II. Environmental Recovery Program Of The Canabrava Park

Region	**Latin America and the Caribbean**
Award Scheme	**Guangzhou Award**
Sustainable Development Goals	**Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable**

Summary

Canabrava is an area of 52,000m² that used to be a dumping ground for Salvador' waste from the 1970s up to the year 2000. In 2000 the dumping ground was deactivated and became a municipal park, but after 15 years the area had almost no tree and was not much used by the surrounding community.

Background and Objective

Canabrava is an area of 52,000m² that for more than 20 years, from 1970s up to the end of 1990s was a dumping ground for Salvador' waste, which would produce tons of CO2 and methane gas. People that used to live from the dumping ground would collect recyclable waste and some even food for themselves. In the year 2000 the dumping ground was deactivated and became a Municipal park, but the dumping ground had left consequences on the soil. Due to years of unregulated waste disposal, Canabrava Park was severely degraded, unable to sequester CO2 emissions, which increases the local temperature and spreads disease. Furthermore, approximately 8% of Salvador's greenhouse gas emissions are the result of waste, 59% from wastewater plants. The Program is transforming the area by planting native trees and using treated sludge as fertilizer, capturing greenhouse gases, improving the local climate, and providing green spaces to one of the poorest neighbourhoods in the city. The initiative plans to reduce 31,500 tonnes of CO2 in the first 12 months and 2,800,000 tonnes of CO2 in the next 20 years. It also plans to plant 20,000 trees there in the next 20 years, increasing the green coverage of the city, improve the city's air quality and its microclimates. Reforestation of the park will reduce public health risks for residents in the area, such as respiratory diseases, that are associated with an open-air garbage dump. Also, the Environmental Recovery Program of the Canabrava Park provides a new meeting place for the extremely dense and underprivileged neighborhood, where there are otherwise few leisure options and green spaces. Lastly, SECIS hopes the planting and the involvement of a university, the private sector and the community on the area will encourage them to help maintain and protect the area. The program is a partnership with the private sector, where different parties plant and maintain different sections of the park, creating ownership of the program. So far, two large plantations have been planted with the assistance of 300 participants, including environmental engineering students from the local university and inhabitants of the surrounding areas. One of the main partnerships is with Odebrecht Ambiental, which developed and made available for SECIS a fertilizer produced from the treated sewage of the city and biosolids from an industrial effluent treatment station for the management of the soil and which is a vital part of the carbon sink project. In addition, the Bahia Association of Forest Based Companies (Abaf) and the Paper, Pulp, Cardboard, Wood Pulp and Paper and Cardboard Artefacts Industries Trade Union of Bahia (Sindpacel) donated the 10,000 seedlings to plant in Canabrava. The planting was done in partnership with the Jorge Amado University Center (UniJorge) and Revita business, besides some community members. As mentioned above, ABAF and Sindpacel contributed with the trees seedlings, Odebrecht Ambiental contributed with the fertilizer and Universities and Revita contributed with human resources on the planting day

Actions and Implementation

Other cities can learn how to beautify an old waste dump and use treated sludge as fertilizer as well as how to partner with the private sector to implement a revolutionary project

Outcomes and Impacts

The initiative already planted 10,000 trees native to the tropical rain forest, 800 on the first phase and the remaining 9,200 on the second phase, reforesting the area and turning it into a pioneering environmental education program in the country for the population that used to live collecting garbage from the site. It has also reduced 31,500 tonnes of CO2 in the first year. It was chosen by the C40 (Cities Climate Leadership Group) as one of the 100 urban solutions that help on the fight against climate change that can be executed by other cities. The metrics being used are based on a study done by the University of São Paulo, which measured how much CO2 each tree from Mata Atlantica absorbs in its first 20 years of life. Thus, SECIS has been using the number of trees planted to measure how much carbon it is absorbing. To attain the desired outcomes SECIS implemented a new working method in which it did partnerships with the private sector where different parties plant and maintain different sections of the park, in order to create ownership of the program and ensuring that they will help to protect and preserve the park. The initiative helps to put Salvador in the forefront of cities that are leading

the fight against climate change, besides being an example and pioneer on the country. It also strengths its international position on sustainable development and on forums such as the C40 and other international bodies

Sustainability and Scalability

Goal 6: Ensure availability and sustainable management of water and sanitation for all Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable Target 4: Safeguard cultural and natural heritage Target 6: Improve air quality and manage municipal and other wastes Target 7: Universal access to safe, inclusive and accessible green and public spaces, in particular of women, children older persons and persons with disabilities Goal 13: Take urgent action to combat climate change and its impacts Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Initiative Contribution

The initiative is taking place under the Municipal Policy for the Environment and Sustainable Development and the Urban Afforestation Directive Plan. By planting ipê, pau brasil and sibipiruna trees, all native to Mata Atlântica, it is helping to recover one of the five most important biodiversity hotspots on the planet, in accordance with the Aichi Biodiversity Targets agreed at the UN Biodiversity Convention and the Paris Agreement. It is also helping achieve ODS 6, 11, 13 and 15.

Innovative Initiative

The initiative can be considered revolutionary because it revitalized an old dumping ground area, which was abandoned, turning it in a carbon sink area, in which were planted trees from the tropical rain forest that are considered endangered species as well as the fertilizer that was used was all made from waste and reused material, helping the environment. It is a pioneer initiative in the country, showing how it’s possible to transform and improve places and spaces for the city and communities' well-being. It was even chosen by the C40 (Cities Climate Leadership Group) as one of the 100 urban solutions that help fight against climate change that can be executed by other cities. The innovation is being applied in a bigger policy called Caravana da Mata Atlântica, that aims to increase the coverage area of the tropical rain forest in Salvador, because it has been severely deforested. It is innovative on its design, once the area chosen to be afforested was an old dumping ground, and the fertilizer was also made from treated sewage of the city and biosolids from an industrial effluent treatment station, which also show how materials that were considered waste can be put back in the chain of production, creating a circular economy. The biggest obstacles were the availability of financial resources, which were below what would be ideal, but it was overcome by the partnerships that donated the tree seedlings and the soil management, besides the contribution of partner with part of the human resources needed. The socio-economic situation of the community surrounding the project, which still lacks basic infrastructure and has problems with its waste management, basic sanitation, adequate dwellings and high unemployment rates does not allow them to consider the importance of preserving the environment, as they see it as a resource available that they can use. Thus they might cut trees to use the wood in their houses, take its cattle to graze in the few existing green spaces, etc. That was why involving the community and ensuring they would take care of the area was important to ensure the project would be successful.

Resources devoted to delivery

BASIC CITY DATA Population size: 2,953,986 Population growth rate (%): 0.63 Surface area (sq.km): 693.00 Population density (people/sq.km): 3.859.44 GDP per capita (USD): 4,872.78 Main source of prosperity: Services (tourism included) and trade
http://www.guangzhouaward.org/a/931.html?lang=en&page=2