



POLICY BRIEF 10

# Nature Based Solutions for preventing urban sprawl in Latin America

**Contributions from Bogotá's Sustainable Urbanisation efforts**



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## Nature Based Solutions for preventing urban sprawl in Latin America

### Contributions from Bogotá's Sustainable Urbanisation efforts

This policy brief outlines the role of Nature-based Solutions (NbS) on mitigating challenges caused by urban sprawl in Bogotá, offering insights and recommendations to decision-makers interested in addressing socio-ecological challenges of urban-rural borders by employing NbS.

### Key Messages

- In Latin America, current policies struggle to effectively contain uncontrolled urbanisation in rural and natural areas. In this sense, a paradigm shift is needed to address urban expansion and rural-urban borders whilst breaking social and environmental disparities in peripheral areas, contributing to sustainable urbanisation.
- Incorporating a NbS approach into place-making processes presents an integrated strategy to enhance resilience at urban-rural fringes, preventing uncontrolled urban expansion, while tackling both social and ecological disparities and promoting a sense of belonging.
- Unlocking the full potential of NbS in urban-rural borders requires both government action and collaborative efforts across various sectors to boost local economies and empower communities, while at the same time protecting and improving natural ecosystems at urban fringes.
- Successful implementation requires continual evaluation, stakeholder mapping, and the development of easy-access methodological and training materials.





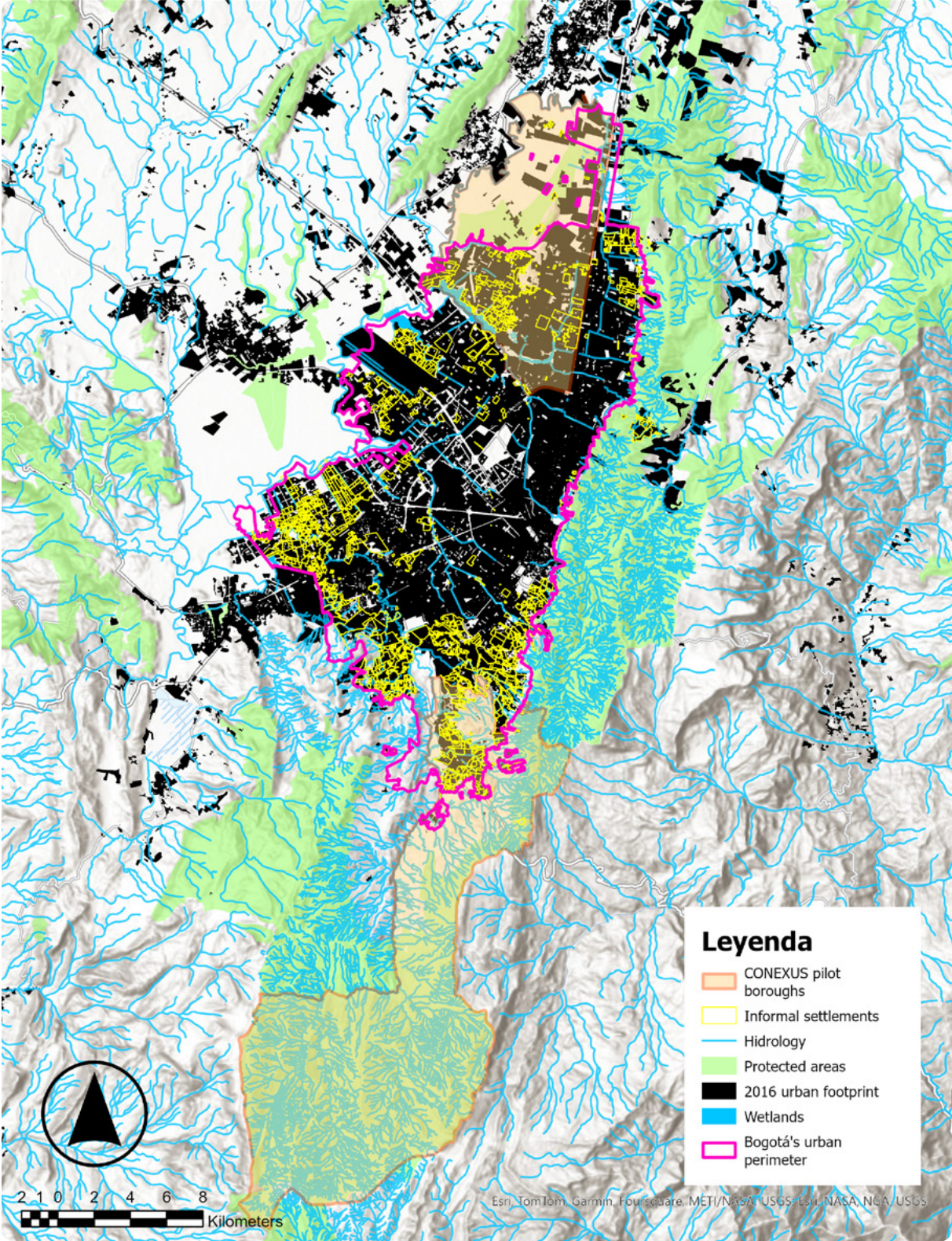
## Nature-Based Solutions to Face Urban Sprawl

**Latin America is the most urbanised region in the world, with almost 80% of the population living in urban agglomerations.<sup>1</sup> Urbanisation has largely occurred through informal processes and resulted in persisting inequalities and socio-ecological challenges.<sup>2</sup> In Bogotá, for example, about 30% of the city is considered informal,<sup>3</sup> and, as in other Latin American cities, most informal settlements are located in peri-urban areas where development is undesirable or restricted, such as steep hills, landslide risk areas, flood risk areas and ecological reserves, which heightens vulnerability conditions for inhabitants and diminishes ecological services directly related to inhabitants' quality of life.<sup>4</sup>**

Current policies in Bogotá are insufficient for controlling urban sprawl and addressing its social and ecological challenges, resulting in declining institutional trust and exacerbating social and environmental inequalities. Few policies approach rural/natural areas next to the urban fringes, which are at risk of being taken by urbanisation. In this context, Nature-based Solutions (NbS) are emerging as a ground-breaking paradigm for co-creating multidimensional transformations, fostering local identity, ecological protection, and social and economic opportunities, while addressing socio-ecological challenges of the urban-rural borders.

The integration of NbS into local initiatives emerged as a promising strategy, aligning micro, meso and macro policy initiatives.<sup>5</sup> Bogotá pilot interventions within the Conexus project (CONEXUS Bogotá Life Lab) identified several NbS strategies in rural borders that could contribute to consolidate these areas and help to find alternatives to uncontrolled urban expansion. These include riparian buffer planting, greening of social facilities, protection of water bodies, rainwater harvesting, soft infrastructure to help agro-tourism and economic livelihoods, and others.<sup>6</sup>

Bogotá's map with protected areas, urban footprint and informal settlements



## Integrating NbS on territorial management instruments in Bogotá

To prevent urban sprawl in environmentally sensitive areas of Bogotá, it's crucial to mainstream NbS into key policy frameworks, emphasising social inclusivity and ecological sustainability. Drawing from the CONEXUS Bogotá Life Lab's governance approach,<sup>7</sup> integrating NbS projects and programmes with the Regional Agreement on Biodiversity and Development, the Bogotá's Land Use Plan (POT), and the Border Pacts (Box 1) can provide a comprehensive strategy to tackle the dual challenges of urban expansion and environmental conservation.

**Box 1:** Key policy instruments for urban-rural borders in Bogotá

**Regional Agreement on Biodiversity and Development of the Bogotá Savanna and Connected Areas:** Instrument that seeks to promote volunteer public-private partnerships, bringing together technical, logistic and financial efforts and initiatives between institutions, companies and organisations to ensure connectivity between urban and rural areas, protect the natural heritage and promote a more competitive and resilient city-region.<sup>8</sup>

**Bogotá's Land Use Plan (POT):** Bogotá's planning instrument defining guidelines for land use, aiming for sustainable, equitable and efficient development of the municipality. The plan guides urban growth in order to promote quality of life, sustainable mobility, heritage protection and economic development, through a dynamic and participatory process with society.<sup>9</sup>

**Border Pacts (Pactos de Borde):** Legal agreements signed between the municipality of Bogotá and informal settlements, with the aim of preventing illegal urbanisation in environmentally sensitive areas. The instrument foresees safeguards for citizen participation and community oversight.<sup>10</sup>

The Regional Agreement should foster public and private financial support on NbS projects to maintain ecological connectivity between urban and rural areas, protecting the natural heritage and promoting community stewardship and resilience. Moreover, implementing NbS projects on rural-urban fringes can be a way forward in the implementation of the Border Pacts. Socially inclusive initiatives like agroecological programs can empower local communities, promoting sustainable agriculture and environmental stewardship while preventing illegal urbanisation. In relation to the POT, the category “transitional zones” (border areas and rural villages) could be explored to provide structured directives on land use and urban expansion, while setting more inclusive regulations that take the current occupations out of their precarious condition of informal settlements.<sup>11</sup>

**Sustainable development calls not only for incorporating nature in cities, but also to protect nature around cities, to improve liveability and enhance ecosystem services.**

A participatory approach involving communities, NGOs, and public institutions is vital in planning and implementing NbS, leveraging each policy instrument’s strengths to address urban sprawl’s root causes effectively. Consequently, strategies recommended for addressing urban sprawl and the urban-rural fringes challenges must focus on adaptive interventions, fostering a vision that addresses social problems at the regional scale and engaging the active participation of multiple actors. By integrating socially inclusive NbS into Bogotá’s policy instruments, the city can balance human development with ecological preservation, creating a sustainable and resilient urban future. This strategy not only addresses the immediate challenges of urban sprawl but also sets a sustainable urban planning precedent. **Projects that seek to improve quality of life at the urban-rural borders while protecting strategic ecosystems in periurban areas supports the effective implementation of territorial policy instruments and, therefore, should be supported and incentivized.**

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## Policy Recommendations

- Sustainable plans based on co-management strategies can help design multifunctional solutions that consider local knowledge and leverage various resources, including financial, technical, and labour force support.
- In view of ecological flows and networks, it is important to establish agreements at a regional level, in order to get concerted actions.
- Identifying possible synergies and innovations in existing planning instruments is a strategy to boost NBS implementation and mainstreaming.
- At the local level, projects and actions that manage to protect strategic ecosystems in periurban areas while improving quality of life should be supported and promoted.
- Establishing specific local commitments is a strategy that can help engage citizenry and develop direct communication channels with local administrations, contributing to raise awareness on the benefits of NbS, generate a sense of ownership and thus, promote an adequate and efficient management of the territory.

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