

CURITIBA 26 – 28 MARCH 2007



CITIES AND BIODIVERSITY:

Achieving the 2010 Biodiversity Target



PROGRAMA BIODIVERSIDADE URBANA

BIOCITY

1. INTRODUCTION

Biodiversity or biological diversity refers to life on planet Earth, in all its expressions. This term is usually used to describe the variety of species, but it also includes the diversity in ecosystems as well as variability within species. Brazil and 16 other countries, which are also known as “megadiverse countries”, hold within their boundaries about 70% of the planet’s plant and animal species. Among these, Brazil is the country with the highest biological diversity, comprising about 20% of the world’s entire biodiversity, found mainly in forest ecosystems.

Fauna and flora comprise a nation's heritage, as they are the outcome of thousands of years of evolution. In addition to this, it is from nature that all raw materials which underpin several industries are extracted to meet human consumption needs and ensure the well-being of populations. In nature, biodiversity plays various important roles through ecosystem services, such as purification of water and nutrient cycles, and maintains a balance between ecosystems and the planet’s climatic conditions. Therefore, biodiversity is an asset of major if not priceless value for the survival of mankind and for a better quality of life.

Strong pressures on urban biodiversity arising from population growth, especially in large urban centers, affect the quality of life of citizens. Preventive measures must be taken to allow urban development to take place while local ecosystems are preserved - this is called sustainability.

The City of Curitiba endeavors to achieve this balance through its Environmental Policy, adopted in the 70s and supported by strong legislation.

Actions in the field of environmental education have been implemented, namely the creation of waste programs, preservation units, and tree planting in public spaces.

The Environmental Policy created mechanisms and incentives which lead to the current proportion of 51.2 m² of green area per inhabitant in Curitiba.

2. CONCEPT

Within this urban context, the City carries out actions seeking to achieve the Millennium Development Goals, following the path to sustainability.

The evolution of the three dimensions of urban development in the city – urban planning, transportation and respect for the environment - is demonstrated through the city's high levels of human development and quality of life.

We must continue evolving, consolidating concepts and innovating through actions. The BIOCITY Program aims to halt the voracious rate at which cities develop, greatly affecting natural areas, destroying ecosystems and life niches, fragmenting natural spaces and often driving species to the brinks of extinction.

The project endeavors to study, grow and use indigenous flora species in parks, squares and public or private gardens and yards, as an incentive for the population to also adopt this practice.

BIOCITY regroups actions that are carried out by the City Administration through a broad and far-reaching urban biodiversity program.

This program reflects the city's effectiveness in accomplishing the objectives discussed during COP 8 to reduce biodiversity loss and take innovative actions to preserve urban biodiversity.

For Curitiba, the involvement of the population is fundamental to the successful implementation of such actions, through partnerships or efforts to raise awareness on the importance of adopting new environmental practices and behaviors which show a high degree of "environmental maturity".

BIOCITY becomes an official public policy, which concerns not only the environmental department of the city but also other municipal departments

conducting projects and actions aiming to contribute to the improvement of the urban environment and the population's quality of life.

The Urban Biodiversity Program is composed of the following projects and actions:

1 - BIOCITY / ORNAMENTAL INDIGENOUS PLANT SPECIES:

The objective is to promote knowledge of and familiarity with the region's indigenous flora through the reintroduction of ornamental species within the city.

This project comprises important actions:

- undertaking studies and surveys to identify potential species for replication as ornamentals;
- creating a Research Greenhouse to promote reintroduction of indigenous plant species - joint project with the Museum and the Botanical Gardens;
- establishing a Demonstrative Garden;
- training volunteers interested in increasing and using indigenous plant species in landscaping projects;
- engaging the population and creating incentives for the private sector and the population at large to encourage the use of indigenous species in residences and private reserves;
- and creating mechanisms for the reintroduction and conservation of regional animal and plant flora.

2 – BIOCITY / CONSERVATION UNITS:

The participation of civil society in the process of reducing biodiversity loss is essential to the preservation of green areas located within the urban environment.

The creation of legal incentive mechanisms for the preservation of private areas is consolidated through the Law on Municipal Private Reserves, an instrument which gives value to the participation of civil society in the efforts to maintain an urban environment of high quality, where biodiversity is preserved.

3 – BIOCITY / PRESERVATION OF WATER RESOURCES

Special attention is given to the issue of the municipality's water resources, as shown in the Strategic Plan for Revitalizing the Barigüi River Basin. This important river flows through the municipal territory from North to South and its basin covers one third of the city's territory. In addition to preserving and recovering the integrity of the basin through land use planning and decontamination, this Plan will also preserve the regional landscape and its green areas. The Plan will also include the creation of new conservation and recreation units, and propose to implement the Parkway, an avenue created to consolidate the Linear Park of the Barigüi and concretely mark out preservation areas, preventing illegal occupations along the 45 kilometers river within Curitiba.

Through BIOCITY, areas that were degraded by illegal occupation of the city's river banks will be recovered. Actions are carried out through the Land Ownership Regularization Plan (Plano de Regularização Fundiária) and prioritize relocation of dwellers in permanent preservation bands.

4. BIOCITY – STREET TREE LINING

The City is taking care of the trees planted along the streets of Curitiba. This constitutes another example of action that has already incorporated the concept of BIOCITY. Flora species along streets have been replaced with indigenous species, as established in the Urban Tree Cover Master Plan to achieve the environmental education goals that were set for the community.

5– BIOCITY / QUALITY OF THE AIR - MOBILITY AND TRANSPORTATION

The Green Line Project aims to revitalize an important federal highway, the former BR 116, built in the 50s, linking the Southeast and South regions of Brazil.

The idea behind the Green Line is to link areas of the city which are currently separated by the highway, through the creation of a major transportation corridor

with special lanes for bicycles and pedestrians, as well as a linear park, taking in consideration important environmental concepts like:

- use of bio-fuels in mass transit vehicles;
- planting of indigenous species in compliance with the guidelines of the Native Ornamental Plants Projects;
- creation of leisure and recreation spaces;
- promotion of quality of life, reduction of traveling time and regional integration;
- giving priority to mass transit over individual vehicles.

For Curitiba, promoting the reduction of biodiversity loss is synonymous with assurance of sustainability.

Implementing BIOCITY demonstrates that local actions can serve as instruments in a broad Urban Biodiversity Preservation project.

For Curitiba, Biodiversity is in people, Biodiversity is all of us!

CURITIBA, March 2007.