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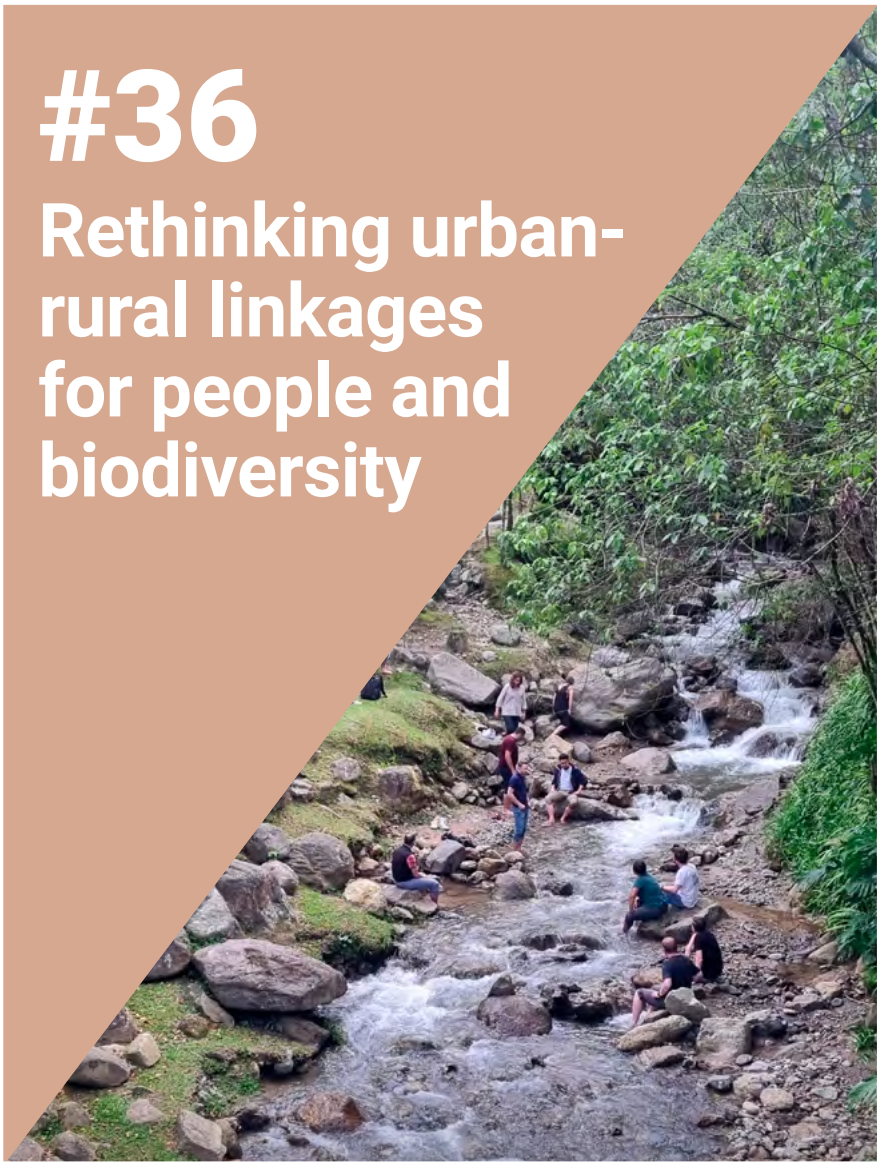
Rethinking urban-rural linkages for people and biodiversity



Peer Learning
Envigado, Colombia. November 2023

INTERLACE
RESTOKING URBAN ECOSYSTEMS

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Content

Foreword

The municipality of Envigado was invited to participate in the INTERLACE project by the Humboldt Institute in 2019 as a result of our experience as pioneers in the Local System of Protected Areas, conserving the municipality's main ecological structure and managing its rich biodiversity. Since then, we have been part of this project that was consolidated in 2020 within the Horizon 2020 program of the European Commission. We have been part of this experience together with five other cities or metropolitan areas in Europe, Central and South America, and more than 15 partners including universities, research institutes, NGOs and local government networks, under the leadership of the Ecologic Institute of Germany.

The INTERLACE project aims to improve the relationship between nature, people and places through nature-based solutions (NBS). The approaches to these solutions in our municipality have evolved from 2020 to the current year 2024, in which I welcome the continued development of the INTERLACE project. They have been enriched through knowledge exchange with cities in Latin America and Europe, and a focus on governance, monitoring and engagement mechanisms that have helped to strengthen the ownership of our ecosystems by the inhabitants of Envigado, especially children, considered fundamental for the sustainable future of our municipality.

In November 2023, the municipality of Envigado hosted with great success the global event "Cities Talk Nature: Rethinking urban-rural linkages for people and biodiversity", which allowed participants from around the world to learn from each other, as well as from the initiatives of Envigado, a leader in ecosystem conservation and biodiversity management in the region. This Peer Learning Note aims to share these exchanges and the key lessons learned during the event with other cities and partners, as well as within our municipality.

I return as Mayor of Envigado confident of achieving short-, medium- and long-term results during my tenure. I applaud initiatives that deepen the understanding of biodiversity and contribute to sustainable city planning through nature-based solutions (NBS). I am grateful for the collaboration of the Humboldt Institute, the global network of United Cities and Local Governments (UCLG), and other partners and cities that have joined us in this process.

In Envigado we are moving forward with environmental education actions that promote the exchange of knowledge and learning with other cities and inspire us to continue transforming our natural environments.

Raúl Eduardo Cardona González
Mayor of Envigado 2024–2027

Introduction

Over 120 participants from 15 countries gathered in the city of Envigado, Colombia, from November 23-24, 2023, to participate in the conference and peer exchange "Cities Talk Nature: Rethinking Urban-Rural Linkages for People and Biodiversity".

The event - which also welcomed over 60 participants from other countries joining online - was organized in the framework of the INTERLACE Project. Its aim was to promote exchange between Europe and Latin America to foster (peri-)urban ecosystem restoration and nature-based solutions. The event allowed participants to exchange knowledge and learn about the initiatives of Envigado's municipality, who is known as a leader in ecosystem conservation and biodiversity management in the region.

Organized by the municipality of Envigado, the Biological Resources Research Institute Alexander von Humboldt, United Cities and Local Governments (UCLG), and Ecologic Institute, the event included a variety of interactive formats, technical visits, workshops and peer learning segments to foster discussion and exchange among the various participants representing local governments, academic institutions, non-governmental organizations, private companies, civil society, and city networks.

Envigado, a municipality with around 250 000 residents, sits in the Aburrá Valley's metropolitan area, conformed by 9 other municipalities including the city of Medellin. Its location in a lush tropical zone, surrounded by sprawling hillside forests, offers plenty of potential but also poses challenges, mainly environmental, due to Medellín's expanding development. Despite this, Envigado has embraced its natural surroundings, integrating tourism and recreational activities with a strong emphasis on environmental conservation. It boasts an environmental secretariat dedicated to preserving biodiversity, setting a benchmark for the region.

120+
onsite participants

60+
virtual participants

28
countries

11 new cities committed to (peri) urban ecosystem restoration!

The conference brought together the municipalities of Baguio (Philippines), Cuenca (Ecuador), Niteroi, Porto Alegre (Brazil), Temuco (Chile), Tilarán (Costa Rica), Villa de San Diego de Ubaté (Colombia), the metropolitan area of Bucaramanga (Colombia), as well as the rural parish government councils of Imbabura, Pichincha, and Santa Elena (Ecuador). They all joined the "Cities Talk Nature" community, showcasing their commitment to the restoration of (peri-)urban ecosystems and the implementation of nature-based solutions with participatory and inclusive approaches. As a result, more than 40 local governments are now part of this growing community, which encourages the exchange of best practices, resources and tools.

Find out more and join the "Cities Talk Nature" community at interlace-hub.com

"We have a great interculturality and diversity in Imbaburá that we want to care for and protect"

Daniel Gudiño Acosta
President of CONAGOPARE Imbabura (Ecuador)

"Temuco is committed to having a more sustainable city, applying nature-based solutions, and strengthening the connection of people with our natural environment."

Viviana Diaz
Councilor of Temuco (Chile)

"We will feed the regulatory plan we are working on with the experiences we have learned from this event and the cities in this community"

Juan Pablo Barquero Sanchez
Mayor of Tilarán (Costa Rica)

Rethinking Urban-Rural Linkages

Urban-rural linkages are understood as the reciprocal, repeated and complementary flows of people, goods, environmental and financial services, employment, information and technology between rural, peri-urban and urban areas[1]. These encompass social, environmental, cultural and institutional relationships, forming a complex network that connects the urban with the rural. The functioning of a city is directly dependent on inputs and relationships that are generally found outside its urban boundaries. This requires an approach that recognizes urban-rural interdependence and the need for articulation to reduce the negative pressures that deepen social inequality and environmental deterioration, while strengthening the positive relationships between the two systems.

View of the Congost river plain in Granollers, Spain. **Photo** by Granollers City Council

[1] UN-Habitat (2015). Habitat III Issue Papers. 10 - Urban-rural linkages

In Latin America, the urban population is projected to increase from 539 million people (81.2% of the population) in 2020 to 685 million (87.8%) in 2050, which will make the links between rural, peri-urban and urban areas even closer and more complex[2]. According to Inostroza[3], four key aspects stand out in this context, which allow us to understand the pressures faced by social and ecological systems within these areas. The first is **rapid urban expansion**, understood as the lack of comprehensive planning. As a result, urban growth is accelerated and consumes extensive areas of land, posing significant challenges for current urban management. The second relates to **urban size and structure**, in relation to the dynamics between capital cities that concentrate population and resources and negatively impact biodiversity and regional ecological connectivity. The third refers to **informal urban development**, which generally becomes more prominent in vulnerable zones that are often home to remnant urban and peri-urban ecosystems. This phenomenon also contributes to socioeconomic, gender and access to land inequalities. Lastly, the fourth key aspect of urbanization in Latin America has to do with the **enormous biodiversity that is threatened**. Many cities in this region are situated in tropical areas with rich biodiversity that is being affected by ecosystem degradation and the lack of ecological connectivity.

In Europe, rural areas cover 83% of the territory and are currently home to 137 million people (30% of the population). The average age of rural people is higher than in urban and suburban areas, with the **rural population in decline** either due to natural causes or to urban migration[4]. Economic activity in these areas has also been evolving. Reliance on services (tourism and recreation) has increased and agriculture's contributions to employment (12%) and value added (4%) have declined, even though it continues to be vital to the continent's economic and food security. In addition, the expansion of urban areas in **suburban patterns consumes rural land**, often in disproportion to the population growth achieved. This has generated friction with ecological transition and climate mitigation policies that directly affect the agricultural sector, which in turn is one of the main sectors affected by the impacts of climate change in the region.

In order to mitigate the negative effects of the expansion of cities and ensure that urban-rural linkages are harmonious for people and ecosystems

[2] CEPAL. (2017). IV. Dimensión ambiental del desarrollo urbano en América Latina y el Caribe. Montero, L., García, Johann. Panorama multi-dimensional del desarrollo urbano en América Latina y el Caribe. (Available in Spanish)

[3] Inostroza, L. (2022) Biodiversidad y Región: un sistema unitario - El cambio de paradigma urbano en el siglo XXI. En: Mejía, M. A.,Amaya-Espinel, J. D. (eds.). BiodiverCiudades al 2030: Transformando ciudades con la biodiversidad. Bogotá. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt. (Available in Spanish)

[4] European Commission (2021). A long-term Vision for the EU's Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040.

Green axis in the metropolitan area of San José, Costa Rica. **Photo** by CBIMA

a profound reflection is needed on the challenges and opportunities arising from the interaction between urban, peri-urban and rural areas. This implies actions that include the protection of local productive systems and the social appropriation of rural and peri-urban territories. Achieving such positive restoration or strengthening, also contributes to the challenges related to climate change, mitigating the impacts of phenomena such as floods, droughts and microclimatic variations.

To move in this direction, it is crucial to adopt a territorial development model that goes beyond an instrumental approach and adopts a functional and systemic perspective. An important element in this is the **incorporation of biodiversity as a structuring axis of urban-rural territories**. This implies not only strengthening regional ecological systems but also those that constitute the urban infrastructure. Bucaramanga's Main Ecological Structure is an example of this strengthening process. The differential functionalities between the urban and rural areas have been recognized in this plan, with rural areas and setback zones around watercourses established as the backbone of its main ecological structure, while the social functionality of biodiversity is highlighted and strengthened. Berlin's Biodiversity Strategy and its network of wild green areas and water bodies

- covering almost 40% of the territory - is another example that shows the importance of biodiversity in the urban planning of a large metropolitan area.

Additionally, these challenges can be addressed through the implementation of **Nature-Based Solutions (NBS)**. When scaled and replicated, these solutions can have significant impacts on people's well-being and the maintenance of ecological networks that connect rural and urban areas. An example of this is the urban and peri-urban gardens and farmers' markets that have been implemented in cities such as Bogota, Lleida and Porto Alegre. These have been strengthened through the articulation between citizens, state entities and social organizations. These gardens create spaces for intergenerational encounters and socialization, which in turn provide food for several families and strengthen the ecological structure of the city, while reinforcing social and cultural links between urban and peri-urban areas. The Oslo Blue-Green Factor is an example of a planning tool that local and regional governments can use to encourage the implementation of SBNs on private land, fostering ecological connectivity and reinforcing ecosystem services in urban-rural areas.

Urban vegetable garden at the Rural School El Uval, in Bogota - Colombia. **Photo** by Humboldt Institute

Integral strategies that include a **bioeconomy** approach can also contribute to increased appreciation of biodiversity in cities and relations with rural areas. Local marketplaces, farmers' markets, seed networks, composting systems, agro-tourism and, in general, the commercialization of local products are good examples of strategies that can contribute to the continuity of ancestral knowledge and traditions and, in turn, contribute to biodiversity. Last but not least, **citizen participation and the social appropriation of knowledge** are key elements that also contribute to the recognition and appreciation of nature's contributions to people and the urban-rural linkages that sustain us, as can be appreciated in many of the examples showcased by cities in this peer learning note.

Peer Learning

During the event in Envigado, many strategies for improving urban-rural linkages were experienced and discussed. The following sections document some of these reflections and exchanges, focusing on urban, peri-urban and rural interdependencies with a focus on people and biodiversity, and how these can strengthen the integration of new approaches into local and regional governments' agendas.

Field Visit in Envigado

The city of Envigado is recognized for its Local System of Protected Areas (SILAPE), where 40% of its territory has been designated as a protected area. In this way, conservation of ecosystems, forests and water tributaries of special importance for ecological connectivity have been preserved. These areas are habitat to important wildlife species, and also provide a space for environmental education and the engagement of citizens with nature, through various programs led by the municipality's Secretariat for the Environment and Agricultural Development, in collaboration with other secretariats.

Image: Leaders of the NGO ECO HUMEDALES shared their experiences during visit to El Trianón Wetland.

Image: Students engaged in the "Guardians of La Ayurá" program for the appropriation and protection of the city's main waterstream.

Image: The visit allowed participants to observe the contrast between Envigado's protected areas (SILAPE) and the urban growth of the metropolitan area in the valley.

During the field visit, attendees explored the Parque Ambiental Lineal La Heliodora and the Humedal el Trianon, which together form the municipality's first urban protected area spanning 23 hectares. This designation was achieved in 2019 following years of collaboration among environmental and community leaders, the Envigado municipality, and the Aburrá Valley Metropolitan Area. There, participants had the opportunity to hear first-hand from community leaders who have been instrumental in conserving these spaces and restoring their ecosystems.

Participants also visited the Ecological Park El Salado, located just 5 km away from the city center of Envigado. This space, located along the La Ayurá stream - the main water tributary structuring the municipal territory -, offers an oasis where citizens can get close to nature. There, they heard from the municipality about the different programs that are implemented with local children to promote the recognition and appropriation by the citizens of this important water corridor and the rich biodiversity of the municipality. Local students and a teacher accompanied this presentation, giving their first-hand testimony and sharing some of the literary works, short stories and poems that they have developed through these educational programs.

Scan the QR code to read more about the visited spaces and watch some videos about the Envigado's initiatives and programs for the restoration of urban-rural ecosystems.

Local practices

More than 15 local practices were presented and discussed during the event. This resulted in rich exchanges and learning among municipal representatives, as well as with participants from academia, civil society, or the private sector. Below we present 5 of these practices along with some of the key lessons and recommendations shared by participants from the different groups at the end of the exchange.

Access the posters of all the practices exhibited during the event through this QR code.

Image: Participants listened and discussed in small groups the practices presented by the different cities.

Lleida (Spain)

How broccoli and strawberries helped to revalue the orchards and renaturalize the city...

The project to revitalize orchards in the city of Lleida, Spain, addresses the disconnection between rural and urban areas, the decline of traditional family farming and environmental deterioration. With a population of 140 000, Lleida sits on an agricultural plain between the Pyrenees and the Ebro River, about 150 kilometers from Barcelona.

For more than a decade, several initiatives have championed Lleida's vegetable gardens, organic agriculture and the important biodiversity present in the region. Strategies have ranged from local farm tours, community markets, promoting social and school gardens, reintroducing traditional crops to enrich biodiversity, and wildlife conservation efforts. The project is led by the Lleida City Council in collaboration with the University of Lleida, local producer associations and environmental groups.

Funding comes mainly from city resources and is supplemented by European grants.

Notable achievements include the strengthening of community ties with nature, the revival of traditional crops and significant improvements in urban biodiversity. Looking ahead, the project will seek to establish biodiversity centers, implement more natural management of urban spaces, and forge stronger connections between the city and surrounding farmland. Key lessons learned emphasize the need to enhance valuable elements, engage personal experiences, deliver ongoing education and resources, and seamlessly integrate local products into the daily life of the community.

Key lessons

- Nature-based Solutions must be accompanied by innovation, environmental justice, and social responsibility to transform people's lives.
- A budget anchored in the municipal exercise as a response to the citizenry is key to the continuity and sustainability of the initiatives.
- To value citizen work, recognizing the existing processes and being transparent in the support given, allows to strengthen citizen commitment.
- Involving children and schools in the renaturalization processes, including curriculum integration, allows for greater long-term impact.

Cuenca (Ecuador)

Integrated Watershed Management

The city of Cuenca grapples with multifaceted challenges within its hydrographic basins, including riverbank livestock, deforestation, and encroaching urban sprawl. To ensure a sustainable water supply for its growing population until 2050, the city has committed to a water security-focused approach, emphasizing the integral management of hydrographic basins and formulating environmental policies to safeguard water resources.

Taking a comprehensive approach to water management, the municipal company ETAPA EP spearheads these efforts with an ecosystem-centric vision. Pacts such as the "Mutual Agreements for Water" for high-altitude ecosystems and programs like "Socio Bosque – Páramos" receive substantial investments, emphasizing the city's commitment to conservation. Strategic land acquisitions and the protection of approximately 48% of water recharge areas underscore the city's dedication to preserving crucial water sources. Over the period from 2014 to 2022, an impressive 169 718 plants have been planted, and interventions have covered 60.73 km of riparian forests, safeguarding 259.65 hectares. Additionally, environmental education has reached almost all urban and rural schools within water recharge areas.

This integrative, participatory, and sustainable approach has not only facilitated a shift in the community's attitude towards water resource conservation but also yielded positive outcomes. The generation of accurate information on socio-economic and environmental aspects within water recharge areas has been found to serve as a crucial foundation for making informed decisions regarding the preservation and protection of these vital ecosystems. Political commitment and inter-institutional coordination have also been deemed imperative to fortify strategic alliances, improve regulatory compliance, and minimize adverse environmental impacts.

Key lessons

- Actively empowering and involving the local community is central to the protection of water, forests and urban biodiversity.
- Strategic alliances are key! Similar processes, groups, initiatives and objectives can be brought together to strengthen each other's impact.
- Data is crucial. In order to understand ecosystem regeneration and guide decision making, data collection, including through citizen science, is essential.
- Private land ownership is one of the biggest challenges. Buying back land, making partnerships, incentivizing collaboration and/or establishing regulations and penalties are some of the solutions.

Envigado (Colombia)

"Envigado Florece"

Envigado, with a population of 250 000 inhabitants spread over 79 km^2, faces significant environmental challenges. These range from heat islands in its neighborhoods to the loss of urban green areas due to excessive gray urbanism. This scenario has led to high population concentration and ecological disconnection in the region. However, the municipality has responded proactively with the "Envigado Florece" program, a comprehensive initiative that seeks to counteract these challenges and improve urban environmental quality.

Envigado Florece has become a key municipal strategy. The program, which has been in place for approximately fifteen years, not only focuses on ornamental aspects, but also incorporates the importance of gardens to improve thermal comfort, attract pollinators, and foster ecological connectivity and the improvement of urban ecosystems.

The action focuses on the construction of new green spaces and the improvement of existing ones, green infrastructure and the recovery of green areas. The initiative involves the community, encouraging active participation and care of these spaces. In addition, educational campaigns and gardening workshops have been implemented to promote the appreciation and responsible use of these green environments.

Envigado Florece's achievements are remarkable, with the maintenance and improvement of 162 public gardens, the delivery of more than 133 936 plants to the community and the participation of 270 people in last year's contest Envigado Florece. Nevertheless, the challenge continues, and the project seeks to consolidate itself as a strategic line in the management of urban nature. With the identification of needs such as optimal spaces for the reproduction of plants and resources for their implementation, the program aspires to continue its positive and sustainable impact in Envigado, improving the quality of life and strengthening the connection of the community with their environment.

Key lessons

- Every detail contributes towards making a change, continuous training is needed, as well as listening to nature and creating links with academies and research institutes.
- Articulation with others is fundamental to be able to exchange experiences, knowledge and support each other. Both within the territory and beyond the municipal boundaries.
- The community must be sensitized on environmental issues so that they can take ownership of these NBS practices and the restoration of ecosystems.

Niepolomice (Poland)

Vistula Bicycle Path

With a population of 32 781, Niepołomice - part of the Krakow Metropolitan Area - is characterized by its significant industrial zone and the largest forest complex protected under Natura 2000. The Vistula Bicycle Path project addresses several challenges around the Vistula river - the longest river in Poland, including investment pressure, ecological interruptions concerns, and air pollution caused by car congestion.

The project involves the creation of a bicycle path connecting urban and industrial zones with rural areas and the Natura 2000 protected region. The initiative revitalizes the Vistula river embankment, emphasizing ecological functions and biodiversity conservation. Provisions in local development plans guided the project, emphasizing the preservation of green areas along watercourses.

Regular meetings and consultations among stakeholders, including the administration of provincial roads, Polish Water Survey, National Forests, and Niepołomice municipality, facilitated multisectoral collaboration. The financing, totaling €1.2 million, for a 19.5 km bicycle path along the embankments came from the administration of provincial roads. Additional investments were made by the Polish Water Survey, while the municipality provided a permeable surface parking lot. The municipality also acquired missing plots.

The achieved outcomes so far include reduced car traffic in the city center and near Natura 2000 areas on weekends, increased bicycle traffic with a new parking lot near the Vistula embankment, and the removal of invasive species and abandoned waste. The project aims to extend the bicycle path to connect Niepołomice with Krakow, further impacting air quality and encouraging outdoor activities. Key elements for success have included an amendment to allow path construction on the embankment, close collaboration with funding bodies and embankment owners, and providing necessary infrastructure for cyclists.

Key lessons

- Monitoring and evaluation are key to understanding the impact of interventions, projects or policies on both people's lives and biodiversity.
- Municipalities should develop new financing opportunities, including those from private investment or compensation mechanisms.
- The recovery of public space from and with a visionary perspective allows us to transform realities. This requires us to think of the entire city as a landscape, rather than focusing on specific projects or limited spaces.

Porto Alegre (Brazil)

Sustainable & low-carbon agriculture

The "Sustainable Agriculture and Carbon Emission Reduction" project in Porto Alegre, home to 1 332 845 people, targets three key objectives: shifting to low-carbon farming methods, conserving soil and water, and establishing community gardens. These efforts are critical for the city's sustainability and food security.

The project seeks to establish replicable models that inspire the transition to a more conscious agriculture in the city and its surroundings. To this end, it promotes the adoption of low-emission and organic agricultural practices through incentives, the provision of agricultural inputs and machinery, public-private partnerships, technical assistance and efficient management. It also establishes community gardens in schools and public spaces, promoting environmental education and the adoption of more sustainable farming practices.

Based on scientific evidence, the project reduces the use of chemicals, protects the soil with planting practices as direct planting and permanent cover, and promotes species diversity to preserve biodiversity. Different legal instruments, such as Rural Zoning and the Pesticide-Free Zones Law, support the project, along with programs such as Food Acquisition and Ecological Fairs, which support agroecological production and create spaces for direct sales from the producer to the consumer.

Despite challenges encountered, such as resistance to change, the project has had very positive results and received the support of a large part of the population. The practical lessons learned from the project, as well as some of the initiatives taken so far, will be consolidated in Porto Alegre's forthcoming Rural Development Plan.

Key lessons

- In order to build political will as a vital element in the adoption and strengthening of rural development through agriculture, it is important to highlight the economic, social, cultural and other benefits.
- Initiatives should be integrated into macro development and land-use plans, including new territorial allies that promote rural ties, food security and identity.
- Include and highlight the importance of tourism and landscape values to promote nature-based initiatives showing how land use for urban development or housing is not the only source of economic prosperity.

Palou rural site, from a degraded corner to an emblematic area
Granollers (Spain)

Project to revitalize orchards in the city
Lleida (Spain)

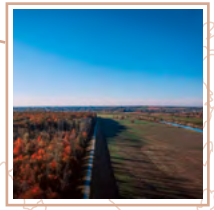
Blue Pearls of Berlin
Berlin (Germany)

"Envigado Florece"
Envigado (Colombia)

Waste, Added Value
Tilarán (Costa Rica)

Citizen's Climate Change Monitoring Network
CBIMA (Costa Rica)

PBOT focused on rural-urban symbiosis
Ubate (Colombia)



Vistula Bicycle Path
Niepolomice (Poland)

Pleisenbach Greenbelt
Chemnitz (Germany)

Co-creation of Nature-based Solutions
Bogota (Colombia)

Portoviejo Urban Trees Technical Manual
Portoviejo (Ecuador)

Integrated Watershed Management
Cuenca (Ecuador)

Polycentric Development
La Paz (Bolivia)

Sustainable and low carbon agriculture
Porto Alegre (Brazil)

Orla Piratininga Niteroi Park
Niteroi (Brazil)

Scan the QR code to explore the posters of all the practices shared during the event.

Interactive workshops

Towards the end of the second day, participants were able to participate in various parallel workshops to discover new approaches and tools for the planning, implementation and/or governance of nature-based solutions.

Governance of NBS in urban-rural areas

Facilitation by Juan Carlos Uribe, Sara Hoeflich, and David Jacome-Polit.

Applying nature-based solutions in urban-rural spaces has specific challenges when dealing with ecosystems that often cross municipal boundaries, combine different land-use regulations, and where different levels of environmental or development management competencies converge. In this workshop, participants had to choose two NBSs to be implemented in a given area, and analyze the different aspects to be taken into account in terms of: actors and coordination; competencies and mandate; technical capacities; and resources and financing.

Key messages

- Coordinating and fine-tuning the interests of the different levels of government, institutions and/or municipalities is a constant task.
- Including multiple stakeholders, especially NGOs, environmentalists and/or farmers, as early as possible is important to gain the commitment and active collaboration from the community and the private sector.

Regenerative Cultures

Facilitation by Juliana Gutiérrez

We are living in a social and ecological crisis that is also rooted in an individual crisis. Understanding polycrisis and its interconnections with our ecological systems is needed for decision-making. Promoting regenerative approaches could be a path, but not only in projects but also in our leadership. A regenerative leadership puts life in all its forms at the center of every decision, recognizing our symbiotic relations with nature and giving back.

Key messages

- Design or redesign systems to heal, and create the conditions for life to thrive.
- Learn from nature's patterns and functioning to design projects.
- Understand our interdependence with living systems
- Healthy people + healthy community = healthy planet

Backcasting

Facilitation by David Jacome-Polit & Sara Hoeflich

Reality perception, ambitions, and achievements are important factors to take into account when considering challenges. In the last plenary session, a period of individual and subsequent collective reflection was devoted to looking backwards from the future. Applying a methodology called “backcasting”, participants visualized the future they want for their city in 30 years, followed by a discussion on how to get there through the lessons and reflections of the event.

Key messages

- Many environmental policies are created "on the go" without a comprehensive vision of the future.
- People as well as the aspirations of many individuals and communities are behind public policies.
- Effective institutions and transversal governance mechanisms make it possible to maintain and adapt the necessary pathways to achieve the future vision.

Reimagining spaces with children and youth through Minecraft

Facilitation by Johana Tabares, Paul Mahony & Ivan Gajos

This workshop replicated the INTERLACE schools programme by giving the opportunity for participants to imagine, design and build nature-based solutions using the Minecraft video game. Participants worked in small teams to develop solutions for the area around Debora Arango Cultural Park (the event’s venue), using the tools in Minecraft to bring their ideas to life. At the end of the session, each team presented their ideas to feedback from the group.

Key messages

- Minecreaft is a highly accessible tool for designing and building nature-based solutions in virtual worlds. Children find it very easy to use; and even adults too!
- Having fun whilst learning and being creative makes the process more enjoyable.
- Tools such as Minecraft provide a platform through which participants can share their ideas, and have great potential for facilitating teamwork and intergenerational dialogue (between children and adults).

Key lessons and recommendations

The exchanges, reflections and discussions that took place during the Peer Learning, particularly around local initiatives and practices, allowed to draw some key lessons and recommendations for local, regional and metropolitan governments interested in rethinking urban-rural linkages in their territory to benefit people and biodiversity.

1. Adopt an integral territorial development model

Local and regional governments can adopt a territorial development model that transcends an instrumental approach. The articulation of the local with larger scale networks is essential. This implies promoting governance that facilitates the coordination of actors and sectors to reduce social, economic and environmental inequalities between rural and urban areas. It is crucial to recognize and value the role of rurality in development, and fostering collaboration between municipalities, institutions, NGOs and communities is crucial to effectively address the challenges.

2. Preserve, connect and strengthen ecosystems

Rethinking urban-rural linkages presents opportunities to preserve and strengthen the functionality of ecosystems that support people's well-being both in cities and in the countryside. Tropical ecosystems, especially in hot climates, have very short growth cycles, which allows life to sprout in many forms in cities as well. In this context, the adoption of conservation practices, such as the designation of protected areas and the restoration of ecosystems, contributes directly to the quality of life, agricultural production sustainability and biodiversity. Investing in green infrastructure also contributes to the physical and mental health of urban residents, while creating more resilient environments that benefit both urban and rural areas.

3. Promote circular bioeconomy

Incorporating sustainable urban agriculture strategies and embracing circular economy practices at the territorial level can enhance food security, improve local waste and resource management, and foster stronger connections between urban and rural communities. This approach yields economic and environmental benefits by diversifying the local food supply, creating job opportunities, boosting economic independence, and alleviating strain on surrounding rural regions.

4. Recognize and engage communities

Including residents in decision-making ensures local needs and concerns are integrated into urban development, promoting empowerment and equity. To this end, it is important to value the community's work and experiences, recognizing existing processes and being transparent in the support provided. The inclusion of children and schools in renaturalization processes, through curriculum integration, fosters greater long-term impact. Similarly, green spaces provide spaces to implement educational programs that foster the connection of the urban population with nature.

5. Monitor, learn and adapt with nature

Living with nature and not in defense of it has particular challenges and realities. The implementation of nature-based solutions must be accompanied by constant impact monitoring and evaluation. Data collection, including citizen science participation, is essential to understand ecosystem regeneration and guide decision making. Environmental education and management of wildlife interactions - whether cougars, insects or herbivores - is key to living with and appreciating biodiversity as a potential and solution. Adaptability and continuous adjustments are necessary to meet changing challenges over time.

6. Foster strategic alliances and holistic approach

An ecosystem can be easily destroyed, while its recovery can be much more complex even with the regenerative power of nature - particularly effective in tropical climates. Fostering strategic alliances is key to strengthening the ownership and impact of initiatives. Collaboration between sectors (public-private), institutions and communities can enhance the effectiveness and sustainability of projects in urban-rural settings with few resources of their own. In developing these partnerships, it is necessary to adopt a holistic approach which considers the interdependence of social, economic and environmental factors when planning and executing initiatives.

Partners

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