



POLICY BRIEF 04

Nature-based strategies to improve livability and enhance ecosystems in vulnerable areas



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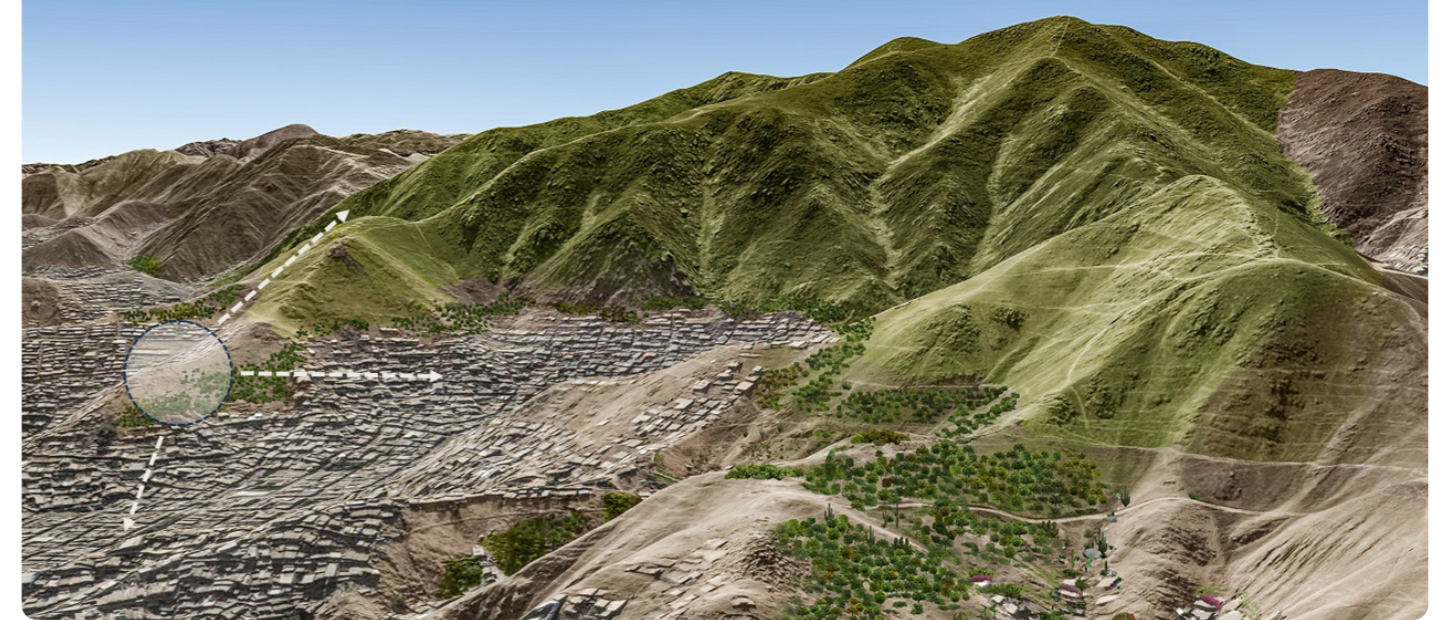
Nature-based strategies to improve livability and enhance ecosystems in vulnerable areas

The innovative approach of Independencia Green Belt, Peru

Many Latin American cities face similar sustainability challenges due to informal urban expansion processes in environmentally vulnerable areas, resulting in increased social and ecological vulnerabilities. This policy brief presents the experience of the Independencia Green Belt in Lima, Peru. It showcases how a Nature-based Solution (NbS) approach to urban planning and ecosystem management can help improve the quality of life of populations in risk areas and vulnerable conditions, while benefiting natural ecosystems.

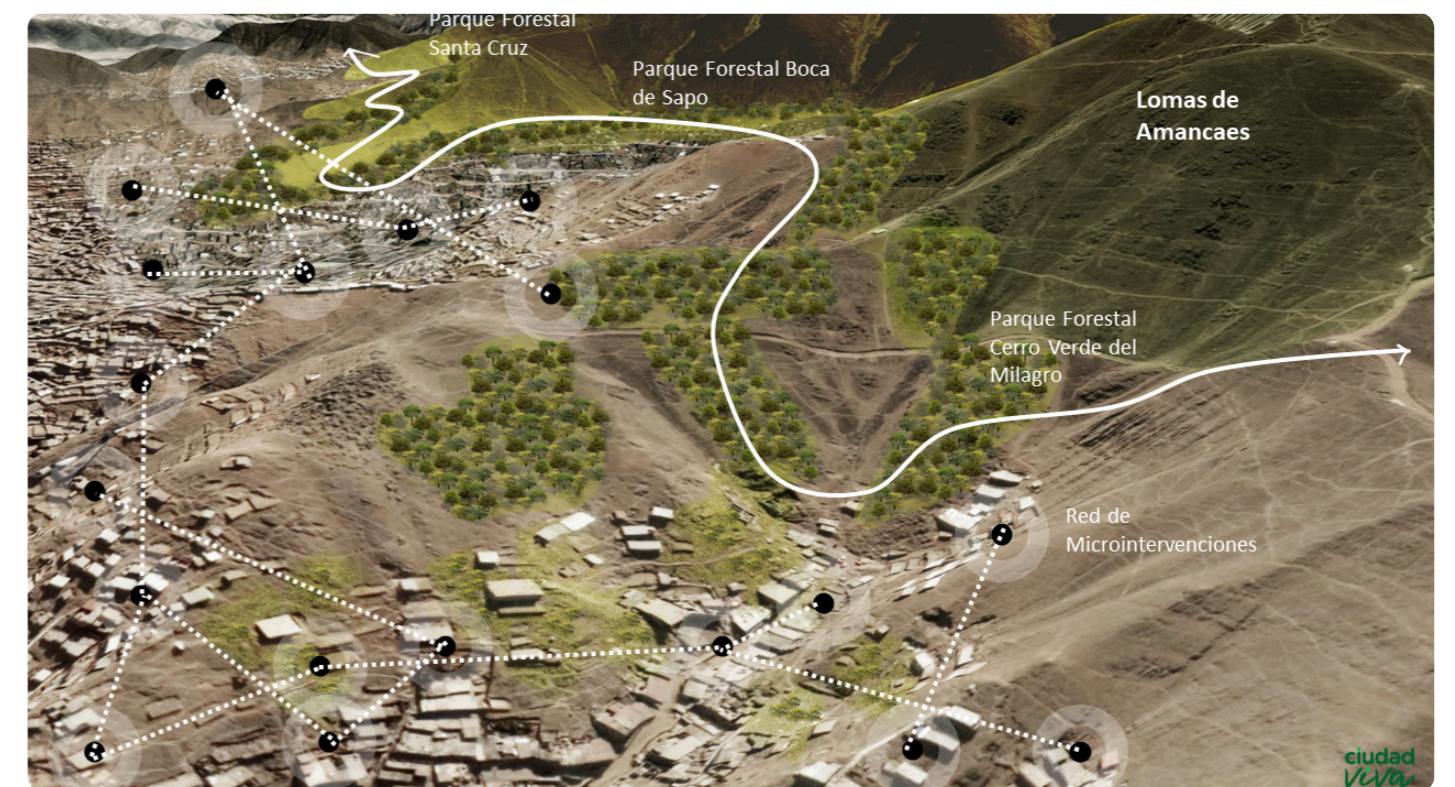
Key Messages

- The Green Belt development process aimed to implement a range of NbS projects in multiple scales along the peri-urban hills of Independencia District, Lima, Peru. It built on co-creation with local communities, and was strengthened considerably by the involvement of NGOs and local leaders.
- Local actors are the ones best situated to negotiate and manage challenges, especially when great leadership, mobilisation and articulation capacities are present.
- It is important to consider how the need for improvements in basic infrastructure (housing, accessibility, water supply and retaining walls) may affect the specific NbS project and how to anticipate possible adaptations.



A Plan that links the urban with nature

The Integral Plan for the Independencia Green Belt is an instrument that combines urban and environmental planning, incorporating elements of both the Concerted Local Development Plan (PDLC) and the Regional Conservation Lomas de Lima Area (ACR Lomas de Lima), focusing on the development of co-creation processes to NbS creation. Moreover, it takes advantage of lessons learned from forest parks and micro scale interventions already implemented in the Green Belt, proposing an effective process to strengthen and improve the impact on the area. In a context of climate and biodiversity emergency, multiple ecosystem services and benefits are linked to its actions.



IMAGES: Ciudad Viva



Portfolio of projects and initiatives to promote the Green Belt

The Green Belt was defined for Independencia as an area that should ensure the maintenance of a permanent vegetated strip of land without urban occupation, that encompasses nature conservation area (part of the ACR Lomas de Lima), small agriculture initiatives, forest parks and the coastal desert, which can be used for recreation and leisure, as well as motivate new social entrepreneurship.

To enable the implementation of the Green Belt, a portfolio of potential NbS projects at micro scale (household and neighbourhood) and meso scale (forest parks) was prepared, based on a prioritisation made with the support of the Municipality and local community (proximal neighbourhood) of the immediate surroundings. Five areas were selected as having the greatest potential for immediate intervention. The most relevant criteria for their selection were community interest and high level of social organisation, and the presence of an installed irrigation system.



IMAGE: Ciudad Viva

Pre-defined NbS intervention typologies were then tested in these areas, including organic vegetable gardens known as *biohuertos*, forestation, belvederes, xerophyte microforests, considering the following criteria:

- Ease of installation in the short term
- Low installation and maintenance costs
- Strengthening of pre-existing actions
- Attention to the wishes of the neighbours involved
- Ease of replication by the community

The projects' costs were estimated and private donors were invited to provide small amounts of funding. Budgeting was conducted using a financing model based on carbon and water footprints offsets to attract private investment.

Three companies were mobilised and an intervention was made in the Santa Cruz forest park, an area of approximately 1 hectare where 0.4 hectare had already 200 trees planted. A large group of volunteers was mobilised for the installation in mid-2023.



IMAGE: Ciudad Viva

Lessons learned, opportunities and recommendations

Although strategies were created as an innovative model for financing NbS projects, the Integral Plan was not approved by municipal ordinance, justified by the fact that the Municipality does not have the full budget for its implementation. This shows the need to 1. A stronger political support for the Plan, through the mayor and the district Council; 2. The need to outline a financial strategy for the entire plan, ensuring more robust predictability of its implementation and continuity. This means articulating and diversifying sources of financing, mobilising funds from the national, regional and local governments, international technical cooperation, private companies and the communities.

The presence of NGOs throughout the development process of the Green Belt, since 2015, together with local leaders organised in Forestry Parks Committees, contributed to

the continuity of the proposal despite change in local government political leadership and technical teams. The participation of the communities living in the areas surrounding the Green Belt has been a fundamental part of the process. Although there are disagreements and conflicting interests among different citizen groups, local actors are the ones best suited to negotiate and manage challenges such as the need to maintain and expand forested areas, protect ecosystems and control new informal urban expansion, especially when effective local leadership is present.

During the Santa Cruz forest project intervention, it became clear that it is important to consider, especially in areas of risk or informal occupations, how the need for improvements in basic infrastructure, such as retaining walls and paths, may affect the specific NbS project and what considerations should be made to try to anticipate possible adaptations.



IMAGES: Unsplash / Dan Gold

Policy Recommendations

- For greater impact and lasting results, governance must be established as a transversal strategy, maintaining a constant articulation between the municipality, the community and the actors involved in the actions, before, during and after the interventions.
- Combining innovative formats of private and community financing with more traditional forms such as funds from national and local governments and the international technical cooperation can provide a more robust financial strategy to enable the implementation of NbS strategies and plans.
- When seeking to attract private investment, establishing a customised finance model for each stakeholder, with objective information about roles and benefits, can help increase companies' interest in getting involved.
- The production and recording of evidence is key for many processes - strategic communication, strengthening potential partnerships, ensuring the continuity of initiatives. Additionally, cooperation with other actors, such as technical partners from non-governmental organisations, can also contribute to such continuity in the face of government changes.

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