



Outstanding Practice in
AGROECOLOGY 2019



FACTSHEET

Brazil – Community organic waste management and urban agriculture - “Revolution of the buckets” (2008)

IN BRIEF

The “Revolution of the Buckets” offers a shift towards a model of community-based organic waste management in socially troubled areas Florianópolis, Brazil. With the cooperation and training of local people, this highly cost-effective practice ensures the recovery of 8 tons of organic waste weekly and its transformation into compost. Through its promotion of urban agriculture, this decentralized and participative waste management system has so far produced 1,200 tonnes of organic fertiliser and contributed to the production of nutritious food and ensured food security for participating families. The growth of the project is limited because of insufficient funds, however after receiving significant exposure in recent years, it is being implemented by other organizations in other cities across Brazil.

ABOUT THE PRACTICE AT A GLANCE

Organisation: Community group (Partnership between the NGO CEPAGRO, the community and the University)

Implemented in: Community Chico Mendes, Monte Cristo Neighborhood, Florianópolis, Santa Catarina (Brazil)

Year: 2008

Beneficiaries: Local community, urban farmers

Topic(s): Waste, urban agriculture

PROBLEMS TARGETED / CONTEXT

In large Brazilian cities, waste is generally collected by large companies and its treatment is one of the three largest urban expenditure items. Moreover, instead of being reused in urban agriculture, waste is unnecessarily wasted.

Projects promoting urban agriculture and composting (in schools for example) have been conducted in Florianópolis since 2006. However, often composting has led to the multiplication of diseases and the proliferation of rats. Consequently, two women from the community offered to collect waste and explain selective sorting to the inhabitants, under the condition that they obtained funding. Thanks to the financial support of the NGO CEPAGRO, a small project has been set up in 2008. The project grew and is being imitated in all of Brazil. The assisted communities live in peripheral areas of Florianópolis (where migration is very intense), where many families live in a situation of poverty. The project hence also addresses social issues. Through its bottom-up and participatory approach, the programme encourages community engagement and integrates young offenders, helping to solve socio-environmental problems.

KEY FEATURES OF THE SOLUTION

The main goal of the practice is to ensure the recovery of organic waste through composting and supporting urban agriculture for a better quality of life. It seeks to reduce the number of rats, to promote environmental education and awareness, urban agriculture, community articulation and capacity building, and to generate work and income. It seeks to be a model of community and decentralized waste management system.

The adopted methodology is the result of 10-years of practice and is based on the participation of local agents. Workshops and meetings organized at the community level provide technical training for local people and create an identity around waste recycling that can be then extended to a neighbourhood scale. In each street of Chico Mendes and Nossa Senhora da Glória, buckets with a lid to separate the organic waste were given to 150 participating families (the buckets are sealed to avoid contact with vectors) and, when filled, the families take them to one of the 38 Voluntary Delivery Points (VDPs), which are places with containers distributed throughout the community. The collection of organic waste from VDPs takes place twice a week, by four community agents and a wheelbarrow designated to collect the containers.

After the collection, the buckets are brought to a composting yard and composted according to the method of the Federal University of Santa Catarina (UFSC): Waste is placed in static lines and mixed with straw and sawdust. This method allows the waste to decompose in 4 months. Once emptied, the buckets return to the VDPs. The compost is transformed into organic fertiliser, which is used to grow herbs and plants at the headquarters at the América Dutra Machado School as well as in other urban gardens. It is partly sold, to partially fund the activities of the Bucket Revolution, and is partly given to the members of the community for urban agriculture.

The main stakeholders of the programme are a community group, which is a partnership between the NGO CEPAGRO, the community and the university.

INNOVATIVE ASPECTS

- Empowering the community, promoting self-confidence and autonomy of locals.
- Engaging the public in circular economy.

- Promotion of social cohesion and integration through community management of waste.
- Participative and decentralized approach to waste treatment.

FACTS & FIGURES

- 1,600 beneficiaries: 150 (i.e. 600 people) families directly benefitting from organic collection of waste, plus 500 people from four school units (schools and day care centres), and 500 people from four neighbourhood institutions for children.
- Reduction of the number of rats thanks to the collection of buckets, and hence of diseases.
- Indirectly, the 30,000 inhabitants of Monte Cristo with 40 VDPs installed, the monthly collection of 10 tons of organic waste, the production of 3 tons fertilizer that supply the need of 25 yards, 4 school gardens and community space.

OUTCOME, IMPACT & EFFECTIVENESS

- Reuse of organic waste through composting, transforming a problem into a solution for agroecology and urban agriculture: 1,200 tons of organic waste already transformed into fertilizer, producing organic food and medicinal plants.
- 5.6 tonnes of organic waste are recycled every month.
- In 10 years, 30 young offenders were integrated in the project and worked to raise awareness to the process of composting and planting gardens.
- Improvement of health and safety in the neighbourhood, through less contact with rats which are often attracted.
- Today, the number of diseases has decreased, the streets are cleaner and urban agriculture is being continually promoted.

OUTLOOK, TRANSFERABILITY, SCALABILITY & COST-EFFICIENCY

The costs of implementation of the practice for 100 families during one year (material and salary for community agents, technicians and interns expenses of the composting yards, administration) is 104,150 reals (24,131 €).

According to the nomination, the growth of the project is limited because of the large waste industry in Brazil and because of the lack of infrastructure, remuneration and support of the government. Still, the practice is spreading all over Brazil: the SECS Network of Santa Catarina replicated the projects in three hotels of the Florianopolis state; the city of São Paulo introduced the project of decentralized composting yards to treat waste from fairs and food markets; it inspired the Brazilian National Solid Waste Policy; won the national second place in social technology award of Banco do Brazil Foundation in 2013 and is now replicated by the Foundation in 4 Brazilian cities.

In order to up-scale the practice, the movement would need a composting yard in Ecoparque model (installation of vegetable gardens, orchards and environmental

education) and an agreement with the government to set up a payment for environmental service programme and landfill diversion service. Since the cost of transport of waste in a municipality are one of the main items of expenditure (136 reals per ton or 43 dollars) and ½ of the waste is organic, the state could fund the work of Revolution of the Bucket.

Technology would be useful to improve the composting process, the transportation of the waste, the sifting and processing of the compost ready for commercialization and also in the commercialization of the products in fairs, stores and networks.

INTERVIEWEE FEEDBACK

Number of points: 20.5 out of 23

Summary: The interviewee gave a lot of information about the project, the problems it sought to tackle and the positive effects it already seems to be having on socio-environmental welfare in the target areas. In general, the practice scored very well across all of the 7 Future Justice Principles, however lost some half points for its lack of direct action on certain points, however these were not due to any shortcomings, rather limited project scope.

1 (Sustainable use of resources) – 4.5/6 – Recycling and optimization of resources are central to operations. Soil fertility and self-regulation supported and reduction of rats (pest) through removal of waste from streets/gardens. Promotes diversity through more gardens (no real focus on agroforestry or integrating animals 0.5). Little focus on synergies in food systems, but definitely contributes to circular economy (0.5). Financial sustainability – mostly survives with money from public calls/awards received/specific projects, but also through sale of compost (0.5).

2 (Equity and eradication of poverty) - 3.5/4 – A social technology which relies on the co-operation and efforts of the community to better the lives of all. Works closely and mainly with young people and women, leading role for black women. Promotes a circular economy and local solutions, local markets indirectly enabled through sale of compost and subsequent vegetable sale.

3 (Precautionary approach to human health, natural resources and ecosystems) - 2 / 2 – No use of chemicals and promotes agro-ecological technology. Social technology developed together with community (who has decision power).

4 (Public participation and access to information) - 3/3 – All created and run together with the public, information sharing, knowledge co-creation and horizontal exchange is central.

5 (Governance and human security) 3/3 – Structures and dialogues in place to increase and ensure transparency. Social control and monitoring ensures no corruption.

6 (Integration, interrelationship- human rights, social, economic and environmental objectives) - 2.5 /3 – These principles motivate the entire revolution. The practice provides environmental services for the society and permits people (who ot-

herwise wouldn't) to have access to adequate food and fertiliser. Positive effect on food diversity (indirectly contributing 0.5).

7 (Common but differentiated obligations) - 2/2 – Entirely adapted to the specificities of the target region and no burdens placed on any party.

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LINKS AND FURTHER READING

CEPAGRO website: <https://cepagroagroecologia.wordpress.com>

CEPAGRO (2017), Revolução Dos Baldinhos: Gestão Comunitária de Resíduos Orgânicos e Agricultura Urbana, Video: https://www.youtube.com/watch?time_continue=603&v=wJwTJ4CyDBc

CEPAGRO (2017), Agricultura Urbana: Diagnóstico e Educação Ambiental na Comunidade da Praia das Areias do Campeche – Florianópolis (SC): <https://www.slideshare.net/Cepagro/agricultura-urbana-diagnostico-e-educacao-ambiental-na-comunidade-da-praia-das-areias-do-campeche-florianopolis-sc>

CEPAGRO (2016), Manual Revolução dos Baldinhos – A Tecnologia Social da Gestão Comunitária de Resíduos Orgânicos e Agricultura Urbana:

<https://www.slideshare.net/Cepagro/cartilha-revolucao-dos-baldinhos-a-tecnologia-social-da-gestao-comunitaria-de-residuos-organicos-e-agricultura-urbana>

CEPAGRO (2016), 2ª TS CEPAGRO – Revolução dos Baldinhos, Video: <https://www.youtube.com/watch?v=z1Sd8uYKnCQ&frags=pl%2Cwn>

De Abreu, Marcos José (2013), Gestão comunitária de resíduos orgânicos: o caso do Projeto Revolução dos Baldinhos (PRB), Capital Social e Agricultura Urbana (Master's Thesis of Co-Founder):

<https://repositorio.ufsc.br/bitstream/handle/123456789/107404/320464.pdf?sequence=1&isAllowed=y>

Farias, Eduardo (2010), Revolução dos Baldinhos: Un modelo de gestão comunitária de resíduos orgânicos que promove a agricultura urbana (Thesis of Student at Universidade Federal de Santa Catarina): <http://tcc.bu.ufsc.br/CCATCCs/agronomia/ragr80.pdf>

Rota Verbum (2018), The bucket revolution - Interview with Marquito, Video: https://www.youtube.com/watch?time_continue=3&v=sVgry_T3IF8

Peixto Clarissa (2016), Bucket Revolution. A Florianópolis community becomes a model of community waste management, Believe Earth: <https://believe.earth/en/bucket-revolution/>