

TUNARI Program

PROTECTING THE ECOSYSTEM FUNCTIONS
OF THE TUNARI NATIONAL PARK



www.armoniabolivia.org



Tunari National Park (TNP) stands as one of Bolivia's most vital protected areas—both for nature and for people. It plays a critical role in safeguarding the water cycle and ensuring a steady water supply for the millions who live in the Cochabamba Metropolitan Area. The park is also a haven of biodiversity, home to many species found nowhere else on Earth. Long before its official designation, these mountains were inhabited and cared for by Quechua farming communities, who continue to live within the park and maintain deep cultural ties to the land.



Ecosystem functions



The native forest patches that line the many watersheds along this mountain slope are vital strongholds of biodiversity—sustaining 84% of the park's bird species. Sadly, these forests are now severely **degraded and fragmented**, putting at risk the essential ecological functions they provide. These include regulating water flow, preventing soil erosion, and maintaining the delicate balance that supports both wildlife and human communities.



Water regulation



Soil conservation



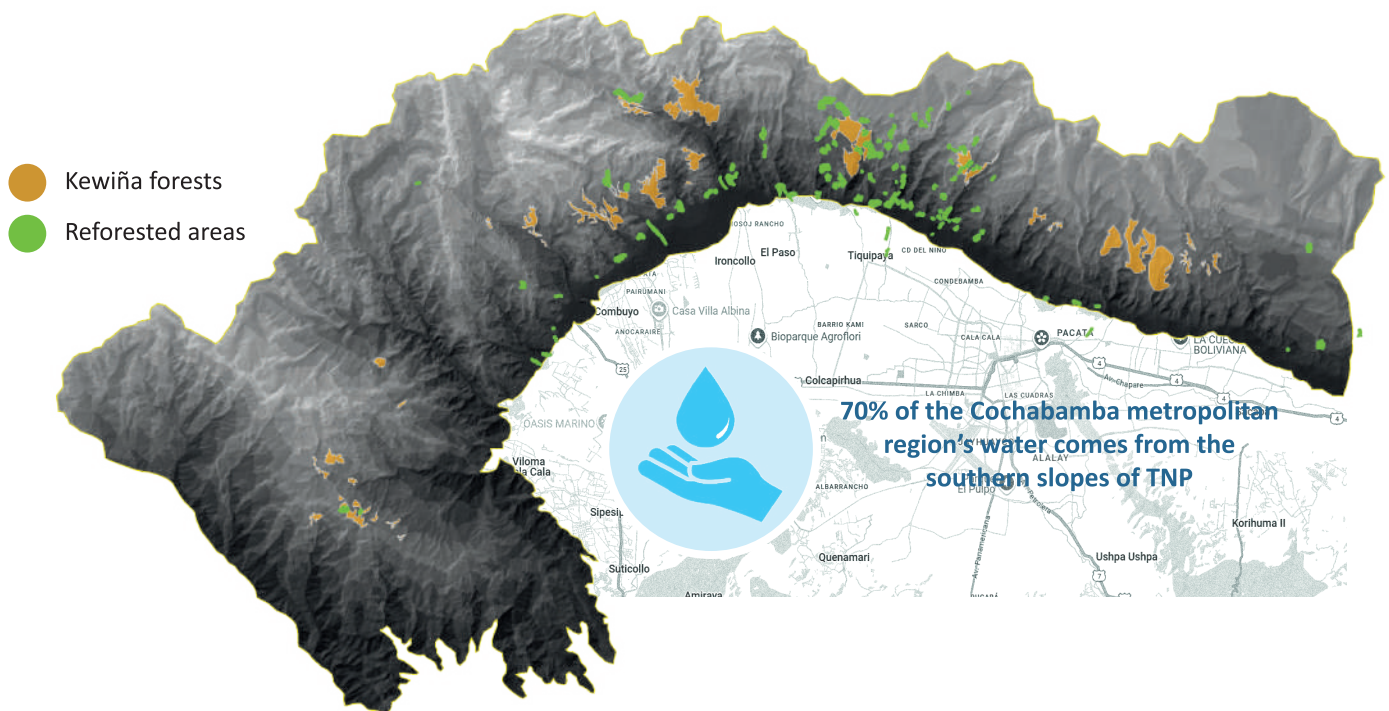
Prevention of environmental disasters



RESTORING HIGH ANDEAN NATIVE FORESTS

Since 2020, Armonía has led a forest restoration programme along the southern slope of Tunari National Park, working hand in hand with local communities to safeguard and revive vital ecosystem services. These communities are the long-standing guardians of the native forests, deeply connected to the land through generations of care and tradition.

Supporting their sustainable development is not just part of the programme—it's at its heart. Together, we are restoring forests and strengthening the people who protect them.



Impacts 2020 -2025

1,809.02	hectares of native forest protected
437.31	hectares reforested
1,000,000	native tree seedlings planted
+10,000	people involved, including community members and volunteers



PROTECTING KEY BIODIVERSITY



Kewiña

Polylepis subtusalbida

Vulnerable (VU)



Lloque

Kageneckia lanceolata

Vulnerable (VU)

Our restoration efforts focus on bringing back native trees that are not only unique to Bolivia but also at risk of disappearing. At the heart of this work is the Kewiña (*Polylepis subtusalbida*), a tree found almost exclusively in this mountain range and threatened with extinction. Alongside it grows the Lloque (*Kageneckia lanceolata*), another threatened species. By restoring these emblematic trees, we are helping to revive the rich ecological heritage of Bolivia's high Andes.

12 native species cultivated in nurseries, including

2 species listed as endangered

Countless species find refuge in the native forests we strive to protect and restore. Among them is the Cochabamba Mountain-Finch, a bird found nowhere else in the world, whose main population inhabits the southern slopes of Tunari National Park. Some species, like the Giant Conebill and the Tawny Tit-Spinetail, are intimately tied to the unique Kewiña forests and cannot survive elsewhere. These ecosystems also shelter highly threatened species with tiny remaining populations, including the elusive Bolivian chinchilla rat (*Abrocoma boliviensis*) and the endangered Cochabamba Water Frog (*Telmatobius hintoni*). Their survival depends on the future of these forests.



Cochabamba Mountain-Finch

Poospiza garleppi

Endangered (EN)



Giant Conebill

Cinorostum binghami

Near Threatened (NT)



Tawny Tit-Spinetail

Leptasthenura yanacensis

Near Threatened (NT)

CONSERVING NATIVE FORESTS WITH A COMMUNITY-BASED APPROACH

On the southern slope of Tunari National Park, local communities possess valuable collective knowledge and practices for water resource management. They are guardians of the land, but they are also among the most vulnerable to the impacts of climate change and ecosystem degradation. Recognizing their vital role, since 2020, 37 communities committed to protecting their water sources and forests have joined our native forest restoration program. Their leadership is driving significant grassroots change.

A community-based approach lies at the heart of our work. We strengthen local capacity for watershed management by co-developing community projects and supporting strategic planning. Improving irrigation systems is part of this effort—not only to secure water for crops during the dry season, but also to ensure water is available when it's most urgently needed: during the wildfire seasons. In partnership with the NGO Agrecol, we also promote agricultural diversification and restore degraded soils through the implementation of agroforestry systems. These actions help build CLIMATE RESILIENCE while empowering communities as key allies in the protection of both water and forests.

Impacts 2020 -2025

- 37** communities benefited
- 31** families benefited with agroforestry systems
- 15.2** kilometers of irrigation piping installed
- 8** water reservoirs for irrigation and fire response
- +10M** liters of water captured in reservoirs



FORMING COMMUNITY FIRE BRIGADES

Wildfires are the most serious threat to native forests and biodiversity along the southern slope of Tunari National Park. Over the past decade, nearly 350 wildfire events have destroyed more than 9,000 hectares of grasslands, forests, and shrublands. In response, local communities—supported by Armonía—have stepped up as first responders, playing a central role in wildfire prevention and control.

Since 2022, we have been training and equipping community fire brigades, with seven brigades now active and fully established across three of the six municipalities on the park's southern slope. These brigades are integrated into the Emergency Operations Committee (COE), the municipal and departmental system for emergency response. While this marks a significant achievement, more work remains: we must continue consolidating brigades in the remaining municipalities to ensure full coverage and protection of the entire southern slope.

Impacts 2020 -2025

91 community firefighters trained

27 ♀ **64** ♂

7 community fire brigades formed

3 of 6 municipalities on the southern slope involved

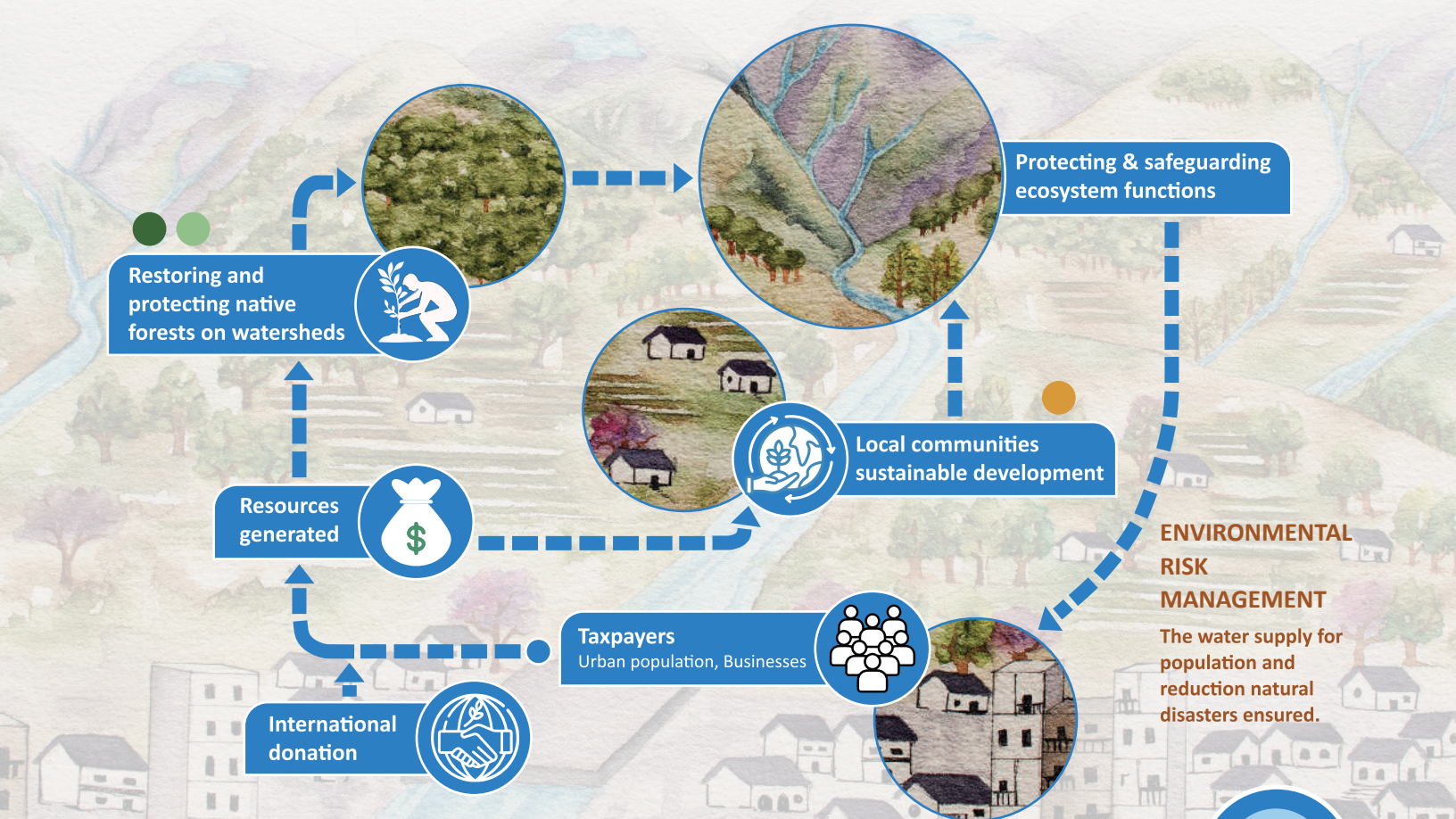


TOWARD AN ENVIRONMENTAL AND SOCIAL FINANCIAL SUSTAINABILITY MECHANISM

Over the past year, our program has taken a significant step forward. Since 2024, we've been developing a strategy to establish an environmental and social financial sustainability mechanism—designed to safeguard the vital ecosystem functions of the southern slope of Tunari National Park. This forward-looking initiative places **environmental risk management** at its core, with a focus on prevention, rapid response, and long-term mitigation.

The mechanism will channel resources where they are most needed, and we have identified three key priorities for its funding:

- **Native forest restoration and watershed protection**
- **Operational strengthening of the protected area**
- **Financial support for sustainable development projects in local communities**





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NATURE & FORESTS



Asociación Civil Armonía is a Bolivian civil society organisation dedicated to preventing the extinction of bird species in Bolivia. To achieve this mission, we focus our efforts on the country's most important sites for its most threatened birds, tailoring our approach to local conditions and the specific threats facing each species and habitat.

Our work is as diverse as the landscapes we protect. We support the management of national and subnational protected areas that harbour Critically Endangered and Endangered species, and we actively manage our own protected areas—the Barba Azul Nature Reserve and the Laney Rickman Reserve—which serve as critical refuges for unique wildlife and as models for conservation management. Through the Conserva Aves initiative, we also promote the creation of new protected areas in key biodiversity sites. In Omereque, we support the Red-fronted Macaw Reserve, a protected area managed by the local community. Armonía works hand in hand with Indigenous and rural communities, implementing sustainable development initiatives such as beekeeping, agroforestry, and sustainable forest plantation management. We also contribute to conservation science and planning at the national level—for example, by identifying and updating Bolivia's Key Biodiversity Areas. And through ongoing investment in environmental education, we help foster a national culture of conservation—so that future generations can continue to thrive alongside Bolivia's unique wildlife.

Armonía is the Bolivian partner of:



If your organization, institution, or company is interested in supporting this program, please contact:

Asociación Civil Armonía

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