# Participatory Sustainable Waste Management

## UN Sustainable Development Goals addressed by this project

2. Zero hunger

8. Decent work & economic growth

- 3. Health & well-being
- 5. Gender equality

10. Reduced inequalities

11. Sustainable cities & communities

13. Ensure sustainable consumption & production patterns

### UVic's International Plan Goals addressed by this project

· International Development, Health and Education



# Increasing the effectiveness, safety, and income generation of organized waste recycling in the metropolitan region of São Paulo, Brazil.

Faculty Lead: Dr. Jutta Gutberlet, Geography

Partners: University of Sao Paulo, Fundacao Santo Andre, Recycling cooperatives (Cooperlimpa, Cooperma, Cooperpires, Coopcicla, Associacao Pacto Ambiental, Refazendo, Raio de Luz, Sempre Verde, Coopercral, Coopercose), Rede Mulher de Educação, FUNDACENTRO, Movimento Nacional dos Catadores e Materiais Recicláveis, Consorcio Intermunicipal do ABC.

Project timeframe: 2005-2011

Funding: CIDA-AUCC Partnership Grant, IDRC, SSHRC

Webiste: www.pswm.uvic.ca

# About

The overall purpose of the Participatory Sustainable Waste Management (PSWM) project was to increase the effectiveness, safety, and income generation of organized waste recycling in the metropolitan region of Sao Paulo, Brazil. Capacity development was accomplished by strengthening the organizational structure and opening up new opportunities for dialogue and action between recyclers and Government. The initiative has increased the awareness about resource recovery and has thus also contributed to improving the urban environment in the region. Besides these outcomes, the project has made significant contributions, far beyond of what was predicted initially. These include, setting up a pilot project on microcredit, advancing the practice of collective commercialization and networking, implementing new training programs for waste pickers on technical aspects of the collection of recyclables, health and risk factors, participative resource management, gender awareness and inclusion, small business and cooperative developments, micro-credit, group dynamics and participatory methodologies. After the conclusion of this project new initiatives gave continuity and advanced the work. A current project now shares and exchanges the co-created knowledge with waste picker groups and movements in other parts of the world.



Over six years, the PSWM has introduced participatory approaches into waste management. It has helped create a more inclusive culture amongst the local governments in this region, where empowered recyclers have now a voice in political meetings and decision making. Remunerating the service of waste pickers who recover resources is a pertinent and political issue; which the project members have brought up in the dialogue with Government.

"The voices of these participants have impacted decision making and policy design, particularly with respect to fair remuneration, decent work, poverty eradication, sustainable development, mobilizing against waste incineration and for zero waste, and many more"

## **Impact Summary**

The project has transformed the lives of many individual waste pickers who have participated in the project or were benefited by a capacity building activity. Through these and the interactions between project members, many of us and particularly the waste pickers have become strongly empowered, helping these individuals to emancipate themselves from oppressive structures. Many waste pickers became leaders in the National Waste Pickers Movement and thus were able to influence policy on a much broader scale. The voices of these participants have impacted decision making and policy design. Some of their outreach has made a difference in local waste governance, generating public policies for inclusive waste management and obtaining funding for new projects.

Level of Impact:

Individual

l Community Systems



#### Extent of community collaboration throughout the project cycle 100%





Photos: Participating members of PSWM, 2012

## Motivations for starting the project

The commitment to address livelihood issues of underprivileged communities and the wish to empower the most excluded, the waste pickers was the motivation to initialize this project. The research praxis of our project team was driven by the aim to enhance the democratization process within the political circles related to solid waste management and education. Due to my previous long-term work experience in South America, I was able to rely on well grounded 'bonding' and 'bridging' social capital in my relations with local and academic communities throughout Brazil. This has resulted in steady and powerful connections, which are fundamental in providing the required research conditions for graduate students, my collaborators and for myself and which has allowed us to implement the Brazil-Canada project (PSWM project).

# Student role & Impact

Students played a key role in this project, since their thesis research actively contributed to the knowledge generation and dissemination, moving the project forward. All interventions and research projects had to be approved by the project's Management Committee, which legitimized the students' work, built trust in the community and contributed to the support by the community.

# **Key findings**

Recycling cooperatives and associations in the metropolitan region of Sao Paulo have been engaged in a network to commercialize recycling and waste management. This work is improving incomes and the networking and organizational skills of some of the most marginalized populations in Brazil. Continuous capacity building training, particularly in participatory management, leadership development, business administration, digital inclusion and gender equality, has helped strengthen the recycling groups.

The project has participated in several local, national and international events, to promote participatory sustainable waste management and to contribute in the debate on waste governance and particularly policy making. The project has played an active role in strengthening the dialogue between recyclers and the government, providing background information and support. It has intensively promoted knowledge sharing and the building of partnerships with municipalities and other key stakeholders, beyond the original geographic region of intervention. It has created and strategically used award- winning videos, photography, newsletters, promotional material, books and articles and a web site to build a better understanding about the important role of information and organized recycling in solid waste management. The project has facilitated a great range of different capacity building interventions, workshops and courses which have contributed to the further emancipation of the waste pickers.

# ". .. I think that the Brazil Canada project went beyond the issues related to work in our respective cooperatives. it gave us the leadership and the education that we are able to do great transformations"

# Key factors for a successful CER project:

In our case it has worked extremely well to have a participatory governance structure with an Executive Committee and a Management Council with deliberative power, meeting regularly.

Transparency and participation were our key guiding principles. This meant decision making power of the Management Council, which gave a vote to every participant (recyclers, government, university and NGOs), constant sharing of the results, acknowledging the co-creation of knowledge, and continuous dissemination of the project findings.

We recognize that it is extremely important to be humble and respectful when working abroad and in a different cultural setting. It is particularly important to communicate well in the local language and to have indepth understanding of the culture, geography, history, politics and colonial legacy of the other culture involved in any research project.

# Outputs

# Outcomes

<b>Refereed journal publications</b>	20+	Student skills & knowledge development
<b>Refereed conference papers</b>	15+	Development of new and improved theory
Books	3	Increased inter-university linkages
Non-refereed publications	10+	Increased interdisciplinary linkages
Multimedia products	multiple	New innovations including social &
Jointly prepared funding proposals	6	technological Partnerships secured through MoUs
Invited Presentations	10+	Faculty awards and honours
Workshops	10	Student awards and honours
Fully produced films or videos	5	Building community sector organization
Social media buzz	active bloggs	capacities
		Strengthened community-university networks

### "The students were exposed to intensive, problem based and critical learning. They were involved in knowledge democratization. The students were empowered through their active and meaningful community outreach; reiterated by project participants"

## **Challenges encountered**

We mostly encountered challenges of bureaucratic and administrative nature during the process of establishing the research partnership at the administrative level of the two universities. Language was one issue (all documents needed to be translated) and the lengthy formal procedures (documents needed to be signed off by several administrative levels) posed another time consuming hurdle in this process. These difficulties also reflected in delays in the disbursement of the funding.

There are still many political and cultural bottlenecks that prevent integrated, inclusive solid waste management programs from being economically and environmentally sustainable. Much more community based research is required.

"Key factors that helped us run the project were: to guarantee transparency, participation, flexibility, participatory and democratic deliberation...and, I think what finally really differentiated our project, was that we all cared about the lives involved and the wider societal and environmental questions and challenges we could address with our work"

# **Select Key References**

Gutberlet, J. (2016). Urban Recycling Cooperatives: Building Resilient Communities. London, New York: Routledge Taylor & Francis Group. 183 pp.

Gutberlet, J. (2015). More inclusive and cleaner cities with waste management co-production: Insights from participatory epistemologies and methods. Habitat International. 46: 234- 243.

Gutberlet, J. (2013). Gestão de resíduos sólidos. Revista de Geografia (UFPE), 30 (1): 6-23.

King, M. & Gutberlet, J. (2013). Contribution of cooperative sector recycling to greenhouse gas emissions reduction: a case study of Ribeirão Pires, Brazil. Waste Management, 33 (12): 2771-2780.

Nunn, N. & Gutberlet, J. (2013). Cooperative recycling in São Paulo, Brazil: towards an emotional consideration of empowerment. Area, 45 (4): 452-458. DOI: 10.1111/area.12052.

Gutberlet, J.; Baeder, A. M.; Pontuschka, N. N.; Felipone, S. M. N.& dos Santos, T. L. F. (2013). Participatory Research Revealing the Work and Occupational Health Hazards of Cooperative Recyclers in Brazil. Int. J. Environ. Res. Public Health, 10 (10): 4607-4627.

Gutberlet, J. & Jayme, B. de O. (2012). A história do meu rosto: como agentes ambientais percebem a estigmatização (re)produzida pelo discurso. Geografia em Questão, 5 (2): 183- 200.

Binion, E. & Gutberlet, J. (2012). The effects of handling solid waste on the wellbeing of informal and organized recyclers: A review of the literature. Journal of Occupational and Environmental Health. 18 (1): 43-52.

Gutberlet, J. (2012). Informal and cooperative recycling as a poverty eradication strategy. Geography Compass, 6/1 (2012): 19–34.

Yates, J. S. & Gutberlet, J. (2011). Re-claiming and re-circulating urban natures: Integrated organic waste management in Diadema, Brazil. Environment and Planning A, 43 (9): 2109 – 2124.

Yates, J. S. & Gutberlet, J. (2011). Enhancing livelihoods and the urban environment: The local political framework for integrated organic waste management in Diadema, Brazil. Journal of Development Studies, 47 (4): 1-18.

Tremblay, C. & Gutberlet, J. (2011). Empowerment through participation: assessing the voices of leaders from recycling cooperatives in São Paulo, Brazil. Community Development Journal, 46 (3): 282-302.

Gutberlet, J. (2011). O custo social da incineração de resíduos sólidos: Recuperação de energia em avannah da sustentabilidade. Revista Geográfica de América Central, Número Especial XIII EGAL, 2011-Costa Rica, 2 (47E): 1-16.

Gutberlet, J. & Pontuschka, N. N. (2010). Pesquisa qualitativa sobre consumo: experiências interdisciplinares. Olhar do Professor, Caderno tematico: Pesquisa qualitativa e consumo. 13 (2): 217-224.

Gutberlet, J. & Jayme, B. O. (2010). The story of my face. How environmental stewards perceive stigmatization (re)produced by the media. Sustainability, 2: 3339-3353.

Gutberlet, J. (2010). Waste, poverty and recycling. Waste Management, 30 (2): 171-173.

