

1. Introduction

In the upcoming years, 2014 and 2016, the world's eyes will be on Rio de Janeiro expecting that the city will successfully receive and host the World Cup and the Olympics.

As Brazil's second largest metropolis and the leading tourist destination in all of Latin America, Rio de Janeiro is known for its natural beauty and unique topography. However, the city needs to face some structural challenges that still compromise its viability as a major city capable of receiving major international events and – above all – it needs to overcome the problems preventing a better quality of life for all of its citizens.

The urban sanitation and efficiency in the management of solid waste in the city are challenges that the city of Rio de Janeiro is facing. Only through a joint effort of society and the local government we can envision a solution to the problem which forecasts new worrying indicators every day.

With a population of over six million people, the city produces about 264 tons of garbage per month, recyclable materials that come from selective collection, totaling only 600 tons monthly – that does not even make up 1% of the total garbage.

The Society of Urban Cleaning - *Comlurb* collects about 8,800 tons of garbage and waste generated throughout the city daily, of which 40% is taken off the roads. Their waste production is 1.505 kg / person / day. To clean the city of Rio de Janeiro, the company has a fleet of 1,069 vehicles and 298 other tools, 364 owned and 705 rented. In addition to many landfills, they have 15,869 employees, of which 11,000 are employed garbage collectors (catadores).

According to the city of Rio de Janeiro, the government is spending about R\$ 250 million a year to collect more than 1.2 million tons of garbage in the streets and beaches of the city. The collection of garbage dumped on the ground costs Comlurb three times more compared to the cost of the collection of garbage in dumpsters. With the saved resources investments in health, education, transportation, recreation, etc. could be made.

With little actions in our daily life we can turn this game around. Separate your trash, use the least amount of disposable plastics, save water, respect the rights of others, save energy, preserve the environment, value your vote that is able to demand the right to live in a healthy city from authorities.

When it rains heavily everybody realizes: misplaced garbage takes work. It clogs drains and costs money. In Brazil, taking care of trash is a huge challenge. There are good initiatives, but they are still very few and insufficient.

Urban waste thrown into the streets, avenues, lakes, rivers and streams is appointed by the city administration as the cause of the retention of rainwater in 30.7% of those cities. It means that more than 600 Brazilian cities would prevent or reduce flooding if people would litter properly and the government would take better care of collecting the garbage.

Among the diseases related to household waste, we highlight: cysticercosis, cholera, dysentery, typhoid, filariasis, giardiasis, leishmaniasis, leptospirosis, plague, salmonellosis, toxoplasmosis, trachoma, and trichinosis. **The state of Rio de Janeiro today has 40 illegal dumps operated by municipalities of the cities themselves, not counting the numerous illegal dumps.**

The garbage collectors of the dump Gramacho in Duque de Caxias, in Baixada Fluminense, claim that the city of Rio invests in projects that are supposed to raise awareness for the separation of recyclable waste and reward the recycling companies that collect these materials from the condos in the city.



It is the state capital which dumps most of the discarded trash at the dump *Jardim Gramacho*. Announcing the closure of this unit until the end of the year, 2,500 garbage collectors seek an alternative income and demand the implementation of the National Solid Waste Law of 2010.

Exhausted in its capacity the landfill Gramacho is one of the largest open landfills in the world. It receives 17,000 tons solid waste per day; 9000 tons of those are from the city of Rio de Janeiro.

According to Sebastião Santos, president of the Recycling Company *Catadores do Aterro Metropolitano de Jardim Gramacho*, to increase garbage separation from 2% to 10% until 2014, as determined by the new law, the city of Rio must educate the population concerning the need to separate their garbage at the time of collection.

In this context, the initiative of Limpa Brasil - Let's Do It! in Rio de Janeiro has been profiling as a move to join forces with other social agents, such as movement of catadores, the local people and the government, all imbued with the difficult task to install a new culture in this city for solid waste management.

2. Action Strategies

The city of Rio de Janeiro was the pilot city for the Limpa Brasil Let's do it! movement on June 5th 2011, whose goal is to show that it is possible to change the Brazilian culture regarding the use of recyclable materials. On this day, 20 Ecopoints were installed throughout the city, where citizens of each neighborhood could gather materials that built up on its streets, squares, vacant lots etc. The material collected was screened by the cooperating professional catadores. Each Ecopoint had the necessary infrastructure for such screening, such as a tent, a table, big bags to store the separated waste and the staff to perform the screening, catadores who are related to 20 recycling companies and trained volunteers.

With this first step of a proposed 10-year lifespan, the Brazilian initiative of the Let's do it! movement, named Limpa Brasil, seeks to establish a new culture in which every individual is aware that co-inhabiting public spaces brings responsibility regarding everything we consume and discard.

The proposal differs from the already successful initiatives in motion Let's do it! in Europe - in Estonia, where the cleaning was done in a single day - because, with Brazil's territorial configuration and the need to educate the public on sustainability, you must invest a much longer period of time. Thus, it is possible to not only clean the cities, but also raise the awareness of this national action, involving adults and especially children, to leave good marks in the next generation and build a clean country's history.

2.1. Institutional Campaign

The PR agency Leo Burnett decided on a campaign for Limpa Brasil that urged the public to join the movement. The slogan "The world became too small for so much waste" was created to emphasize the amount of garbage that people leave in the street without noticing. It ought to have an impact on society. It is for them to realize that the amount of produced garbage is enormous.

Leo Burnett's proposal was to conduct a campaign not informative, but compelling, capable of causing estrangement with many viewers and listeners, encouraging them to visit the website of Limpa Brasil to understand and inform themselves about the movement. Giving detailed information about the campaign was therefore the main responsibility of the website and of the blog.

2.2 T-shirts, Posters, Banners



Although there were two different designs, "Eu sou catador" and "Eu sou catadora", the coordinators of Limpa Brasil Rio de Janeiro chose to print only the "Eu sou catador" version on the T-shirts. In total, 2,000 white T-shirts were distributed to catadores who were linked to Recycling Companies and other volunteers, 100 black T-shirts were used exclusively by the national coordination.

The posters were intended to get the people's attention and make them participate in Limpa Brasil Rio. The first one focused on project and the taskforce in Rio de Janeiro itself and the others emphasized the importance of volunteering and the mapping of places with illegal garbage. The posters were distributed in various parts of the center and the south (Tijuca – waterfront) as well as to partners and coordinators of Ecopoints. The subway in Rio de Janeiro received 40 posters and put them up in the frames in front of public facilities underground.

The banners, with all of the information, were exposed in all of the Ecopoints. One of them showed a map with the location of the Ecopoints in Rio de Janeiro in order to visualize the joint effort in the city geographically. The other featured information was about the different types of recyclable materials that are supposed to be collected to clean Brazil properly.

The banners were also hung up on the city's traffic lights (Central and South Zone). Three people handed out leaflets and were holding promotional banners with basic information about the Limpa Brasil movement.

2.3 Site, Blog and Social Networking

The website of Limpa Brasil and each of the seven blogs from cities in which the action will take place in 2011 were developed in Wordpress. The collaborative map that records the locations of garbage – places with all sorts of illegal materials - was developed in Drupal using Open Street View.

The management of the site as well as the collaborative map is the responsibility of the national communication coordinator of the movement. In the local teams, each one of the members is responsible for the production of valuable content, so it can be formatted and standardized for the national coordination.

For June 5th 2011, the following actions were conducted in order to better tailor the site for it to inform about Limpa Brasil, to sensitize and mobilize citizens for the action:

- a) migration of the website and blogs to a server with better conditions to remain stable even in the event that a peak in the access of users simultaneously accessing the contents after insertion into a radio and / or TV.
- b) set-up of the module "Rio: June 5th" on the homepage, which assembles the content produced especially for the day of action.
- c) develop content in html5 to clarify the four ways of volunteering at the project.

2.4 Social Networks

In total, Limpa Brasil has 5 accounts in social networks: 2 on Facebook (Atitude Brasil and Limpa Brasil), 1 on LinkedIn, 2 on Twitter (Limpa Brasil and Atitude Brasil) posting daily up-dates.

- **Activities in social networks:**



Dispersion of the Atitude Brasil and the Limpa Brasil network;
Research on waste-related news, culture, education, social and environmental responsibility, conscious consumption, recycling, etc.;

Interaction with friends / followers, messaging, chatting, Q&A, E-Mails, friend requests, increasing the networks to promote the project and raise awareness of the users.

- Orkut (Brazilian facebook) turned out to be an inappropriate tool for spreading the world of Limpa Brasil, because we faced several problems: difficulty expanding the numbers of followers (a sort of anti-spam comes into the game when trying to add more than 20 people); little interaction with followers from the topics posted, resulting in little effect – close to zero;
- Other social networks "targeted" (focused on issues of sustainability and participants) that we used, also turned out to have a limited effectiveness until we found "Made in Forest" (<http://www.madeinforest.com.br/?empresa/home/tip/universidade/oid/1789> - A Global Environmental Network which publishes actions concerning environment for free for companies and NGOs) and Cidade Democratica (<http://www.cidadedemocratica.org.br/topico/1995-limpa-brasil-let-s-do-it> - A platform for political participation, where citizens and organizations can express themselves, communicate and generate mobilization to build an even bigger society). It is worth knowing that they have a different dynamic (less interactive) comparing to Facebook and Twitter.

2.5. Volunteers

The engagement of volunteers is an important part of the project – to raise awareness for the day of the action. To support the Limpa Brasil campaign, the registration allowed volunteers to register places – streets, squares, sidewalks, parks, etc. where garbage accumulates in their cities – on the map which was collaboratively developed with free technology (Open Street Maps).

The suggestion to map the points of waste aims to provoke citizens to reflect on the destination that is given to all things that are no longer useful. Practically, this also contributes to the logistics of the cleanups that aside from Rio de Janeiro, will take place in six other cities (Guarulhos, Goiânia, Brasília, Campinas, Belo Horizonte and Sao Paulo) in 2011.

It is worth knowing that throughout the month of May, the registration tool and the collaborative map, was redesigned completely to meet the needs – it went through a series of adjustments, as to eliminate the inconsistencies that impeded their functioning. Taking a look on the statistics of the registration of volunteers, it appears that, two weeks before the action took place in Rio de Janeiro, there was a significant increase in the number of entries. The increase corresponds with (a) the promotion of Limpa Brasil on TV and on the radio, (b) the restructuring of the communication especially addressed to the citizens of Rio and (c) an effort to mobilize new organizations (governmental bodies, private companies, religious organizations and NGOs).

In addition to mapping points of garbage, registered volunteers are invited to support the movement in four other ways:

- a) Passing on information about the Limpa Brasil movement, group cleanups and mobilizing their community and their friends in social networks;
- b) The organization of group cleanups, guiding volunteers in the collection of garbage and helping at Ecopoints;



- c) The logistical processes of group cleanups, such as assisting in the assembly and operation of recycling containers and in guiding volunteers who work in garbage collection;
- d) On the day of action, showing the energy and willingness to end the neglect of the trash.

2.5.1 Training of volunteers

The coordinators of Limpa Brasil and the NGO EccoVida, partner of the movement in Rio de Janeiro, organized three workshops for the registered volunteers who participated in the organization, logistics and waste disposal on the day of the action at the headquarters of Action and Citizenship on Thursday, June 2nd. The workshops, attended by about 30 people, were taught by volunteer Zuzarte Livia, an EccoVida biologist, who spoke about the problems of misdirected garbage as well as the importance of uniting efforts for environmentally friendly actions, thinking also about the future generations. The biologist presented a series of data, among which the amount of waste discarded daily in the world reaches 2 million tons, an equivalent to ten Pão de Açúcar. She also explained the process of transforming waste and gave safety tips when collecting materials.

2.5.2. Certification of volunteers

As a way to reward the dedicated hours that people voluntarily gave to the Limpa Brasil movement, the coordinators built a specific section on the website to certify the registration of the voluntary action in Rio de Janeiro and demonstrate their participation. At the end of the day's action, the administrator sends an email to all registered volunteers for the action of a specified city. This email contains a link that directs to an URL requesting a verification code and a field to select the location of the Ecopoint. Once the system has this information, the volunteer will be asked to provide data that will appear on his certificate: name and identification. With the confirmed data the PDF of the certificate is displayed and the volunteer can save it to his computer. This license contains the signature of Marta Rocha, executive director of Atitude Brasil, the company – in cooperation with UNESCO – which brought the Let's do it campaign to Brazil.

2.5.3. Evolution of the Number of Applications: Brazil and Rio de Janeiro

Despite of all efforts to recruit volunteers and the significant increase of entries in the two weeks prior to the action, there was little presence of the volunteers in Rio de Janeiro that registered in the database of Limpa Brasil. The shy presence of the citizens of Rio is not even reflected in the total number of volunteers who actually participated in the collection of trash from public spaces, which demonstrates the need for adequacy of speech and local mobilization, adapted to more fact that the city will receive the task force. One greatly influencing factor the days prior to the action itself was a strike by the firefighters which mobilized a great part of the media. Also, the morning of the event began rainy.

3. Dynamic of the action

The action plan for the Limpa Brasil movement in Rio de Janeiro aimed at promoting the reflection on the need to change our habits regarding the disposal of solid waste, whether in private or public space. More than that: to promote a dialogue between the government and the local population – meeting the



needs of the structure and the public policy that will put the city on a level of prominence in the field of urban sanitation and respect for environment. The action plan included the following steps:

3.1. Partnerships

Recycling companies: in total 34 companies of the state of Rio de Janeiro were involved. Each of these companies indicated one of its representatives to coordinate one of the Ecopoints that were installed for the action. Based on meetings with the local Limpa Brasil team 400 catadores were allocated to different Ecopoints.

Universidade Estácio de Sá: The University Estácio de Sá [<http://portal.estacio.br/>] offered the space for installing an Ecopoint and its management by volunteering students.

Instituto E: The Instituto E [<http://www.institutoe.org.br/>] teamed up with volunteers; **Vasco da Gama:** They offered the space for installing an Ecopoint and its management by volunteering members;

Brasil Pet: [<http://brasilpet.com.br/>] They offered to co-manage the Ecopoint in Leme and contributed an exhibition of products processed from recycled materials (cardboard chairs reprocessed, puffs of PET bottles, refrigerator magnets of caps, etc..). Also they provided six trucks for the collection of materials gathered during the action;

Guardiões do Mar [<http://www.guardioesdomar.org.br/>] offered two trucks for the collection of materials gathered during the action;

Papiro Pet offered two trucks for the collection of materials gathered during the action;

Ação da Cidadania [<http://www.acaodacidania.com.br/>] offered a room for our temporary office of the local Limpa Brasil team for a month as well as space for the storage of materials that were being distributed on day of the action (Big bags, tables and chairs, water, green bags, banners, etc.).

From the contact with the Recycling companies and the leaders of the communities we were able to install Ecopoints at 20 different locations. Each Ecopoint had the following structure: tables, chairs, banners, newsletters, track identification with the name of unity, 10 big bags (special bags for storage of green bags filled with trash), water for the team, folders with documentation (authorization from the neighborhoods for the use of public space, security authorization of the firefighters and the list of all contact details of the local coordinators).

4. Impacts

4.1 Tangible Impacts

Facebook. 6.200 persons like Limpa Brasil.

Check: <https://www.facebook.com/LimpaBrasil>;

Flickr. 200 pictures of the actions in India, Romania and Portugal next to those of Rio de Janeiro are available on: <http://www.flickr.com/photos/limpabrasil/>;

Twitter. 1.800 posts, 1.500 followers. Check: http://twitter.com/limpa_brasil;

YouTube. More than 6000 views of the Limpa Brasil videos.

Check: <http://www.youtube.com/user/LimpaBrasilLetsDolt>.



4.2 Volunteers subscribers and visitors

Until June 5th 2011, 1467 people registered on the site, and 36% of those (540) are resident in Rio de Janeiro. Between April 1st and June 5th, according to data from Google Analytics, the site of Limpa Brasil registered 35,500 individual visits and 85,000 page views. During this period Internet users viewed 2.40 pages of Limpa Brasil and remained on the site for 3 minutes and 10 seconds on each visit averagely.

4.3. Numbers of Logistic Processes

In total 17 tons of solid waste destined for recycling were collected, on a route that included 20 Ecopoints in different regions of the city of Rio de Janeiro. The organic garbage and materials that cannot be recycled reached an uncountable amount and was collected by trucks of Comlurb (the local cleaning company). The record says that 6,500 people were involved in the event on June 5th including more than 5,000 citizens who were willing to collect the materials on public spaces. The number of catadores of recyclable materials (of 20 Recycling companies) remained at 400.

As a sponsor, Braskem was responsible for producing green bags (made of green polyethylene and captured carbon dioxide from the atmosphere by photosynthesis of cane sugar, 100% recyclable) that were distributed with “cleaning kits” for the action. The company produced 50 000 bags in total, with 30 000 of 50 liters and 20 000 of 15 liters. A week before the day of the action, Banco do Brasil distributed 16,000 bags of 50 liters and 8,000 bags of 15 liters in total in each of its 32 agencies, this made a distribution of material in advance possible. In the south, they ran out of materials at various branches and it was necessary to reallocate the kits that were still available in other units. In various agencies, volunteers from the universities worked in order to support the distribution of kits and guide the public that was interested in engaging in the project. The remaining kits were distributed on Sunday, June 5th 2011, at the Ecopoints. All materials were exhausted.

5. Questionnaire

Observations of volunteers at Ecopoints

1. What is your evaluation of your team at the Ecopoint (internal structure, flow of people, location, place, dynamic of the team)?

The structure available for the Ecopoints was considered sufficient, but the place for the tent was often heavily criticized. Some have suggested a better position in the chosen point due to poor visibility (e.g. Madureira, Catacumba Park), others thought it should have been installed elsewhere in the low flow of pedestrians in the chosen location (ex: Bosque da Barra, Lapa). The flow of people in Ecopoints varied by region, and in some places there were large numbers of visitors (about 200 on the tail), and in others the number was very small (about 20 in Madurai). However, the actual number of volunteers was low in many Ecopoints, ranging from nine (Flamengo) and three (Madurai). There is general agreement that the bad weather hampered on popular mobilization. The dynamic between coordinators and catadores worked well in most Ecopoints.

2. What is the opinion of your team on the logistics of the collected material (bigbags external and internal dynamics of collection and delivery bags, etc.)?



The logistics were praised as well, except for some criticism of delays in delivery of materials (Lapa), material for picking up the garbage (Madureira and Bosque da Barra) and bigbags (Catacumba Park).

3. In the opinion of the team, what are the downsides of Limpa Brasil in Rio de Janeiro?

The biggest criticism was the dissemination, it was insufficient to achieve a greater involvement of the population. It was also considered inappropriate for some due to the excess material used in the manufacture of parts (which could be lower) and the educational information for further reading at the event.

The second point that has been criticized was regarding the treatment of catadores, lack of information and allocating the Recycling Companies to the different points (Lapa), delayed delivery of food (Bosque da Barra), late payment and lunch transport (Catacumba Park). The distribution of bags in Banco do Brasil was not considered an efficient action according to the team of Ecopoint Posto 9, while the team of Ecopoint Leme criticized the lack of general organization, which could have occurred due to a lack of time. Other criticism has already been given above.

4. In the opinion of your team, what were the positive points of the Limpa Brasil in Rio de Janeiro?

The most frequently mentioned positive aspect was the promotion of awareness of people to the litter issue, and effective cleaning of the city, especially where it was held by locals. Also the cooperation between companies, NGOs, Recycling Companies, public and private institutions was mentioned which allowed to set a frame for action and direct involvement of Recycling Companies in the project.

5. What is the estimated number of people who passed the Ecopoint today? What is the estimate of bags collected in your area?

- a) Lapa: 10 volunteers (of which only a part of collection on the street, the other brought the trash separated from their homes) and 3 bigbags;
- b) Madureira: 3 volunteers and 5 1/3 bigbags;
- c) Ipanema (Posto 09): 50 volunteers and 4 bigbags;
- d) Bosque da Barra: Number of volunteers: no data (about 60 visitors) and ½ bigbag;
- e) Park Catacomb: 4 volunteers and 4 ½ bigbags;
- f) Rudder: Number of volunteers: no data (about 200 visitors) and 4 bigbags;
- g) Flamengo: 9 volunteers and 3 ½ bigbags.



Clipping - online:

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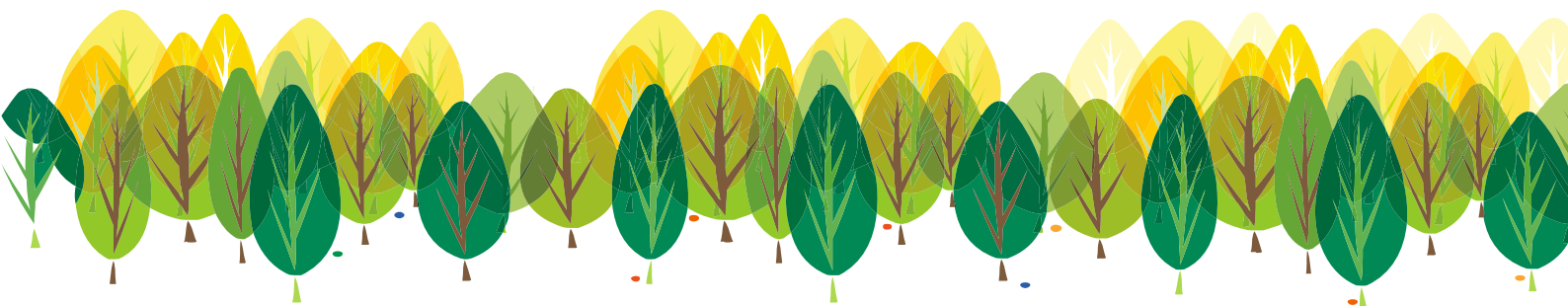
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