

7. Antonio Maria Square: restoration of an urban river



Type: top-down (government initiative)

Region: northeast

State: Pernambuco

Biome: Atlantic Rainforest

City of Recife

Population: 1 633 697 ⁸⁹

Area: 218.435 km²

Coordinates: 8.052200 S / 34.928600 W

HDI: 0.772 (2010) ⁹⁰

Context

Recife is known as the Brazilian Venice, because of its location on the estuary of the two large rivers Capibaribe and Beberibe. The city is a famous tourist destination, with beaches, peninsulas, islands and mangrove remnants. It is a contemporary city, with an important historical and cultural centre. There are many problems with the sewage that runs directly into the rivers. Recife has a plan named Rec500 ⁹¹ to prepare for its 500-year anniversary in 2037. The plan incorporates a project for a 15 km-long park system along both sides of the Capibaribe river ⁹². The aim is to incorporate the river into the daily lives of the residents through a series of integrated parks that will offer multiple social and ecological functions and be the backbone of the city. The park plan was developed with public participation.

The Antonio Maria square restoration project will be part of the series of parks that will transform the Capibaribe, with the renaturalisation of one of its tributaries within a multifunctional park.

89. <https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia-de-noticias/releases/16131-ibge-divulga-as-estimativas-populacionais-dos-municipios-para-2017>

90. <https://cidades.ibge.gov.br/brasil/pe/recife/panorama>, accessed: 12.10.2018.

91. Recife 500, <http://www.rec500.org.br/>, accessed: 12.10.2018.

92. <http://parquecapibaribe.org/>

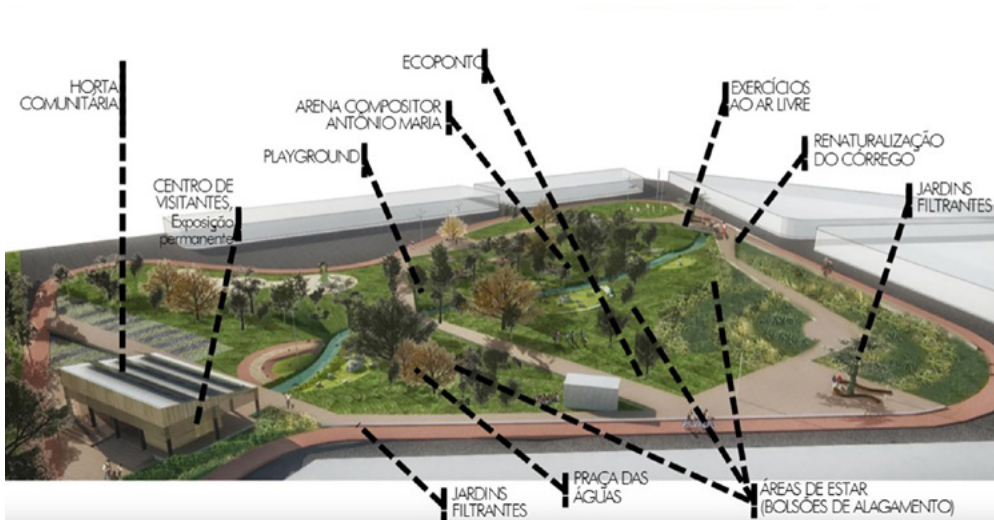


Figure 52. Antonio Maria park design.

Objectives

In the new Antonio Maria Square park, the French company commissioned to develop the ecological project, Phytorestore, designed wetlands along the river banks and filtration gardens to clean the water. The project aims to promote the following social and ecological benefits.

- Create niches to enhance native biodiversity.
- Provide a pedagogical space.
- Offer a natural playground for children that aims to raise awareness about the environment.

The square will be connected to the Capibaribe river through a floating wooden deck and a jetty for electric boats.

Recife is working on the ecological restoration of its rivers, so incorporating NBS to recover the water quality through filtering gardens was the best option.

Actions

The executive project has been finalised, but not yet built. The city has developed a phasing

timetable for Rec500 plan that incorporates this project in the future.

Stakeholder involvement

Rec500 was developed by an innovative agreement between the city of Recife, through the Secretary of Sustainable Development and Environment and the INCITI, a research network of the University Federal of Pernambuco.

Regarding Antonio Maria Square, the project was developed by a partnership between the Recife Agency for Innovation and Strategy and Phytorestore, a French landscape architecture studio. Research has been carried out to assess local history and learn what the expectations of the residents are.



Figure 53. Artist view of the future renaturalised river.

Implementation

The Antonio Maria Square project was developed in 2016, but has not yet been implemented. The funding to develop the executive project came from the Recife Agency for Innovation and Strategy, which select the Phytorestore design through a public open tender.

Outcomes

This project was an opportunity to validate the technology of the filtering gardens as an NBS that can be applied in other parts of the city.

Expected outcomes:

environmental:

- river bank restoration,
- enhanced water quality,
- creation of new habitats for aquatic fauna and birds and consequently an increase in local biodiversity;

social and economic:

- more and better public urban open spaces,
- environmental education,
- development of the regional economy.

Success factors

Success or failure of the implementation will depend on the engagement of the local community. It is critical that the place be appropriated by people that will care for biodiversity conservation, waste generation and disposal and maintenance of the spaces, facilities and equipment, among others.

Limiting factors and risks

Rec500 is planned over a long period, so there are risks related to change of government and political will to implement the project.

Lessons learnt

Every situation is unique, based on the local context. The lesson learnt with the development of the project was how to adapt the NBS to the local urban environment and to social expectations.

Contacts

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Figure 54. Mangroves in the city of Recife.

Selected references

Alencar, A.K.B. and Sá, W.L.F., Parque Capibaribe como Sistema de Drenagem e Tratamento das Águas no Recife, PE, available at: <http://parquecapibaribe.org/tag/drenagem/>, accessed: 23.8.2018.