



# COSTA RICA – COLOMBIA CONCEPT NOTE BIODIVERSE AND RESILIENT CITIES

### INTRODUCTION

Cities play a key role in addressing biodiversity loss, as well as the crises of climate change, pollution and public health. Currently, they not only concentrate more than 50% of the world's population and generate 80% of the global gross domestic product but are also responsible for producing 75% of global carbon emissions.

In this sense, since they hold most of the people and economic output, cities offer unique spatial efficiency. They also have great potential as drivers of innovation and in producing solutions that incorporate new alternative ideas to the climate crisis and biodiversity loss. Thus, including nature and biodiversity as a core part of urban development is a path we aim to pursue.

In this context, there is a need to adopt new ways of relating to nature and biodiversity in order to create more economically and socially prosperous societies. The recently issued Dasgupta review showed how as a society we have failed in incorporating the economic costs of biodiversity degradation into GDP. Therefore, adopting new measures can represent important fiscal savings for the economy of cities.

In addition, the COVID-19 pandemic has further evidenced the importance of urban systems in promoting disease prevention and control strategies, as well as the vital service public spaces and urban green areas offer to mental, physical and emotional health and well-being of people and communities.

A nature positive approach can bring benefits to different aspects of urban life. It contributes to improve the conditions of these environments by favoring the supply of oxygen, CO2 fixation, reduction of atmospheric pollution, regulation of humidity and high temperatures, damping of noise and control of soil erosion processes. Likewise, extended green areas in urban spaces help control pests and encourage cross-pollination. Public health can also be improved by reducing particulate matter and increasing public space usage through an improved green cover; energy consumption and household electricity costs due to AC can be reduced by decreasing the heat island effect, and public infrastructure can be more resilient, through the deployment of nature-based solutions (NbS), such as sustainable drainage systems that improve the water cycle and reduce pressure and demand on storm drainage systems.

The adaptation approach as the initiatives and measures aimed at reducing the vulnerability of natural and human systems to the real or expected effects of climate change, suggests that the different NbS approaches can be used in combination with other types of interventions and help in





this way to generate multiple benefits for populations, biodiversity and at the same time strengthen resilience of cities. It is also necessary to reinforce the principle that the landscape is a fact of general interest and a collective nature, with outstanding features among which the recognition of the ecosystems that sustain it is an essential part of the right to environmental quality in which urban life develops.

Considering how cities have underestimated the value of biodiversity, we propose a draft resolution aimed to solve the long-documented disconnect between cities and nature, bringing the value of biodiversity to the center, through a model of cities and biodiversity called **Biodiverse and Resilient Cities**.

This model and draft resolution seeks to transform cities in the short, medium, and long term by mainstreaming biodiversity in urban planning and promoting the sustainable use and protection of biodiversity and ecosystems. This is based on the idea that urban areas are not only centers of economic and social development, but also important spaces for biodiversity and for promoting processes of ecological connectivity between urban and rural areas.

#### 1. THE CHANGE VISION AND STRATEGY

Biodiverse and resilient cities, considers biodiversity as an opportunity to think and transform our cities and improve people's well-being and quality of life.

The aim is to raise global awareness around the importance of mainstreaming biodiversity into cities to address the climate crisis and biodiversity loss we face today.

To achieve this aim, it is necessary that different international, national and local actors commit to join forces for the transformation of cities.

The transformation of cities is:

- Change from the current urban development model (which does not include the
  environmental variable in urban planning), to one that promotes orderly urban growth
  without deteriorating the environmental conditions of cities.
- Change from the disharmonic relationship of cities with nature to cities that conserve, protect, and value nature.
- Planning of cities adapted to climate change through nature-based solutions and ecosystem-based approaches.
- Shift from the disconnection between rural and urban to cities with an established rural-urban linkage.
- Moving from pollution problems that do not benefit economic investment to sustainable models that attract investment.
- Shift from cities with high levels of pollution to cities with good environmental quality.
- Shift to cities that provide public, healthy and safe green spaces that allow people to recreate and enjoy themselves.
- Shift from a local economy that competes with economic growth to a local economy that benefits from ecosystem services.





- Moving from people's inaction in the cities to actions that generate quality of life for the population.
- Moving from non-collaboration between local governments to collaboration between local governments.
- Supporting efforts towards inclusive repopulation of urban centers, which recognize the right to the city for everyone.
- Understanding that ecosystem conservation efforts should not compete with human development but can instead be approached as complementary and as an important window of opportunity.

For this, it is necessary that cities identify and prioritize actions such as:

- Green walls
- Green roofs
- Ecological restoration
- Botanical gardens
- Hotels for insects
- Wildlife walkways
- Sustainable markets
- Bioeconomy
- Green belts

- Urban parks
- Rainwater collectors
- Permeable pavements
- Pollinating plants
- Urban forests
- Riverbank forests
- Live fences
- Urban vegetable gardens
- Urban growth boundaries

These actions should be prioritized and adapted according to the conditions and needs of each city and should be implemented in a coordinated and participatory manner with the support of different stakeholders such as the public and private sectors, multilateral agencies, academia, civil society organizations and citizens in general.

By seeking the transformation and rewilding of cities, promoting environmental changes, developing actions that involve biodiversity, improving the relationship between people and nature, and reestablishing the territorial urban link, the following is achieved:

- 1. Creation of cities that are better planned and articulated with their natural wealth;
- 2. Ensure the care, protection and conservation of biodiversity and ecosystems;
- 3. Contribution to climate adaptation, mitigation, and resilience;
- 4. Pollution reduction;
- 5. Improvement of the quality of life, health and well-being of people living in cities.

#### 2. CONCEPTUAL FRAMEWORK

#### **Biodiverse and Resilient Cities**

These are cities that enable human settlements to recognize, value, prioritize and mainstream biodiversity and ecosystem services guidelines into urban-territorial planning, thus maximizing human well-being and fostering positive dynamics between nature and people to improve the quality of life.

Biodiverse and Resilient Cities generate connectivity between urban and rural areas, prevent the loss of nature at its edge, and brings back biodiversity into their urban fabrics, with particular emphasis on climate resilience and pollution reduction goals, while





developing new businesses thanks to innovation and knowledge about biodiversity, engaging citizens in decision-making and addressing the urban nature as a scenario for enjoyment and learning.

To achieve this vision, **Biodiverse and Resilient Cities** proposes to fulfill **five** commitments:

- 1. To preserve and restore critical natural habitat: Generate a sustainable relationship with their surroundings by planning compact development patterns, sparing land at the urban edge, protecting high-value ecosystems, promoting the rehabilitation and regeneration of biodiversity on a regional scale through urban green corridors, and achieving positive urban-rural linkages.
- 2. To embed biodiversity in the urban fabric: Seek to maximize the value biodiversity can bring to the built environment and citizens through its multiple services and benefits, from climate resilience to human health and prosperity, through nature-based solutions and ecosystem-based strategies, emphasizing a more equitable distribution of nature's benefits.
- 3. To make nature a competitive advantage: Draw on natural capital to facilitate the identification of solutions and the emergence of innovation, entrepreneurship, businesses, and technologies centered on biodiversity, such as bioeconomy, biomimicry and circularity.
- **4.** To promote better governance agreements: Promote multilevel governance. Partnerships between the public sector and local governments, civil society, the private sector, and international cooperation are intended to promote biodiversity conservation, and improve social equity and living standards, contributing to the SDGs' localization.
- 5. To encourage a shift in the urban planning model to a new mindset through nature: Invest in nature as a catalyst for a renewed sense of citizenship, and cultivate a mindset where cities are seen as homes to different species, not only humans. They promote sustainable behaviors through education programs, civic campaigns, and nature-sensitive urban design. This is achieved through educational programs, sustainable production and consumption patterns, integrated waste management, citizen campaigns, and playful and biophilic urban design.

The implementation and sustainability of **Biodiverse and Resilient Cities** is possible through **three enabling mechanisms**:

- **1.** Planning for ecological mainstream.
- **2.** Financing for urban nature, nature-based solutions, and ecosystem-based strategies.
- **3.** Monitoring and assessment of the state of biodiversity in urban environments.





To achieve this long-term vision, *Biodiverse and resilient cities* works on two co-related dimensions: technical and financial. First, technical assistance is provided for the prioritization and formulation of strategies and projects that incorporate biodiversity in cities. Then, co-financing mechanisms are prioritized and implemented to ensure the implementation of actions in these five transformational axes or commitments, and follow-up mechanisms to ensure the monitoring of the transformation of cities and the mainstreaming of biodiversity criteria in city planning.

## 3. PROJECTS TO TRANSFORM CITIES INTO BIODIVERSE AND RESILIENT CITIES

These are some examples of projects that were led by Costa Rica and Colombia to identify and incorporate biodiversity in the development of cities:

Project: SWEET CITY.

Location: Municipality of Curridabat, Costa Rica.

Scale: Local.

More information:

https://www.curridabat.go.cr/inicio/proyectos/ciudad dulce

http://www.humboldt.org.co/biodivercitiesby2030/pdf/exp-the-sweet-city.pdf

Project: INTERURBAN CORRIDORS AND CITIZEN PARTICIPATION.

Location: María Aguilar and Torres River Interurban Biological Corridors (CBIMA and

CBIRT-RB), Costa Rica.

Scale: Local.

More information:

https://biocorredores.org/biodiver-city-sanjose

https://www.sinac.go.cr/ES/correbiolo/Paginas/default.aspx

Project: THE ROLE OF WETLANDS, FAUNA AND GREEN AREAS IN THE

METROPOLITAN PLANNING OF A BIODIVERSE AND RESILIENT CITY. **Location**: Medellín and Área Metropolitana del Valle de Aburrá, Colombia.

**Scale:** Urban-regional. **More information:** 

https://www.metropol.gov.co/Paginas/Noticias/ecosistema-urbano-del-valle-de-

aburra.aspx

Project: PARTICIPATORY SCIENCE: THE ROLE OF TECHNOLOGIES FOR THE NEW

URBAN NATURALISTS.

Location: Armenia, Montería, Barrancabermeja, Yopal, Leticia, Pasto, Villavicencio,

Manizales, Colombia. Scale: Country level More information:

https://www.minambiente.gov.co/asuntos-ambientales-sectorial-y-urbana/el-bioblitz-de-monteria-registro-91-especies-de-aves-y-557-observaciones/





Project: DISCOVERING THE BIO-ECONOMIC POTENTIAL IN BIODIVERSE AND

RESILIENT CITIES

Location: Samper Mendoza Market Place, Bogotá, Colombia. Markets and Green Areas in

Barranquilla, Colombia. Scale: Urban-regional. More information:

http://www.humboldt.org.co/biodivercitiesby2030/pdf/exp-weaving-stories-of-people-and-

plants.pdf

http://www.humboldt.org.co/es/boletines-y-comunicados/item/1784-expedicion-

barranquilla-saberes-locales-biodiversidad-urbana-y-bioeconomia

In general, some partners from Colombia and Costa Rica that supported their initiative to transform cities into cities with a better relationship with nature were:

- World Economic Forum (WEF)
- Development Bank of Latin America (CAF).
- Inter-American Development Bank (IDB).
- Deutsche Gesellschaft f
  ür Internationale Zusamme- narbeit (GIZ).
- UK PACT (Partnering for Accelerated Climate Transitions), British Embassy
- World Resources Institute (WRI)
- Local Governments for Sustainability (ICLEI)
- Environmental Solutions Initiative (ESI), Massachusetts Institute of Technology (MIT)

### 4. BIODIVERSE AND RESILIENT CITIES AND INTERNATIONAL TARGETS

Internationally, the "2030 Agenda for Sustainable Development" clearly recognizes the importance of the role of cities and urban centers in developing better capacities to achieve environmental sustainability and climate resilience, to achieve inclusive and safe spaces for all.

This is also reflected in the New Urban Agenda, which also recognizes environmental sustainability, resilient urban development, biodiversity and ecosystem conservation, resilience and adaptation to climate change and climate change mitigation as a global commitment that must be taken to a local scale.

The above, taking into account:

- The latest Intergovernmental Panel on Climate Change (IPCC) report documenting climate impacts in urban areas and highlighting aggravated risks that may also affect cities, such as intensified warming and average precipitation.
- 2) The **Kunming-Montreal Global Biodiversity Framework (GBF)** adopted in 2022, which enshrines a target (#12) dedicated to improving the quantity and quality, connectivity, access and benefits of green and blue spaces in urban areas through conservation and planning, and the Action Plan on Subnational Governments, Cities and Other Local Authorities for Biodiversity, which provides a critical roadmap for achieving multi-level governance for nature.





The relationship between **Biodiverse and resilient cities** and the international targets is shown below:

Biodiverse and Resilient Cities, UN-Habitat and the 2030 Agenda. UN-Habitat is mandated to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. The concept address the 2030 Agenda in a crosscutting manner and aim at the effective implementation of SDG11 and its targets, in particular those referring to sustainable urbanization, reduction of the environmental impact of cities, access to green public spaces and resilient construction. In addition, the biodiverse and resilient cities contribute to increasing the shared prosperity of cities and regions and strengthen climate action by improving the urban environment.

**Biodiverse and Resilient Cities and the New Urban Agenda**. By reorienting the way cities and human settlements are planned, designed, financed, developed, administered and managed, cities in harmony with nature help improve human health and well-being, build resilience and protect the environment.

**Biodiverse and Resilient Cities and the Paris Agreement.** Climate change is recognized as an opportunity to rethink cities and the well-being of their inhabitants, based on the understanding that a solid natural base is the priority in building resilient and adapted cities, in addition to promoting low-carbon urban development and contributing to the generation of carbon neutral cities.

Biodiverse and Resilient Cities and the Post2020 Biodiversity Framework. The link between urban development and biodiversity sought is related to the objectives and targets set out in the Kunming Montreal Global Framework for Biodiversity, as they aim to recognize, value and restore nature's contributions to sustainable human development (Goal B), such as air, water and climate regulation, soil health, as well as protection against natural hazards and disasters through nature-based solutions and ecosystem-based strategies (Target 11). Biodiverse and Resilient Cities are based on "biodiversity-sensitive urban planning" and contribute to "inclusive and sustainable urbanization and the provision of ecosystem functions and services" (Target 12).

### 5. IMPLEMENTATION APPROACH: GLOBAL AND LOCAL WORK

Based on the development of international guidelines and principles on *Biodiverse and resilient cities*, we seek to compile examples of best practices and innovative methodologies for the spatial planning and management of cities along a preserve-conserve-restore-create spectrum that responds to varying states of natural habitat within and around cities.

This will serve to capacity building through technical assistance and guidance to improve knowledge, skills and abilities in biodiversity management in urban planning, so that countries and cities can improve programs, projects or processes that enable the transformation of their cities into biodiverse and resilient cities.





Finally, it seeks to identify options for supporting sustainable investment in *Biodiverse and resilient cities* and share information on bilateral and multilateral sources of finance to enable developing countries to develop and deploy actions that incorporate biodiversity in cities.

The above, through the articulation between *Biodiverse and resilient cities* and the implementation of the New Urban Agenda, from a global and local scale, with the support of different actors such as Member States, international agencies, national and local governments, and civil society organizations.

#### 6. CALL TO ACTION

Today, humanity faces two of the most important challenges of our existence: reversing climate change and halting biodiversity loss.

While we are convinced that all countries need to do their fair share to combat the world's major environmental crises, we also recognize the importance of globally implementing an innovative and coordinated strategy that considers biodiversity and climate change as a challenge to transform cities for the benefit of nature, the environment, and people.

We call on all countries to unite in the cause of reestablishing the link and connection between cities and nature to break with the idea that urban areas are only centers of economic and social development, and better start thinking that cities are important spaces to reestablish ecological connectivity between urban and rural areas and to preserveconserve-restore biodiversity.

We believe that putting biodiversity at the center of urban life contributes to the solution of environmental, social and economic problems. For this reason, we invite you to adopt the *Biodiverse and resilient cities* resolution because developing coordinated, remarkable, bold and innovative international actions with a local focus is an opportunity to make change and generate the greatest degree of prosperity and opportunities for the environment and people.

We are convinced that adopting the **Biodiverse and resilient cities** resolution will:

- a) Promote mainstream biodiversity and ecosystem services guidelines into urbanterritorial planning;
- b) Embed biodiversity in the urban fabric;
- c) Make nature a competitive advantage within the cities;
- d) Promote better governance agreements and contribute to the SDGs' localization in cities;
- e) Encourage a shift in the urban planning model to a new mindset through nature.

It is an opportunity to improve the relationship between cities and nature, conserve biodiversity and promote climate adaptation and resilience.