

FIGHTING POVERTY AND PROTECTING THE URBAN ENVIRONMENT: THE REFUSE COLLECTORS OF RIO DE JANEIRO, BRAZIL[†]

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SUMMARY

This paper reviews and documents a unique approach to poverty reduction targeting a segment of urban poor in the city of Rio de Janeiro, Brazil: the collectors of recyclable materials discarded by urban residences and businesses, along with their refuse. The approach is unique for Brazil because it combines assorted policy objectives at different governmental levels, two socially/security valued, two environmentally valued and one economically valued. The paper specifically seeks to (a) determine the current profile of collectors, both social and economic; (b) assess the current state of play of the dwindling collectors cooperatives programme, including perceptions of its performance by different stakeholders; (c) describe the current practices and players in the collection of recyclables, with its associated implications; (d) reconstruct the role of key players with a focus on the operational policies and administration of the programme by municipal departments; (e) assess the current priority among social and environmental objectives of the waste collection programme of the municipal government; (f) draw conclusions and recommendations on policies and administration for such programmes, to improve the social outcome for the collectors while still achieving the associated environmental objectives; and (g) draw some comparisons with other Latin American countries that have engaged in similar programmes. Copyright © 2012 John Wiley & Sons, Ltd.

KEY WORDS—collectors; recyclers; urban poverty; urban environment; sanitation

INTRODUCTION

Fighting poverty requires a wide range of approaches fitting the equally wide range of targeted poor. Poverty reduction interventions by national and local authorities and the policy objectives driving them often compete among themselves, having unintended consequences, some desirable, others not.

This article reviews and documents a unique approach to poverty reduction targeting a segment of urban poor in the city of Rio de Janeiro, Brazil: the collectors of recyclable materials discarded by urban residences and businesses, along with their refuse. The approach is unique for Brazil because it combines assorted policy objectives at different governmental levels, two socially and security valued, two environmentally valued and one economically valued, described as follows:

- (a) To create a sustainable source of income for some of Rio's homeless, young and old, male and female.
- (b) To reduce crime by providing an alternative occupation for those most likely to engage in petty street crime.
- (c) To reduce the predatory gathering of recyclables that causes street clashes among collectors and the scattering of garbage.
- (d) To reduce waste collection volumes and the pressure on the already overburdened landfills, operating over capacity.
- (e) To provide a source of increasingly valued items to a range of small industries that convert these materials into marketable goods and processed raw materials.

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Against the background of prior research, this article analyses the current dynamics and competition among these policy objectives and the stakeholders concerned with each of them, eliciting losers and winners among them.

Box 1– Background on the article

The article builds on research carried out over 1993–2004, which sought inter alia to understand the context and dynamics of collectors' cooperatives promoted by Rio's municipal government. It also attempted to elucidate the motivation and behaviours of the key stakeholders: the collectors/recyclers, Rio's municipal waste collection company (Companhia Municipal de Limpeza Urbana—COMLURB), the Municipal Secretariat of Social Assistance, the State Secretariat of Social Assistance and Human Rights, the Federal Government, the City Mayor and the buyers/middle men. Identification of winners and losers of this enterprise was also a central objective. That research also traced the evolution over the years of waste/trash perception by different segments of urban society and government and the associated response to urban waste management and collection of recyclables. It found inter alia that in the eyes of collectors, instead of providing greater independence and profitability for collectors, cooperatives further subjugated them to the interests of buyers/middle men. Disillusionment with the cooperatives programme led to disengagement by collectors, and the blame for failure was placed squarely on municipal managers of the programme in COMLURB.

The article picks up where this research project left off and specifically seeks to

- (a) Determine the balance between the poverty reduction and the environmental and security policy pursuits of these levels of government as regards the collectors/recyclers.¹
- (b) Determine the current profile of collectors, both social and economic.
- (c) Assess the current state of play of the dwindling collector's cooperatives programme, including perceptions of its performance by different stakeholders.
- (d) Describe the current practices and players in the collection of recyclables, with its associated implications.
- (e) Assess the current priority among social, security and environmental objectives of the waste collection programme of the municipal government.
- (f) Draw conclusions and recommendations on policies and administration for such programmes, to improve the social and economic outcome for the collectors while still achieving the associated, security and environmental objectives.

Box 2. Analytical Framework to Assess Poverty and Governance

*The **underlying paradigm** focuses either on the **supply/income** side of poverty or on the **demand/consumption** side (this article discusses cooperatives as a strategic vehicle to deal with the demand for higher income of recyclers). Resource allocation via budget formulation is a platform consistent with a supply paradigm and a poverty alleviation impact (labour market and collaboration at different levels of governance as a platform are also covered in this article). These constitute alternative but not mutually exclusive approaches to assessing and intervening to reduce poverty.*

*The intended **impacts** of poverty-related interventions by government are as follows:*

- (a) **Alleviating poverty (lowest level of results intensity)**
- (b) **Mitigating poverty (intermediate level of results intensity)**
- (c) **Eradicating poverty (highest level of results intensity)**

*The **platform or vehicle** for government intervention in regard to poverty. This parameter refers to the **entry point** as determined by government policy to approach and treat poverty. The intended **impact** may determine*

¹These findings were possible by review of literature and a set of interviews carried out during 2011.

*the vehicle/platform chosen to treat poverty. For example, a demand side paradigm with a poverty alleviation-intended impact may use the service delivery supply **vehicle** to target the poor. Associated with this vehicle/platform are policies and procedures for social or client accountability enabling citizen recourse and redress. As corruption is regressive (affecting the poor most), promoting transparency and fighting corruption may be a chosen vehicle/platform. This article uses recycling as its poverty-reduction platform.*

Targeted populations. *Every poverty-related policy must specify the targeted population and define its demographic, socio-economic and spatial features. These may in turn determine the viable paradigm, impact and platform (this article uses urban recyclers as a sample of the poor).*

Policy and institutional arrangements. *The preceding parameters determine the nature and instrument of policy to address the specific poverty target. The policy in turn will determine the institutional arrangements and the organizational architecture to implement it (policy considerations are touched on in this article. It also covers institutional requirements and the complementary organizational architecture).*

THE CONTEXT

In general around the world, the recyclable collectors' plight has been the subject of policies that vary with the context and the locale (Castillo Berthier, 2003; Cointreau, 1986; Medina, 2007; Sicular, 1991). The urban collectors/recyclers represent an 'enclave' of socially and economically disenfranchised individuals lodged in an otherwise well-to-do middle and upper middle urban class. Policies in their regard range from repression and exclusion—when they are seen as a threat to urban security, sanitation and cleanliness—to support and encouragement as they are willing to delve in refuse, a task despised by most urban dwellers (Medina 2000, 2007).

Box 3– Some features of the collector/recyclers of Rio

- *The collectors/recyclers are a small segment of informal workers sharing some features with street vendors (unlicensed and unregulated), a much larger and vocal segment of the urban disenfranchised;*
- *Within the collector/recycler class, there is a variety of operators, further fragmenting them and challenging targeted policy;*
- *Unwillingness of many to participate in government programmes and being torn between opportunities and guarantees of entitlements by the state and federal governments also disrupt their social and occupational structure;*
- *Unlike at its onset, currently the collectors/recyclers have evolved into a group operating within a labour and environmental regulatory framework (not fully enforced), whose tangible benefits are not entirely clear. As a professional class however, these acquired “rights” of citizenship have rendered them more susceptible to politization.*

In developing countries, strategies for post-consumption treatment and recycling of refuse always factor in the work of collectors/recyclers, usually not working for municipal refuse collection and treatment services but willing to participate gainfully on the fringes of these services, as informal self-employed operators. In some cases, they are excluded as an obstructive nuisance to the organized municipal service, in others—as in the case

studied in this article—they are co-opted (Birkbeck, 1979a, 1979b; Castillo Berthier, 2003). In developed countries, when they exist, they are formally employed sorters in municipal recycling plants.²

Poverty and unemployment are seen as the drivers of the disenfranchised to seek this informal occupation as a matter of survival (Bastos, 2008; Eigenheer, 2003; Gonçalves, 2006; Magera, 2003; Portilho, 1997). This sets the stage for policies that are both socially as well as environmentally based to the extent that informal recyclers contribute to the viability of collection of recyclables in an economical manner and in keeping with sanitary standards.³ Without them, urban refuse collection in many developing countries would not be economically viable. Although much has been written about refuse collectors, little is known about the effective impact of policies directed at them in terms of raising their income thus reducing poverty and the improvement of urban environmental conditions (Eigenheer, 2003; Gonçalves, 2003; Pimenteira, 2000).

The recycling industry emerged in Brazil after World War II, but was limited to industrial waste, and over the years, governments in general tended to encourage the work of collectors as it translated into an economic dividend for industry and provided an occupation to unskilled and underprivileged urban dwellers. In general, the Rio collectors have been unskilled and often illiterate individuals, excluded from the formal employment market. Some are homeless and live on the fringes of the law. They are grouped into (a) those that are members of cooperatives, (b) those that are regular collectors but non-members of cooperatives and (c) the ‘occasional’ collectors who do not fit the profile of the others and who have some other occupation but use recyclable collection as a way to make ends meet. These need to be differentiated from the sorters (*catadores*) working in recycling plants and in refuse landfills. The latter pick, sort and sell their materials at or near the landfill. An associated category is the *carroceiro* (carter) who wanders around town picking up assorted materials, including remnants from construction. Home makers and staff of residential condominium buildings are also a category who engages only in the sorting and sale of recyclables at their doorstep.

The socio-economic context in which the collector/recycler operates is characterized by the level and profile of poverty in the city/municipality of Rio de Janeiro. The Getulio Vargas Foundation estimates that there currently are 350 000 families in the state in extreme poverty. It also shows that between 1997 and 2008, poverty rates in Rio had increased by 89% and those living with less than US\$1 a day increased from 3.5% to 6.61%, contrary to the national rate which had a decrease of 38% in poverty rates and those living with less than \$US1 dropped from 4.66% to 4.14%. Likewise, nationwide the number of people with no income at all dropped by 16%, yet in the city of Rio it increased by 6.42%. By mid 2011, however, over a period of 12 months, the average *per capita* income in the city had grown by over 14% compared with 6.1% in six other major metropolitan areas in Brazil. Although there are several explanations for these trends, the most plausible one is that Rio, a large urban centre became a migrant magnet for the displaced inhabitants of poverty-stricken areas such as the northeastern region, therefore inflating the numbers of disenfranchised in the city. These trends explain the impact that increased poverty must have had on the collector/recycler ranks.⁴

Box 4— Historical determinants of collector/recyclers

The context is also determined by the historical background of the perception and treatment of refuse in Rio de Janeiro from colonial times. Rio became the capital of colonial Brazil in 1763 and with the arrival of the Portuguese royal family in 1808 refuse became equated with other socially undesirable elements such as street beggars, prostitutes and collectors. They were all to be removed from urban sight. Public sanitation, involving refuse

²Brazil recycles less than 3 per cent of the recyclable materials, according to data presented at the II State Congress on Recycling in 2010, yet the estimated benefits place the potential environmental service gains at BRL8bn (reais) per year (\$US4.5bn) at March 2012 exchange rates.

³The environmental element is based on risks and the economics of scarce materials, whereas the sanitary is based on risks to health caused by sub-standard discarding and manipulation of waste. The economic element enters the equation as the private sector resorts to recycling technology as means to rendering recycling a profitable industrial activity (Do Carmo, 2008).

⁴Currently, the average monthly income of a collector in Rio ranges from BRL563.00 (\$US313.00) to BRL900.00 (\$US500.00) at August 2011 exchange rates (<http://www.rj.gov.br/web/imprensa/exibeconteudo.article-id=483665>, accessed on 27 August 2011, and <http://cps.fgv.br/renda-bem-estar/pobreza-desigualdade>, accessed on 26 August 2011).

collection, water treatment and proper city cleaning was only adopted at the outset of the 20th century (Portilho, 1997).

The collector/recycler in Rio had his occupational origins in the refuse collection practice among immigrants from Portugal, Spain and Italy who specialized in glass containers, discarded metal scrap, and paper products. These immigrants moved on to other occupations and many became the middle men purchasing from individual collectors, usually migrants from the impoverished northeastern regions of Brazil with a considerably lower social standing and many homeless or squatters in the favelas (shanty towns). The collection of scrap metal (sucata) was beyond their reach as it had been captured by organized providers of these valuable materials used by the smelter industry.

It is only by mid 1970s that Rio built facilities to sort out residential and business waste which was collected in mixed form and then sorted into its different components. These facilities were usually located near *favelas* as most of its workers were residents of them and also generated compost for agriculture and other sources of organic fuel. It is noteworthy that these sorting facilities only handled a small part of recyclables as most was collected along with regular refuse and taken to the Rio central landfill known as Gramacho.⁵ This constraint leads to a thriving endeavour of collection and sorting of recyclables at the landfill itself, which created a major social, sanitary and environmental problem for the city. These collectors command higher earnings because they are in a strategic location and many are organized in cooperatives, protecting their turf.

As in other parts of the world (Birbeck, 1979b; Medina, 2001), there are many gaps in the information about collectors in Rio. The 2003 National Convention on Refuse and Citizenship stressed that little was known about collectors as a group, their social profile and especially their work conditions. A rough estimate at the convention placed the numbers of collectors nationwide at 500 000 in 2003, up from 200 000 in 1999, an increase attributed mostly to increased unemployment.⁶ As for the metropolitan area of Rio de Janeiro, the estimate in 2009 was of 40 000 collectors (Jansen, 2009). These data gaps have made the formulation of policy a challenge and prone to be based on guess work.⁷

THE ORIGINAL COLLECTORS/RECYCLERS COOPERATIVE PROGRAMME

According to Brazil's Federation, its inter-governmental organization places the responsibility for urban refuse collection and disposal squarely on municipal governments.⁸ By the mid-1980s, COMLURB collected recyclables through its own field staff, as the informal collectors/recyclers were few and not organized. As early as 1987, COMLURB started supporting school-age residents of a *favela* (shanty town); João Paulo II to collect and sort refuse, for which they were paid a stipend. The programme expanded and at one point there were 2500 participants, all providing materials to the collection points set up by COMLURB. Similar programmes emerged in the 1980s such as the Community Refuse Collector (*Gari Comunitário*) covering several *favelas*, all isolated initiatives of small scale.

Towards the end of the 1980s, municipal authorities started to focus more systematically and carefully on the collectors/recyclers as a social and economic underclass and began to support the organization of cooperatives moved in part by an explicit focus on social welfare and poverty reduction motive. It is at this point that the

⁵The landfill serves several municipalities in addition to that of Rio city and it comes under the purview of COMLURB. In addition to providing a centralized collection point, it processes the refuse and monitors its environmental impact such as leakages into the water supply and the Guanabara Bay, which is already heavily polluted.

⁶*Movimento Nacional de Catadores de Recicláveis* (MNCR; National Mobilization of Recyclable Collectors) promoted registration and has raised this figure to 35 000 (members of cooperatives and associations) nationwide and 8900 in the city of Rio de Janeiro alone. The Labor Ministry, which tracks different occupations, had placed the numbers of collectors in 2003 at only 17 674, confirming the disparities in statistics.

⁷Brazil is seen as one of the largest recyclers of refuse (Marta, 2002; Vialli, 2003b), with collectors being responsible for collecting 43 per cent of disposed cans (Vialli, 2003a), 37 per cent of office paper, 60 per cent of cardboard, 61 per cent of aluminium and 21 per cent of plastic soft drink bottles (Seroa da Motta and Sayago, 1998). At 98 per cent, aluminium recycling places Brazil as the number one recycler of this material, with Japan in second place and the USA as a distant third place. Yet it is also estimated that Brazil recycles only 3 per cent of reusable waste.

⁸Through its National Policy on Solid Waste adopted by the Federal Government in 2010, municipalities were obligated to involve the collectors/recyclers in their programmes of solid waste selection.

Municipal Government, through COMLURB, adopted a policy to help the creation and support of collector's cooperatives. The policy intent then was to provide support for the collectors/recyclers to compete with middle men and market their collected materials directly to the large buyers and users. Accordingly, COMLURB provided on its grounds facilities for storage of collected items, cooperative management and a resting place for collectors/recyclers. It also intended to enable them to better manage the collection and marketing of their materials, contributing to revenues/profits higher than they would otherwise derive from this occupation.

Although little is known about the policy of the State-level Secretariat for Social Assistance and Human Rights with regard to this segment of urban poor, it is known that in the early 2000s, the Secretariat in its welfare policies mirrored those of the Federal Government, which have been based on tied/conditional transfer payments inspired in the widely recognized *Bolsa Família* (family welfare allowance). The conditionality of these income supplements to poor families in general has to do with keeping children in school, not seeking employment. The alleged motivation and rationale of COMLURB were that by redirecting recyclables to dedicated locations, which would add value to them, the pressure on refuse transportation and on the landfill would be reduced.

Framed in such a way, one could say that COMLURB as a government-owned corporation was within its remit of promoting proper waste disposal in the city, despite its utilitarian implications for the collectors/recyclers. Some observers however claim that by supporting a cooperative approach to the organization of the collectors/recyclers enterprise, the social content was favoured because cooperatives are based on the socialist principle of collective gain rather than individual business achievement. Yet COMLURB in effect has no social mandate as such. Furthermore, a case can be made that the cooperative approach was better aligned with the level of education and the assumed low level of entrepreneurial motivation, given the social-educational profile of the collector/recycler.

In parallel with these initiatives of COMLURB and the increased social awareness of the importance of recycling, Rio residential condos, through their managers and the support of concerned residents became involved in the sorting and sale of recyclables. This contributed to the urban environmental protection objective and to generate income for condo staff and managers (Branco, 1990). The collectors/recyclers became a key element in this marketing scheme, regardless of their social standing and level of income, as they worked with condo staff and managers to collect recyclables that they laid out. The motivation for this initiative of COMLURB was driven by a mixture of increased awareness by the educated middle class residents of the limitations of fossil fuels and the need to conserve energy via recycling, and on a lower level of concern by local government with unemployment and poverty.

Driven by this motivation, during this period, the isolated small-scale initiatives by Rio's municipal government expanded to involve businesses, supermarkets and schools, all choosing to play a part in the recycling movement. Even prisons allowed convicts to participate as sorting labour in exchange for shorter sentences. Clearly with volumes and efficiency increasing, the recycling business was generating enough revenues to raise incomes of collectors/recyclers and especially of the middle men that whole-sold the materials to industry.⁹ The 1992 United Nations Conference on Environment and Development, which took place in Rio, gave the recycling campaign a significant boost. However, the incoming municipal administration (1993–1997) began to realize that the costs to COMLURB to promote the campaign were higher than the income being generated to all concerned, becoming uneconomical. The new Mayor, Cesar Maia took a stand in regard to the continued lack of discipline of the collectors using state and municipal property and moved them to locations such as under bridges and overpasses, which were usually occupied by the homeless and petty criminals, including drug traffickers and users.

By moving the collectors into these spaces, Rio City Government was pursuing a policy of maintaining the cooperative movement, by reducing their costs, making them more competitive with small business collectors by providing basic business training and yet clearing these urban locations of socially undesirable types. Clearly

⁹Somewhat surprisingly, populist Rio de Janeiro State Governor Leonel Brizola during his 1991–1994 administration supported COMLURB's initiatives by allowing cooperatives to use state property strategically located at the central business district of Rio for storage.

this was a business-oriented policy with important security dividends, but only marginally related to mitigating the poverty of the collectors, because most were not business oriented or skilled.

THE DECLINE OF THE COOPERATIVE PROGRAMME

Because these initiatives were not enough to handle the continuing increase of refuse, the 1990s also saw the emergence of refuse-sorting plants staffed by COMLURB staff of street sweepers (*garis*) and a few selected recycling cooperatives that worked as sorters of recyclables. This initiative was in direct competition with those not selected to play a role in these plants, as they were removing refuse that would otherwise be collected and processed by the non-organized street recyclers, including the predatory ones and excluded cooperatives. In response to this competition, the street-wise recyclers were beating the COMLURB trucks to the materials laid out by businesses and residences and running off with them for their own benefit. Additionally, there were attempts by excluded cooperatives to sabotage the operations of the cooperatives working for COMLURB's sorting plants. The stage was set for a conflict that undermined support for cooperatives of collectors/recyclers.

As reported by the press, in 1996, when there were some 2000 members of collectors cooperatives, Rio residents started complaining about the unsightly and disturbing presence of collectors/recyclers, generating noise, some refuse scattering, violence among them and a general sense of insecurity.¹⁰ Whether these deviant behaviours were by cooperative members or non-member predatory collectors/recyclers did not matter as far as the perception of residents was concerned. This perception engendered the image and designation of the 'predator collector/recycler', a type which should be either controlled or eliminated. This discontent with the collector/recyclers and their activities came to a confrontation when one of the cooperative sites caused a major urban fire with life and property loss.

As the policy of repression against the 'unruly rebellious' recycler had been abolished a decade earlier, disorderly conduct could not be ostensibly prevented. This conflict in effect triggered the downturn of the organized collector/recycler cooperatives. The definitive demise of these cooperatives came in 2010 when the administration of Mayor Eduardo Paes introduced a policy known of 'order shock', which consisted of strict measures to clear the city of predatory, petty criminal behaviour and violence in the gathering points of the unruly street collectors/recyclers.

According to a senior officer of COMLURB, the main problem that brought down the cooperatives was the insistence of its founders that they be managed by the recyclers themselves, after the facilities were built for them. Because these facilities were not built with their own resources or with their own inputs as to location, design size and so on, they expressed little ownership of them. Instead they ransacked the installations removing wiring, windows, fans, all items that they could resell, adding to the negative perception alluded to earlier. Only one cooperative proved immune to such behaviour by their members: Coopermiso. These factors converged to seal the demise of cooperatives, although no sitting mayor wanted to take responsibility for it.

INSTITUTIONS AND POLICIES

Institutionally, the municipal government intervened only through COMLURB, which had in its ranks a position of Coordinator of Selective Refuse Gathering with a small staff and a strong leader.¹¹ Although COMLURB as the city's refuse collection arm had no formal social mandate to reduce poverty among the city's disenfranchised, the strong leadership in effect gave it this role, albeit marginal. COMLURB's core mandate is to collect refuse from residences, clean common urban areas, including beaches, lakes and lagoons and sanitize municipal hospitals and proper disposal of medical waste. Its concern with the collectors/recyclers is seen as a logical extension of its broad responsibility with urban refuse in general, mostly because their

¹⁰In 1999, the number of recyclers in Brazil was put at 200 000, in 2003 at 500 000 and in 2009 at 1 million.

¹¹This post was occupied off and on by a strong advocate of collection/recycler cooperatives, Mr Elinor Brito, who was interviewed for this study.

activities border on areas of COMLURB's operation. So it is a mandate by association of mutual convenience and not legally binding. If COMLURB chooses—as it did off and on—to ignore the collectors/recyclers, there are no legal consequences. It is because of this loose link with them that COMLURB does not seem to be actively concerned with the social fall-out of the relocation of the Gramacho landfill.

The Municipal and State Social Affairs Secretariats were nowhere to be seen in this campaign, which leads to the conclusion that *de facto* the focus of formal policy *vis a vis* the collector/recycler was mostly environmental or urban security, not social in the sense of fighting poverty. However, running through these policies was an implicit developmental objective of rendering recycling economically viable and inculcating a measure of entrepreneurial skills and motivation among the collectors/recyclers. The cooperative model however, given its socially inspired equalization proneness, may not have been the ideal entrepreneurial model to use, as individual incentive and reward were stymied and subordinated to collective reward.

Box 5. Some institutional features

COMLURB was inspired in a utilitarian and socialistic model to deal with collectors/recyclers. As such, it was primarily concerned with factoring in the collectors/recyclers to achieve greater coverage, effectiveness and efficiency of refuse collection and recycling, and marginally their welfare;

State and municipal social entities were by-and-large absent from the collector/recycler movement and their cooperatives.

Currently, because of the enhanced involvement of the Federal Government, there has been a nominal shift to policies targeting the welfare of the poor in general and the collectors/recyclers in particular only benefit to the extent that the federal government requires municipalities to involve them in their refuse collecting and sorting activities but without any income guarantees.

The involvement of three governmental layers has rendered policies regarding the collectors/recyclers movement unfocused and hard to implement.

Discerning policy initiatives on the part of the municipality through COMLURB during this initial phase is not a straightforward task. The record and evidence suggest a series of small pilot-type initiatives on a limited scale, with short duration, little or no evaluation of impact and constant replacement by another one, depending on the interests of stakeholders. This trend characterizes an awkward yet pragmatic 'trial and error' approach to policy. No continuity and deliberate policy is discernible, as no coordinated policy mechanism pulling together the concerned government entities was evident. COMLURB's mandate made it difficult for it to be the formal policy leader on these matters as they spanned a social, environmental, urban security and economic agenda, quite beyond the technical and administrative remit of this refuse collection municipal company.

It seems that municipal initiatives were being pushed by circumstances and pressure from different constituents without a clear formal leadership role being assigned to any governmental entity despite the *de facto* leadership of the incumbent Coordinator of Selective Collection at COMLURB. Notwithstanding the strong leadership, the lack of an organization platform or much administrative or technical support set considerable limits on the achievement of policy objectives. Because the collectors/recyclers are informal workers operating outside the 'radar screen' of government, it is difficult to assess the socio-economic impact of their work. What was clearly present in all these initiatives was that collectors/recyclers were being afforded opportunities to practice their trade and earn their livelihood.

From the perspective of environmental policy and its interface with a social policy of fighting poverty, the pattern in the case of COMLURB was its concern with preserving the occupational standing of the collectors/recyclers through these multiple gyrations of interests, technology, pressure from the residents of Rio and municipal, state and national political dynamics. Rather than being germane to welfare, the adopted policy was

more germane to 'workfare'. On that basis, one can only surmise that the transfer payments based on the Federal Government *bolsa* concept would run counter to the 'workfare' principle and have the potential of undermining what the cooperative movement was trying to achieve.¹² This dilemma is not all that different from that which takes place as a result of deforestation in the tropical Amazon forest, which displaces indigenous workers such as rubber tappers, nut collectors and others (Pinto and Puppim de Oliveira, 2008).

Box 6. Policy environment

- *The policy mix of social, economic and environmental goals leads to potential inter-goal clashes and becomes a major policy challenge.*
- *Policies started out with an environmental bias then incorporated the social and economic bias. The sanitation bias emerges with the disorderly practices of the street collectors, and the security bias was a derivation of the latter as these same predatory collectors engaged in petty crime and street violence. The economic bias is a consequence of the economic imperative dictated by the increasing value of recyclables and the emergence of a market for them, which brought in the private operators concerned with their profit margins.*
- *The unregulated and unlicensed nature of informality is also a challenge for social and economic policy regarding the collectors/recyclers.*
- *Policy has not been formulated on the basis of diagnosis, analysis, socio-economic mapping and data collection.*
- *The impact of context fluctuations and lack of policy continuity and consistency regarding the collectors/recyclers translated into the need for constant adaptation and renewed challenges for their operations.*

SALVAGING THE COOPERATIVE MODEL: LEARNING FROM EXPERIENCE

In early 2000s, the *Partido dos Trabalhadores* (PT; Workers Party) of Lula da Silva came to power in a landslide electoral victory. With this came a host of populist policies that indirectly affected the recyclers plight in the city of Rio de Janeiro. At this time, COMLURB came up with yet another initiative that of creating plants to sort out the recyclables that had been pre-sorted by residences and businesses, known as *Centrais de Separação de Recicláveis* (CSR; Central Recyclable Sorting Facilities). The work in these plants was carried out by the more disciplined cooperatives, operating mostly in the suburbs of Rio, which now had a steady source of work and income, as volumes of pre-sorted materials had grown as a result of municipal legislation requiring this pre-sorting, in addition to the effects of the green movement.¹³

Again, as in the past, this initiative organized by COMLURB was in effect reducing the source of materials for the 'unruly' self-managed recyclers that operated mostly in the centre of downtown Rio. The results were not unlike those in the past. The street savvy recyclers removed materials destined to the CSRs, reducing the volume and level of activity, which led the commercial wholesale buyers who worked closely with the unorganized central Rio collectors/recyclers, to bring pressure on COMLURB to close down the CSRs. This outcome suggests that there was little learning from past experiences (Victor, 2007). The learning here is that the predatory gatherer that engages in criminal or disorderly behaviour as he goes about his work is part of the problem. Turning this behaviour pattern around is certainly part of the solution.

¹²To make a dent on extreme poverty, the RJ State Government through the *Secretaria de Assuntos Sociais e Direitos Humanos* (State Secretariat Social Affairs and Human Rights) launched in 2011 two programmes known as *Renda Melhor* (Improved Income) and *Renda Melhor Jovem* (Youth Improved Income). To start, the programmes will target one of the poorest state municipalities, Japeri with 27 per cent of its population in extreme poverty. For 2011, the programme had a budget of BRL35m or some US\$21m at August 2011 exchange rates. These programmes complement a similar one by the RJ Municipality known as the Carioca Family Card. The *Renda Melhor Jovem* is intended for families with children of school age who are enrolled in public schools. Those eligible for the *Renda Melhor* programme would also have access to professional education programmes. In principle, these programmes represent an investment to create employment opportunities. The extent to which such programmes would impact collectors/recyclers is hard to tell as their coverage and funding are very limited.

¹³According to CEMPRE (2009), 81 municipalities carried out selective refuse collection in 1994, 237 in 2004, 327 in 2006 and 405 in 2008 (7 per cent of all municipalities in the country). Of these, 43 per cent partnered with collector/recycler who derived an income of 1.5 minimum wages in the south and southeast regions and 1 minimum wage in other regions (http://www.cempre.org.br/imprensa_detalhe.php?id=MTU= accessed on 27 August 2011).

Another potential lesson here is the answer to the question whether 'supportive' interventions by the municipal government are absolutely essential or whether there are other more effective regulatory interventions. Moreover the lack of a policy framework based on a minimum amount of diagnostic and statistical data and studies also undermines any municipal government intervention.

With the rise of the Workers Party's influence and command of government, local as well as national entities such as non-governmental organizations (NGOs) started to cater to the interests of the disenfranchised, collectors/recyclers.¹⁴ For example, the Federal Ministry of Social Development and Combating Hunger started requiring that families of recyclers be registered in the central registry of social programmes of the Federal Government. On the other hand, COMLURB took it upon itself to help in the fight on poverty and hunger along with urban and environmental sanitation at a time when poverty had been politicized by PT. Collectors/recyclers were led to seek civil registration (national identity cards), register to vote, register as self-employed recyclers with the Labor Ministry, all with the direct or indirect support of federal entities such as Banco do Brasil, Petrobras and Caixa Economica Federal, among others.¹⁵ Furthermore, important legislation and regulatory measures¹⁶ were enacted that brought a measure of legitimacy and potential federal government support to collectors/recyclers, such as the *Programa Nacional de Resíduos Sólidos* (PNRS; National Policy on Solid Waste), which was intended to expand the scope of recycling and significantly improve the working conditions and income of collectors/recyclers.

Although tangible benefits that actually accrued to the recyclers were few and far between, this association certainly politicized the support movement.¹⁷ Interviews with collector/recycler leaders in Rio for this article revealed an abiding belief that the PT was very supportive of the movement. It is undeniable that association with the PT certainly placed the recyclers around the country on the national policy agenda and before the eyes of the media, mostly by way of national congresses and seminars dedicated to the class and their issues.¹⁸

Associated with these legal and regulatory measures was the selective welfare support of the Federal Government to municipalities that complied with the promotion of sorting of refuse for recyclables as established in the legal and regulatory framework. Because on social welfare matters the federal government operates mainly through the state and municipal governments, these are the areas of most concern by these levels of government, and also because funding is associated with this intermediation. Despite the incremental support, some observers expressed pessimism as to the capacity of the municipal government of Rio to take on the expanded responsibility with regard to the collectors/recyclers and feel that the task would be best placed with the state government, which has greater administrative capacity. Yet the number of municipal government support programmes had been growing steadily across the country.¹⁹

¹⁴According to Westarb Cruz *et al.* (2009), in a study about Curitiba City (a model for the country in terms of recycling), 'the establishment of an interaction system between different organizations that also precede in different levels of involvement, with high participation, of the third sector organizations in the detriment of public and private organizations, consolidating the importance of this sector as the main social actor in the public issue'.

¹⁵In addition to government interventions many non-governmental entities played a role such as the *Movimento Nacional de Catadores de Recicláveis* (MNCR), the *Programa Ambiental de Apoio à Cooperativas de Catadores de Material Reciclável*, (Environmental Program of Support to Recyclable Collectors) *Ministério do Meio Ambiente* (Ministry of Environment), *Conferência Nacional dos Bispos do Brasil* (CNBB; Brazilian National Conference of Bishops), *Coordenadoria Ecológica de Serviço* (CESE; Ecumenical Service Coordination), *Centro de Estatísticas Religiosas e Investigação Social* (CERIS; Center for Religious Statistics and Social Research) and *Cáritas* of Brazil.

¹⁶Decree No. 5.940 of 25 October 2006; Decree No. 7.405 of 23 December 2010; passing of Law 11.445/2007 (*Lei do Saneamento*; Sanitation Law); Decree 7.404 and 7.405

¹⁷One such benefit was the extension to recyclers of the federal government program known as *Fome Zero* (zero hunger). Under this programme, food baskets were exchanged for a certain number/volume of recyclables. The success of this programme was not assessed by this article. Super markets had similar programmes.

¹⁸One such event was the *I Congresso Nacional dos Catadores de Materiais Recicláveis* (First National Congress of Recyclable Collectors) in 2001, attended by 1700 collectors/recyclers and related social workers and NGOs where the *Carta de Brasília* (Brasília Charter) was issued as a statement regarding the struggle of the class. This Congress gave the class much visibility that had an impact on the social and economic elements of the national policy on the management of solid waste.

¹⁹In 2008, as estimated by CEMPRE, there were 405 municipal support programmes, whereas in 1994, there were only 81 and in 2002, 192. These programmes would certainly increase recycling. CEMPRE estimates that in 2009, BRL10bn had been generated in revenues (http://www.cempre.org.br/imprensa_detalle.php?id=MjM= accessed on 27 August 2011).

Despite assorted NGOs attempting to salvage the cooperative movement and improve the lot of the collector/recycler, such as the *Instituto Brasileiro de Inovações pró-Sociedade Saudável* (IBISS; Brazilian Institute of Social Health Innovation), the *Rede Independente de Catadores de Materiais Recicláveis* (RICAMARE; Independent Network of Recyclable Collectors), the *NOVA Pesquisa* (NEW Research) and the *Fórum Estadual Lixo e Cidadania* (State Forum of Refuse and Citizenship), among others; they engage in isolated initiatives which together do not ensure a large enough collective movement capable of redirecting and shoring up the work and welfare of the collectors/recyclers. On the other hand, cooperatives only aggregated a small number of collectors/recyclers, so neither providing a focal organization point. For example, COOPERGRAMACHO (the cooperative at Rio's largest landfill) in 2008 congregated only 10 per cent of its 960 active gatherers (Bastos, 2008).

With the near-demise of the cooperative movement, the current focus now is on two fronts. First to deal with the massive social displacement of collectors and sorters in the Gramacho landfill that is to be closed down and relocated imminently. No solutions to this social dislocation were discussed in the course of the interviews for this article, but the impact on the social scene of this group of urban underprivileged is likely to be significant and with many repercussions. The dilemma here is in part due to the State *versus* municipality jurisdictional issue.²⁰

Second, as a source of mitigation of this impact, the most recent initiative is being driven by a grant from the *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES; National Economic and Social Development Bank) to the Municipality of Rio de Janeiro to invest in assorted infrastructure and equipment for yet another set of selection and sorting centres. The programme, which carries a BRL50m price tag supported by the grant and by the federal programme known as *Programa de Desenvolvimento de Coleta Seletiva com Geração de Emprego e Renda para o Catador de Lixo* (Program for Development of Selective Gathering with Employment Generation for the Refuse Collector), seeks to create six storage and commercialization centres strategically located around Rio, linking the residential and commercial producers of recyclables and the final purchasers—users of the sorted materials, essentially cutting out the middle men. Additionally the grant covers capacity building, training of a marketing network and environmental education and renewal of the transportation fleet of COMLURB. The programme targets some 1500 collectors/recyclers, and impervious to past experience, those successful cooperatives that are still around and operational will be contracted to work these centres.

The alienation of the middle men is expected to create a major source of resistance and eventual blockage. There is no indication that the programme seeks to co-opt these middle men to neutralize the likely source of obstruction. It remains to be seen whether, in the refinement of this programme, the lessons learned from past experiences will be incorporated into this approach to improve the social and environmental impact of the collectors/recyclers of Rio de Janeiro.

FINDINGS AND CONCLUSIONS

- (a) In regards to which institutional factors mattered most among policies, administration and implementation, leadership, resources and response of beneficiaries, it is clear that leadership and response by stakeholders outweighed the others.
- (b) This study could not find any explicitly formulated and documented policy supporting the implementation of any of the many initiatives and certainly no prior diagnostic efforts. Even the basic statistics on the numbers and profile of collectors/recyclers were lacking. Institutional and administrative capacity was non-existent. COMLURB has no mandate to engage in fighting poverty although its work brings it close to the collectors/recyclers. Resources were hard to measure but appear to have been minimal.
- (c) The motivation of COMLURB to deal with collectors/recyclers was not necessarily the same as those of the state and federal governments. It was more concerned with factoring in the collectors/recyclers to achieve greater coverage, effectiveness and efficiency of refuse collection, recycling and marginally their welfare.

²⁰The responsibility for collection of refuse rests with municipal governments. In the case of large generators of refuse and the landfills, the responsibility rests with state governments, a source of jurisdictional conflict. In 2004 the Environment Ministry had promoted the creation of NGOs to organize and support the collectors/recyclers with the intent of creating jobs and raising the income of this class.

- (d) The collection practice of COMLURB has not changed much except that it has mobilized the collectors/recyclers as well as its sorting plants to deal with the increase of refuse. Because of the limitations of data collection and analysis, it has not been possible to measure this change. Sorting at collection centres has been mechanized and therefore has become less labour intensive.
- (e) The Rio collector/recycler cooperative programme was an appendix to COMLURB's refuse collection programme and the attention it received from it was marginal and spotty. This could have been avoided if the State and Municipal Secretariat of Social Assistance played a more salient role.
- (f) The cooperative programme has gone through many trials and tribulations. Although it has not consolidated, it continues to be the underlying model underpinning the most recent initiatives regarding the collectors/recyclers.
- (g) The perceptions of the cooperatives' performance have not changed in any measurable way. In regard to verifiable performance, it is impaired due to an almost total lack of related analysis, diagnosis and study.
- (h) Interventions by multiple jurisdictions can lead them to work at cross-purposes and raises the coordination challenge. When a municipal entity with a narrow mandate takes the lead, without proper decentralization from higher levels of government and mandate clarity, results are compromised.
- (i) Reconciling policy from different levels of government with diverging policy biases creates a layering challenge with the potential of policy clash or intergovernmental policy gaps.
- (j) Straddling among several approaches and goals rather than putting forth a multi-goal integrated policy framework undermines policy effectiveness.
- (k) Policy by 'trial and error' is costly and creates policy fatigue and a credibility issue.
- (l) The most recent recycling initiatives are still being launched so it is too early to assess their impact. On the other hand, the environmental impact has been negligible as Rio is still known for scattered trash and lack of discipline because of poor enforcement of refuse sorting by residences and businesses.
- (m) Although the approaching World Cup and Olympic Games may change this condition, the aggregate demand on Rio's municipal government to prepare for these global events is such that many measures—especially those marginally related to them—may fall short.

RECOMMENDATIONS

COMLURB, a government company that has neither the vocation nor the wherewithal to formulate and implement social policy, is not the vehicle to institutionally guide government intervention in any of the policy areas reviewed here, except refuse collection. Leading governmental agencies driving such policies and programmes should be clearly mandated to do so.

Policies should be preceded by careful social, demographic and economic profiling and mapping of the targeted population as well as the many stakeholders. Performance of policies and their implementation should be carefully monitored. Policy by 'trial and error', however pragmatic, does not work.

Because of poverty's multi-factor causation, fighting poverty calls for a multi-faceted strategic approach, such as creating employment, raising income, providing social services, licensing and regulating economic activity, promoting competition and protecting workers. It is a package.

Box 7. Summary of experience in Latin American countries

A quick review of isolated experiences with collectors/recyclers in a few Latin American countries points to some interesting parallels. For example, the emergence, evolution and stage sequence of the collector/recyclers movement, as well as how they were perceived by urban society were quite similar among all countries reviewed. The observed homogeneity of approach is probably due to the exchange of models and experience that took place among them, such as between Bogotá, Colombia and Curitiba in Brazil. Mexico on the other hand, despite the pervasiveness of corruption, stood out for having invested substantially on the business strength of their cooperatives, which gave them access to commercial bank borrowing, not common in the other countries reviewed.

In regard to the way that the ‘undesirability’ of the collector/recyclers—in the eyes of middle class urban dwellers—was dealt with, some differences are noticeable. Colombia, which denied them access to the landfill, was clearly more forceful than Argentina, Mexico and Brazil in their repressive measures. Another striking contrast between all countries with Argentina is that in this country economic crises lead members of the urban lower middle class of Buenos Aires to join the ranks of the “cartoneros” (cardboard collectors). There is no evidence of this trend taking place in the other reviewed countries, where the collector/recycler emerged mostly from urban migrants and the homeless.

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