, the PNRS was formulated after several rounds of participatory debates, and even subsequent measures, such as the recycling system (the Reverse Logistics Agreements – see section 6.3), were deliberated and decided on primarily as a result of the pressure of the participatory process.

The practice of conducting participatory debates in forums established by the government, as well as other parallel channels of discussion, emerged with the promotion of the PNRS; the government encouraged diverse groups to interact with each other and negotiate their specific interests as part of the political process. Certainly, these spaces are not impartial, as not all interest groups have the power to influence policy outcomes, but they do provide a political arena for face-to-face interaction and confrontation. In fact, it is through these participatory processes that the Brazilian waste pickers or *catadores*, with the support of politicians, civil society and other groups, have been included in government decisions on the sector. The National Conference on the Environment (CNMA) (section 6.2) is another example of a nation-wide participatory forum involving interest groups from across the country in political discussions. The empirical analysis of these cases shows that pressure group participation has played a crucial role in the evolution of political debates around the issue of solid waste management in Brazil, helping shape the contents of its policies.

It is important to bear in mind, however, that this participatory effort is not a common practice in all policy issues: unpopular legislation, like the recent labour reforms, anti-corruption legislation and the austerity package, have been voted on in Congress without any public participation – sometimes in the middle of the night. Hence, there is a tension between the political processes determining how pressure groups participate and the different ways in which these groups, even marginalised groups, are able to influence policy. The debates over municipal waste management policy have provided a forum in which this tension is recognised and contested.

In India, on the other hand, there are two parallel processes in the country's waste reforms: the series of Waste (MSW) Rules, from 2000 up to the proposed amendments in 2016, and the government campaign, the Clean India Mission (SBA). They mark two distinct moments in the story of Indian waste reforms, where public participation plays a particular role in advancing the implementation of these policies and the inclusion of interest groups in the political process. The MSW Rules represent an essentially technocratic process: they were decided on behind closed doors, with limited public scrutiny; the campaign, however, was promoted publicly in order to engage the support of a wide swathe of the population.

In the first procedure, therefore, according to empirical evidence gathered from interviewees, official documents and the description provided by Lavanya Rajamani (2007), there was little space for the public or interest groups to participate in the government's decisions, and the rule-making process was restricted to high-ranking public officials and hand-picked experts (section 5.2). Excluded from access to any other alternatives, some interest groups appealed to the judiciary as a channel through which to demand action by the state (section 6.4). The negative evaluation of such

judicial activity by both government (MoUD, 2013) and academic sources (Agarwal et al., 2015, Chaturvedi and Gidwani, 2011, Kaushal et al., 2012) is evidence of the mismatch between the solutions to the management of solid waste proposed by the technocrats at the central level and the range of problems the implementation of these solutions encountered on the ground across the country. The 2013 bill proposing an amendment to the MSW Rules 2000, which was barred by the High Court, and the National Consultation Programme in Bangalore, discussed in sections 5.2 and 6.2, respectively, are clear examples of the abuse of economic power by some lobby groups and biased participatory processes, the result of the limited space for contestation.

The SBA, on the other hand, marks a turning point in this policy sector, bringing a popular audience to the discussions around the waste management issue. From that point forward, sanitation became one of the priorities of the government, particularly as the re-election of Prime Minister Modi to some extent relies on the success of the programme that he has so publicly championed (Gatade, 2015, 35). Due to the popularity of the campaign and the pressure of election deadlines, new participatory forums, and a series of business meetings promoted by associations of industrialists, were established to engage interest groups in discussions of the waste problem (section 5.2). Although recent government evidence of the successful evolution of the campaign lacks credibility, as it is by no means an independent evaluation, the campaign does appear to have the potential to achieve some significant results. However, as discussed in section 5.2, the support of the population has been used, in effect, to legitimise the actions of the government, and the citizens themselves have had no opportunity for political participation in the actual policy proceedings. The prime minister's campaign is in fact based on the idea of making India business-

friendly and open to investment. Future research will be needed to analyse the government's strategy in its handling of the tension between its need to garner popular support and its acquiescence to the traditional pressures of nepotism and the demands of the powerful coalitions that dominate certain policy areas.

One singular group that this research has shown deserves special attention when discussing public participation in these countries is that of the waste pickers. The inclusion of the *catadores* in the Brazilian PNRS is a key differential between these countries' decision-making processes. The structures of the decision-making process and the participatory spaces in Brazil have contributed to the political participation of the *catadores*. However, this does not mean the Brazilian political system is more socially fair than that of India. It is also important to keep in mind that *catadores* have gained in strength over the last decades in Brazil. Waste pickers' unionism originated in the midst of trade union movements in the 1980s. The Workers' Party (PT), in power from 2003 to 2016, emerged from that scenario; trade unionism, public participation and progressive policies are the basis of the party's political agenda. Howlett et al. (2009: 71) claim that, although less strong than business groups, labour unions are also crucial pressure groups that are able to engage in the shaping of public policies. The activism of the *catadores* has definitely shaped Brazil's solid waste policies, since one of the key features of the PNRS, highlighted by the literature, is its social and economic inclusiveness – the government created mechanisms (in the form of lines of credit and government bodies) to promote the effective inclusion of the *catadores* in the institutional management of solid waste and in projects related to reverse logistics.

In the case of the Indian Waste Rules 2000, however, the technocratic treatment of the waste issue has clearly excluded the informal sector from the political decisions over the last decades. Although waste pickers received legal recognition in 2006, this has had little impact on waste management policy, and it is only very recently that their role in waste management has received official mention in the new, amended MSW Rules 2016. However, the case of the Indian waste pickers is more complex than that of the Brazilian *catadores*: in addition to the barriers to effective collective action due to their diversity of cultures, languages and castes, it is difficult to conceptualise their fragile and fragmented political engagement in the extremely competitive neoliberal environment endorsed by the government. Despite many existing critiques (Gatade, 2015; Kumar, 2014), further research is needed to fully understand the role of the informal sector in a government campaign such as the SBA, which claims as its purpose improved sanitation for all, but whose ideology is focused primarily on implementing pro-business measures.

Who are the participants in these political processes?

The major finding in this research is the limited political capacity of citizen participation: in addition to a corporate bias, interest group activity poses significant challenges for citizens' democratic right to participate in government decisions. This is problematic as public participation should provide citizens with an alternative route into politics, enabling them to oversee the decision-makers' activities and scrutinise the political processes and content of the policies. The evidence discussed in Chapter 5, which evaluated the decision-making processes in Brazil and India, and the case studies of institutional spaces presented in Chapter 6, show that these political processes are predominantly occupied by interest groups and experts. From what I

observed of the events that I attended during the course of the fieldwork for this research, the debates are extremely technical and the participants and main speakers are politically engaged, supporting certain specific interests, both in the case of the 4th CNMA and the Sectoral Agreements in Brazil and the conferences in Mumbai and New Delhi. In these participatory processes, leading groups dominate the debates and there is little space for the ordinary citizen or public interest groups to participate. In fact, they are usually only involved in environmental policies in the case of localised issues such as not-in-my-backyard (nimby) protests (Riydin and Pennington, 2000) or when new taxes are introduced to finance waste management services.

The analysis of citizen participation from the perspective of interest group theory revealed how political and economic elites take advantage of the discourse of popular sovereignty to advance their interests. Although Chapter 2 discussed the distinction between the literatures of citizen participation and collective action, this research has revealed significant interrelationships between these theories. The research findings add substantially to our understanding of these two distinct lines of thought. The problem is the fact that participatory spaces, as John Gaventa (2005) discusses, which appear to hold the potential for civil society to gain some form of institutional channel for political action, have ended up reinforcing the influence of powerful interest groups. As Robert Dahl (1989) emphasises, 'effective participation' relies on 'equal and adequate opportunities' for participants to put forward their claims and support or oppose policy proposals in the political arena. This research has shown, however, that there is a very unequal balance of power between the participants involved.

With regard to the identity of the participants in these political processes, Chapter 7 has examined the main groups involved in solid waste management in both countries,

and how their activity and organisation shapes waste reforms. In the case of interest groups, not all groups are potentially powerful enough to influence government decisions (Jordan et al., 2004). Among the groups involved in the political process, only some powerful, well-articulated and long-established groups in the policy sector have the necessary capacity to influence and control the decision-making process and the decision-makers. The concept of dominant coalitions or networks proposed by Pranab Bardhan (1998), and more recently by John Wallis (2015), contribute to the explanation by describing the interaction between different elite interest groups, government officials and the major forces influencing government decisions. In this sector, the major contracting companies, associations of industrialists, financial institutions, politicians and public administrators are the political and economic driving forces shaping its policies. Their members are involved at all stages of the political process, exchanging information and lobbying for their interests.

As Lee Alston et al. (2016: 19) explain, in the attempt to press for policy alternatives that favour their members, dominant networks seek to shape the opinions and beliefs of interest groups; they are the main beneficiaries of the measures agreed and the public resources invested. The institutional participatory spaces in Brazil, mentioned earlier, have provided the opportunity for such interest groups to establish their coalitions, negotiate their conditions and receive the endorsement of the government. Therefore, to some extent, the participatory process legitimises government actions and their agreements with dominant coalitions. Andréa Gozetto and Clive Thomas (2014: 3) claim that the Brazilian political realm has always been characterised by the distribution of power between political and economic elites. Alston et al. (2016) claim that dominant networks play a significant role at critical moments of political transition, accommodating the processes of change in such a way that they shape the

values and institutions of the political sphere to ensure it will continue to promote their interests. In the period of political crisis that Brazil faces at the moment, the government is fragile; its lack of popular support means that is forced to rely on agreements with powerful groups to advance and approve its reforms. In the Indian political context, Pranab Bardhan (1998) employs the term 'dominant coalitions' to describe the alliances forged between corporate groups and the bureaucrats controlling key infrastructural policies. In his view, these are barriers that have constrained India's private investment and economic growth over the last decades. In the end, the solid waste management policies in these countries regulate how power is distributed among the interest groups that claim a stake in the sector.

This research does not suggest that public participation is a sham, or that it should not be supported. On the contrary, public participation enables pressure from below. Important social victories have often been the result of the existence of such channels of public participation and representation, many of them won through social mobilisation and activism. Authors like James Holston (2009) have shown that the participation of the poor is possible if the mobilisation is big enough to matter to policymakers. Without public participation, the most disenfranchised groups rely only on the will of political leaders, which risks encouraging clientelism. Moreover, many authors (Gaventa, 2004, Brodie et al., 2009) have stressed the potential role social control plays in ensuring transparency and accountability in the relationship between public and private forces.

The main problem this research has revealed, however, is that informal rules provide disproportionate advantages to certain economic and political elites, creating imbalances of power that hinder fairer competition in the market, with consequent

costs to society as a whole. The analysis of the decision-making involved in waste management policies supports the argument of this research that the power relationships in these political processes affect the functioning of democracy and the progress of development in emerging countries.

Interest groups and democracy

As discussed in Chapter 2, interest group activity is inherent to liberalism and crucial to economic development; Grant Jordan and William Maloney (2007: 2) even suggest that, in many cases, it has become more representative of citizen concerns than political parties. Certainly, without the involvement of pressure groups, many policies would not have had the strength to evolve, far less be implemented (Maloney et al., 1994). Interest groups provide information for policy formulation and reduce the number of conflicts and antagonist reactions that often block the decision-making process (Howlett at al., 2009). In addition, interest group participation is crucial to solving the problems of waste management. Municipal solid waste management poses significant challenges to countries such as Brazil and India, since the majority of local administrations in these countries lack the financial and technical capacity and the personnel to implement national policies; the private sector can therefore play an essential role in the provision of this public service. One of the major obstacles discussed in Chapter 6 (section 6.3), is the fact that, in both Brazil and India, there is neither a consensus on nor a methodology available to implement the systems of reverse logistics (Brazil) and extended producer responsibility (EPR) (India), which have been created to structure a national recycling industry. Certainly, any debate on solutions to the enormous challenges of national implementation could not evolve without the participation of the industries and the sectors involved; their businesses

are strongly affected by these policies. Therefore, only an extensive and participatory debate, driven by the needs of national policy implementation, could hope to bring the plurality of perspectives (including those of interest groups, government authorities and civil society) to bear on finding solutions to these challenges.

However, interest group activity in itself represents a challenge to the democratic systems in these countries. Two major issues arise from the disproportionate power of interest groups in government decisions: the question of who participates in the participatory debates on government decisions (and for what reasons) and the problem of informal rules. Interest groups do not seek to negate democratic procedures; on the contrary, their competition is crucial for development and for advancing solutions. The danger is, however, that the government and civil society often lack the capacity to intervene and mediate between powerful interests, and possess limited mechanisms with which to eradicate, or at least inhibit, economic and political abuses in both the policy decision-making process and in governance.

However, in all the cases of participatory spaces presented in Chapter 6, wealthy and powerful groups in both countries have been able to take advantage of these democratic openings to advance their own interests. Corporate interests have prevailed in all the policy decisions in this sector, and the interests of the ordinary citizen have become secondary concerns. The results of the Sectoral Agreements in Brazil (section 6.3) illustrate the example of neo-pluralism (defined in Chapter 2), where a contract is agreed between the state and a coalition of powerful industries and corporate retail groups to their benefit, and contrary to the interests of the large majority of other groups and the local governments involved. In this case, the final agreement covers only a small percentage of the country's population.

This problem becomes evident in developing countries with high levels of socioeconomic inequality, such as India and Brazil, where certain sectoral niches are dominated by coalitions of elites that are able to influence policies in order to maintain their privileges and protect their interests (Jayal, 2001; Bardhan, 2011). As discussed in the literature review in Chapter 2, Guillermo O'Donnell (1996) claims that the main problem in these 'uneven democracies' is the distance between formal institutions and behaviours on the ground. In order to reflect more precisely on these definitions, Chapter 4 has shown that both Brazil and India in fact have well-established government institutions with which to implement solid waste management reforms. Indeed, this research provides evidence that both countries have far more comprehensive policy frameworks for waste management and environmental protection than even some of the more advanced industrialised nations, and their federal structures have established a hierarchy of government bodies responsible for implementing policies across the country. Moreover, the literature (Barcellos, 2004; Sahu, 2007) shows that the judiciary and the public prosecutors, empowered by environmental legislation, have played a significant role in supervising central government and correcting irregularities in this sector. The main problem, however, lies in the quality of the government institutions that hold the ultimate power to restrain irregularities and particularism.

Section 6.5 has shown that the systemic deficiencies (associated with nepotism and clientelism) of the bureaucratic systems and political cultures in these countries are probably worse than the individual cases of corruption that capture the headlines would indicate. In both countries, in the waste management sector, the passage of biased public tenders using legal proceedings, and the financing of electoral campaigns by powerful interests in return for political and economic favours, are

common practices. These informal rules give the offenders disproportionate advantages, allowing them to benefit from their misconduct at enormous cost to society and the rest of the market. These issues became obvious during the fieldwork, when stories of nepotism kept emerging in the different cities I visited. In India, there are many cases of conflicts of interest involving family ties and the 'revolving door' between officials in the bureaucracy and the personnel of corporate groups. In both countries, some large companies operating in the solid waste management sector today originated from such corporate-political collusions. In addition, these groups are able to hire the best professional experts and lawyers in the market to defend and lobby for their interests. The only official mechanisms that appear able to restraint these irregularities are those possessed by the judiciary and public prosecutors. However, lobbyists and decision-makers work ceaselessly to create legal loopholes to allow the private sector to take advantage of ambiguities in the rules (Janaagraha, 2012).

The unofficial activities of institutions is a frequent complaint even among businessmen and public officials in the sector, particularly as it negatively affects fair competition in the market, the integrity of the political system and the quality of public services. In sum, with all the advantages that powerful institutions accrue due to their informal relationships with government decision-makers, in addition to their substantial financial resources, skilled personnel and control of information, it is difficult to see how public participation, which is currently hampered by the lack of organisation and political engagement in society at large, will overcome the power of these elite groups and compensate for the lack of government institutions able to restrain their irregular conduct.

The central claim in this thesis could only have been brought to the fore by a comparative analysis of the characteristics of the political processes in this sector in these two countries. As mentioned before, the decision-making procedures and the public-private relationships in these countries appear natural to the political contexts in which they are embedded, and it is only when the same political phenomena are contrasted that we can highlight the key characteristics of both political contexts and consider alternatives to the problems this research has revealed. Some of these problems include the influence of 'revolving door' practices on public-private relationships in the sector; the relatively homogeneous influence of international pressure groups on the sector in both countries; and the actions of the judiciary, which appear to provide an alternative route to compensate for social inequalities, but have also been misappropriated by the wealthiest groups in society. The two case studies, therefore, provide a rich analysis of one specific field in these two emerging economies. The conclusions, however, cannot be directly generalised to other countries, including other emerging economies, because they refer to the complex interplay between the actors involved and the specific historical background and political structures in Brazil and India. Notwithstanding these limitations, the approach used in this research could be extended to interest group analysis in other contexts, where the focus is on the effectiveness of these groups in public policies.

Further research is needed to deepen our understanding of how the participation of pressure groups in government decisions affects the quality of democracy and development. This investigation could also be expanded to other developing countries with democratic polities in order to discover how corporate interests influence public institutions in these contexts. It is also crucial to analyse whether long-established democracies, with higher degrees of institutionalisation of the principles of equality,

accountability and the responsiveness of the government to all citizens, promote more balanced, publicly oriented government behaviour. In Brazil and India themselves, additional work is needed to understand how private interests influence other policy areas, investigating which are more prone to control by corporate interests. Finally, once the bills regulating lobbying activities (mentioned in section 6.5), which are still at the debate stage in these countries' legislatures, are enacted as laws, this research can serve as a starting point from which to measure the impact of this legislation against a period when the activities of pressure groups were still unregulated.

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9 Appendix

9.1 Maps



Figure 1: Map of India with cities visited during the fieldwork

Source: author illustration



Figure 2: Map of Brazil with cities visited during the fieldwork

Source: author illustration

9.2 Legislative framework for special waste in India and Brazil

Translation of the Brazilian National Policy on Solid Waste to the English language by the author:

http://wiego.org/sites/wiego.org/files/resources/files/Pereira-Brazilian-Waste-Policy.pdf

Brazilian National Policy on Solid Waste, Law 12,305/2010 (in Portuguese):

http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2010/lei/l12305.htm

Solid Waste Management Rules 2016 available online at the MoEFCC website:

http://www.moef.gov.in/sites/default/files/SWM%202016.pdf

9.3 Interviewees

Table 1: Interviewees in India

Interviwee	Organisation	Sector
Abhay Khobragade	Bharuch Enviro Infrastructure Ltd - Unit Ahmedabad	Private Sector
Akshay Yadav	SWM Roundtable	Civil society
Amit Kr. Singh	A2Z Onfrastructure Ltd	Private Sector
Dr. Amiya Kumar Sahu	National Solid Waste Association of India	Private Sector
Anand Singh Bhal	Ministry of Urban and Development	Government
Anjor Bhaskar	Activist	Waste pickers' organisations
Anselm Rosario	SWM Roundtable	Civil society
Arvind Bhai	RWA - Charitable Trust	Civil society
Avinash Madhale	Centre for Science and the Environment	Civil society
Baba Adhav	Labour Union	Civil society
Bubbaljeet Kaur	Chintan Environmental Research and Action Group	Waste pickers' organisations
C. R. Kharsan	Ahmedabad Municipal Corporation	Government
Chikhale Dr.	Antony Lara Enviro Solutions Pvt Ltd	Private Sector
Dr. Debolina Kundu	National Institute of Urban Affairs	Government
Dharmesh Shah	Activist, GAIA	Waste pickers' organisations
Ebony Bertorelli	Janaagraha Centre for Citizenship and Democracy	Civil society
Imran Khan	Chintan Environmental Research and Action Group	Waste pickers' organisations
Jose Jacob	Antony Lara Enviro Solutions Pvt Ltd	Private Sector
K.C. Yatish Kumar	The Bruhat Bengaluru Mahanagara Palike (BBMP)	Government
Dr. Kaveri Gill	IDRC Think Tank Initiative	Research
Dr. Ketaki Ghatge	Pune Municipal Corporation	Government
Ketki Gadre	Centre of Environment Education	Civil society
Lakshmi Narayanan	SWaCH Seva Sahakari Sanstha Maryadit, Pune	Waste pickers' organisations
Lokesh Chandra	Joint Secretary of Ministry of Steel	Government
Dr. M. Ramachandran	MoUD	Government
M. Subba Rao	Ministry of Environment and Forest	Government
Madhavi Joshi	Centre of Environment Education	Civil society
Dr. Mona Iyer	CEPT University	Research
Myriam Shankar	SWM Roundtable	Civil society

Dr. Nakawana	Ahmedabad Municipal Corporation, South Zone	Government
Neethu Peter	SWM Roundtable	Civil society
Patrick Rousseau	Veolia Environment	Private Sector
Pradeep Khandelwal	Municipal Corporation of Delhi	Government
Pramod Mishra	Global Waste Management Cell Pvt Ltd	Private Sector
Prashant A. Pandya	Ahmedabad Municipal Corporation	Government
Pratibha Sharma	SWaCH Seva Sahakari Sanstha Maryadit, Pune	Waste pickers' organisations
Dr. Pritpal Randhawa	Centre of Studies in Social Policy	Research
Ranjit Gadgil	Parisar	Civil society
Ravi Agarwal	Toxic Link	Civil society
Dr. S. R. Maley	Eco Save Systems Pvt Ltd	Private Sector
Sandya Narayanan	SWM Roundtable	Civil society
Sanjay Singh	IL&FS Environmental Infrastructure & Services Limited	Private Sector
Shashi B. Pandit	All India Kabadi Mazdoor Mahasangh	Waste pickers' organisations
Shashi Shekhar	Ministry of Environment and Forest	Government
Suresh Jagtap	Pune Municipal Corporation	Government
Tarun Rokadiya	Abellon Clean Energy	Private Sector
Tejas Shah Dr.	Health Department - New Waste Zone	Government
Dr. V. Rajagopalan	Ministry of Environment and Forest	Government
Dr. V.K. Chaurasia	MoUD	Government
Vaishali Nandan	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Civil society
Yamini Parikh	Self Employed Women's Association	Waste pickers' organisations

Table 2: Interviewees in Brazil

Interviwee	Organisation	Sector
Eng. Afonso Celso Teixeira de Moraes	Consultant, Groupe Vauchê	Private sector
Aírton José Ruschel	Ministry of Science, Technology and Innovation (MCTI)	Government
Alessandro Massimo	Biorenove	Private sector
Alex	MNCR	Waste pickers' organisations
Dr. Alexandre Barbosa	Cebrap	Research
Ana Lúcia Oliveira dos Santos	Associação dos Catadores de Materiais Recicláveis da Ilha de Vitória	Waste pickers' organisations
Ana Paula Bernardes	ABIVIDRO	Private sector
Dr. Anne Scheinberg	WASTE, Netherlands	Research
Anonimous	Catador with pushcart on the street	Waste pickers' organisations
Antonello Moscatelli	SPARK Energy	Private sector

Arno Rui Schaly	Bruno Industrial, Brazil	Private sector
City Councilor Aurélio Nomura	City Council, São Paulo	Government
Beatriz Martins Carneiro	Ministério do Desenvolvimento, Indústria e Comércio Exterior	Government
Benito Juncal	Univerisadade da Bahia	Research
Carlos Alexandre	Catador with pushcart on the street	Waste pickers' organisations
Carlos Minoru Nomura	Consultor técnico da Câmara Vereadores SP	Government
Carlos R. V. Silva Filho	ABRELPE	Private sector
Christian Weinguny	Kommunalfahrzeuge Fordertechnik Umwelttechnik (MUT), Austria	Private sector
Diógenes Del Bel	ABETRE	Private sector
Dr. Eduardo Caldas	FEA/USP	Research
Eduardo Soriano Lousada	MCTI	Government
Elaine Patrícia Gomes de Melo	SEMA, Alagoas	Government
Eliene da Silva	President of the COOPVILA	Waste pickers' organisations
Ernani Ciríaco De Miranda	Ministry of Cities	Government
Fábio Henrique Castro de Lima	Piranhas, Alagoas	Government
Flávio de Miranda Ribeiro	Cetesb	Government
Francisco Inácio (Xorró)	COOPIRES, São Paulo	Waste pickers' organisations
Gislaine Vilas Boas Simões	Technical Advisory, City Hall of Sorocaba	Government
Gustavo Lima Novaes	SLUM	Government
Helcias Pereira	CEASB	Waste pickers' organisations
Herman Huisman Msc.	Ministry of Infrastructure and the Environment the Netherlands	Government
Irilene Silva Alcantara	Civil servant, state of Maranhão	Government
Ivanilda Gomes	COOPVILA	Waste pickers' organisations
Joana Luiza Oliveira Alencar	Institute for Applied Economic Research (IPEA)	Research
João César Filho Fernando	Banco do Brasil	Private sector
João Gianesi	ABLP	Private sector
José Valverde Machado Filho	Technical co-ordinator of the Committee Rapporteur	Research
Kazuo Nakano	City Hall of São Paulo	Government
Leonardo Boff	Theologian	Research
Leonardo Fontes	National Front of Mayors (FNP)	Civil society
Lizaldo Vieira dos Santos	Movimento Popular Ecológico de Sergipe	Civil society
Luis Carlos Sales dos Santos Sales	COOPERE	Waste pickers' organisations
Marcela Belic Cherubine	Observatory of Public Consortia and Federalism (OCPF)	Civil society
Marcelo Chaves Moreira	Ministry of the Envirtonment (MMA)	Government
Marcius Beltrão Siqueira	City Hall of Penedo	Government
Maria Alice	City Council, São Paulo	Government

Maria Amália Abreu	Department of Urban Cleaning of Maceió (SLUM)	Government
Marilyn da Silva Oliveira	National Health Foundation (Funasa)	Government
Maurizio Ruggi	WT Energy, Italy	Private sector
Mayors of several cities	Event carried out by the ICLEI in the RWM	Government
Montse Garcia	IDOM, Engineering, Consulting & Architecture	Private sector
City Councilor Nabil Bonduki	City Council, São Paulo	Government
Nadja	Department of Urban Cleaning of Maceió (SLUM)	Government
Patrícia	CORESO	Waste pickers' organisations
Pedro Paes Lira	IDOM, Engineering, Consulting & Architecture	Private sector
Pierre-Yves Vauché	Expert, Group Vauchê (França)	Private sector
Raimundo Nonato Kaxinawás	Native from the *Kaxinawás* ethnicity, Acre	Civil society
City Councilor Ricardo Young	City Council, São Paulo	Government
Rita de Cássia Gonsálves Viana	CEADEC	Civil society
Roberto Laureano Rocha	MNCR	Waste pickers' organisations
Rodrigo Alves da Silva	Catador with pushcart on the street	Civil society
Roland P. Greil	Hitachi Zosen Inova AG, Switzland	Private sector
Ronei Alves da Silva	CENTCOOP	Waste pickers' organisations
Sara Regina	SEMA, Sorocaba	Government
Silva Vieira de Brito	ADERES, Espírito Santo	Civil society
Silvano Silvério	AMLURB	Government
Sílvio Valdevino de Oliveira	Catador, Mato Grasso	Waste pickers' organisations
Stefan Kipp	Keppel Seghers, Germany	Private sector
Tadeu Pinheiro Dias Pais	Central Mecanizada de Triagem Carolina de Jesus, Amlurb	Waste pickers' organisations
Takashi Shimakawa	Kawasaki Heavy Industries, Japan	Private sector
Tayara Calina Pere	São Paulo City Hall, International and Federative Affairs	Government
Telines Basilio	COOPERCAPS	Waste pickers' organisations
Thiago Xavier	SEPLAN/SPE/DPT	Government
Valmir Lessa	City Hall of Penedo	Government
Vicente Carlos Y Plá Trevas	Sao Paulo City Hall, International and Federative Affairs	Government
Yoli Wirth	Activist, Rio Grande do Sul	Civil society