

GUATEMALA

A Complex, Megadiverse, and Vulnerable Country

C ince its historical origins, Guatemala has Salways been considered a place where life rejoices and nature manifests in its entire splendor. Its privileged geographical location, as bridge between the Americas, its tropical climate, and varied geography makes it one of the most biodiverse territories in the world. Guatemala is a megadiverse country, but also one of the world's most vulnerable countries in the world to the adverse effects of climate change. These are aggravated by the conditions of poverty in which many of its inhabitants live. The link between the well-being of the population and the state of nature is close: much of the current forest cover exists today because of the sustainable management and care of multiple stakeholders, with indigenous and local communities playing a key role with a vision and culture that integrates care for nature and human well-being

Quetzal, the national bird of Guatemala © Herson Solis/ TNC Photo Contest 2021; **COVER PAGE:** Aerial view of the mountains and lake Atitlán and surrounding villages © Estuardo Torres/TNC;



$108,889 \text{ km}^2$

territorial extension

14 ecoregions

66 ecosystems

360 microclimates

16.000 different species of plants, animals and insects

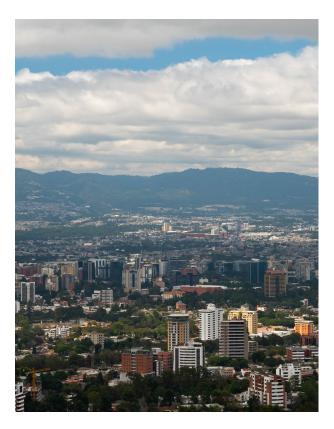
+13%

of the species are endemic, it is the Central American country with the most endemic species

+1/3 of the Guatemalan territory (about 39,000 km²) is still covered by forests

25 different ethnolinguistic groups

> 58.8%urban population



Challenges

The country faces enormous socio-environmental challenges to conserve nature and generate lasting benefits for the population. Currently, more than 55% of the population lives in poverty (World Bank 2024).

More than 50% of Guatemala's forests have been lost in the last 50 years and its enormous biological diversity continues to decline at alarming rates as monocultures, intensive agricultural practices and real estate-industrial development expand. More than 96% of the country's rivers and freshwater bodies are severely polluted and aquifers are being overexploited. Soil erosion rates are alarming.

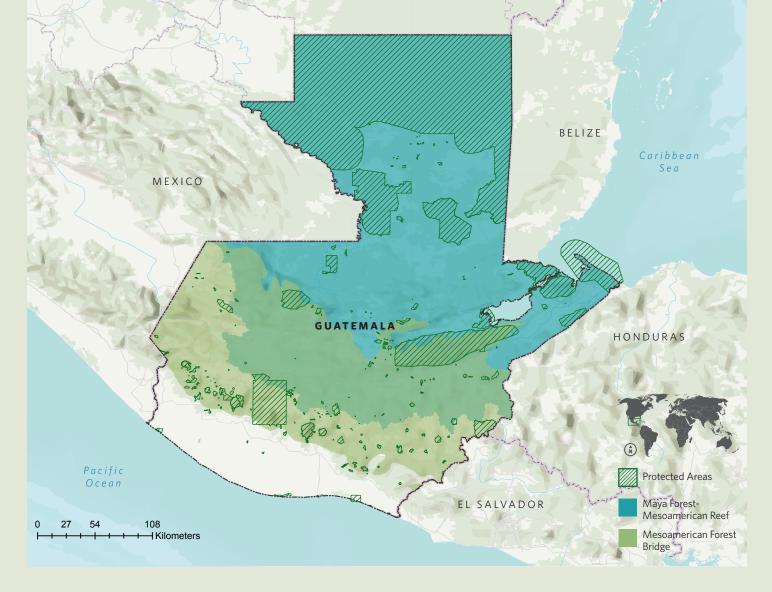
Regions

Guatemala is a small country in terms of territory, but with very diverse and relevant ecosystem representations for the region. Due to its biological, economic and socio-cultural characteristics, The Nature Conservancy (TNC) has identified two priority areas of work known as iconic sites in Guatemala: the Mesoamerican Forest Bridge and the Maya Forest.





TOP: Aerial view of the mountains, Lake Atitlán, and some surrounding villages. © TNC; Aerial View of Puerto Arturo Lagoon located in the Maya Forest, in the municipality of San Andrés, Petén © TNC; **TOP-LEFT:** Guatemala City © Jason Houston;



Maya Forest-Mesoamerican Reef

The Guatemalan Maya Forest is located within the largest forest block in all of Mesoamerica and the second largest tropical forest in the Americas, extending into Mexico and Belize. This landscape includes the 21,000 km² Maya Biosphere Reserve (MBR), the largest natural protected area in the country, which in turn represents about 20% of the national territory and more than 60% of the surface of all the country's declared protected areas. It is home to a large number of endemic, iconic, and endangered species, including the five American big cats: margay, jaguar, puma, jaguarundi, and ocelot, as well as other key species, such as the tapir, and numerous bird species, including the scarlet macaw, red-breasted hawk, and crested eagle.

Community forest management in the MBR's forest concessions has been a global example of sustainable forest management and the generation of benefits for local communities. However, the dynamics of forest cover have been very different in some protected areas, particularly in the southern Petén region, where industrial monocultures (mainly palm oil), extensive cattle ranching, activities related to the new human settlements, illegal logging and forest fires have destroyed the forest landscape.

Mesoamerican Forest Bridge

This territory encompasses a set of key ecosystems located in five countries in the region, Mexico, Guatemala, El Salvador, Honduras and part of Nicaragua, and plays an important role in geological, geographic and evolutionary processes by connecting South American and North American forests. This forest bridge is the temporary home of a great number of migratory species, a factor that increases its relevance for the conservation and connectivity of biological diversity. Additionally, it is key to environmental services essential for human well-being and the maintenance of the region's economic activities.

The country's megadiversity also includes its people and its wonderful cultural heritage. This particular area is home to 22 ethnic groups of Mayan origin, among which the K'iche', Q'eqchi', Kaqchikel and Mam ethnic groups stand out. Each of them contributes to the diversity with different artistic, religious, culinary, linguistic and territorial management manifestations. These communities have strong roots in their territory, with ancestral effective community management of forests and protection of water sources, as well as the cultural values associated with them. The presence and rootedness of these communities is a great opportunity to collaborate and achieve important results in the conservation of ecosystems.

Our Work

TNC began working in Guatemala in the mid-1980s. The organization has over 30 years of experience working for conservation and sustainable development in the country. During that time, in close collaboration with a network of local partners, it has supported the conservation of the remaining forests in Guatemala and contributed to the restoration of degraded landscapes. This includes the creation of innovative financial and governance mechanisms, technical assistance to improve regulatory frameworks, and the promotion of sustainable management models for natural goods and services.

TNC Guatemala continues searching for investments and new opportunities to take solutions to scale, building more partnerships with multiple stakeholders to expand activities that maintain the country's natural wealth as the basis of economic and social development for all.



- Our Vision -

TNC Guatemala has contributed to find a replicable development model compatible with nature conservation through 2030. This model is supported by the best science, modern public policies, and durable financial mechanisms that ensure that nature's health and human well-being go hand in hand.

> **TOP:** Farmer on her small family farm with agroforestry systems © Jason Houston; San Pedro La Laguna, Lake Atitlán © Gabriel Sandi / TNC Photo Contest 2019





LEFT: Crops in a nursery in Santa Clara La Laguna, Atitlán © TNC; BOTTOM: Jaguar (Panthera onca) © TNC Photography Contest 2020;

WORK STRATEGIES

Biodiversity Conservation, freshwater and forest remnants

To revert the climate change crisis and the rapid loss of biodiversity, we must protect and sustainably manage the lands and freshwater resources. Our work includes:

- > Monitoring the development, planning, and management of various protected areas and management categories.
- Reforestation with native-species and protection of water-generating forests in private reserves, municipal lands, and communal forests, with tangible benefits for people and nature.
- Promoting private investment projects and leveraging conservation actions in basins that provide water to Guatemala's Metropolitan Region.
- Facilitating the integration of Indigenous knowledge to improve forests and water management in Guatemala.
- Supporting grassroots organizations to facilitate access to state forest incentives managed by the National Forest Institute and improve the management of communal forest concessions in the multiple-use area of the Maya Biosphere Reserve.
- Contributing to resilience and decreasing risks through the restoration of forest landscapes.



Nature-based Solutions

To help reduce the greenhouse gas emissions needed to stabilize our climate, TNC scientists and partners have researched solutions to meet the most urgent climate goals. Our actions include:

- Landscape restoration on agricultural lands through livestock and regenerative agriculture practices that contribute to forest landscape restoration.
- Measuring carbon sequestration on cattle ranches in the Selva Maya to provide information for the development of carbon market projects.

Sustainable livelihoods and resilient landscapes

As we promote the protection of nature, we focus on the coexistence of communities with their environment and socioeconomic well-being. Our actions include:

- Supporting communities, organizations, and rural and Indigenous leaders at the forefront of conservation under the Inclusive Conservation axis that elevates efforts to manage forests, water, and other natural resources.
- Improving place-based sustainable economic opportunities, such as monitoring and support for community tourism initiatives and no-timber products value chains.





TOP: Crops in a nursery in Santa Clara La Laguna, Atitlán © TNC; One of the ranchers implementing improved practices on his farm located in the Maya Forest © TNC; Cattle resting on a farm with improved livestock practices in the Maya Forest, Petén © TNC; **RIGHT:** Puerto Arturo Lagoon in the northern Maya Forest © TNC;









LEFT: Municipal Committee in Baquiax, Totonicapán © TNC; **BOTTOM:** Resident of Santa Clara La Laguna, Atitlán © TNC;



Partnerships and institutional support for partners and government authorities

Public policy is vital to drive change and take solutions to scale: It can create incentives and lay the foundation for complex environmental problems. At TNC, we provide the science, tools, and partnerships that influence decision-making to achieve large-scale protection through finance mechanisms, science, and improved public policies.

- Agreements with Ministries, other public institutions, and the academic sector.
- **Technical support** to municipalities and communities.
- Studies that promote changes to regulations and public policy (i.e., incorporating environmental management into water tariffs).
- Institutional strengthening of non-governmental organizations to access forestry incentives and other economic incentives.

Recent Achievements

Design

of the Fund for the Conservation and Restoration of the Petén Forests (FCRP), as a mixed mechanism to mobilize at least US\$80 million

16 unity organ

community organizations in the Maya Forest that manage community forests and forest concessions have strengthened their institutional capacity in territorial and environmental management and implement community-led conservation projects based on a process of co-creation and cooperation agreements

17,500 people benefit from better management of community forests in the Guatemalan Highlands and the Selva Maya

Trinational

Strategic Plan for Conservation of Biodiversity and Freshwater of the Iconic Landscape of the Selva Maya with 6,000 km of rivers and 136,000 hectares of lakes prioritized for intervention

Conservation projects with at least 6 grassroots organizations that manage forest concessions located in the Multiple Use Zone of the Mayan Biosphere Reserve (MBR) impacting more than

617,000 ha

Plan to convert agroforestry systems with local species and regenerative livestock based on carbon market projects, covering 420 ha Update of management plans for 4 forested areas in the highlands to conserve biodiversity and promote the sustainable use of natural resources on

4,670 ha where ecotourism, sustainable agriculture and forestry will be implemented

2030 -2032 Guatemala BU Goals



1 million hectares under improved management (national parks, municipal reserves and private protected areas).



424,000 hectares with improved management under the community forest conservation model through concessions in the Selva Maya.



250,000 hectares of agricultural and livestock landscapes have adopted low-emission or regenerative practices that promote biodiversity restoration.



At least 150,000 hectares of dry and humid forests in Guatemala's central and western highlands (PFM) under improved management.

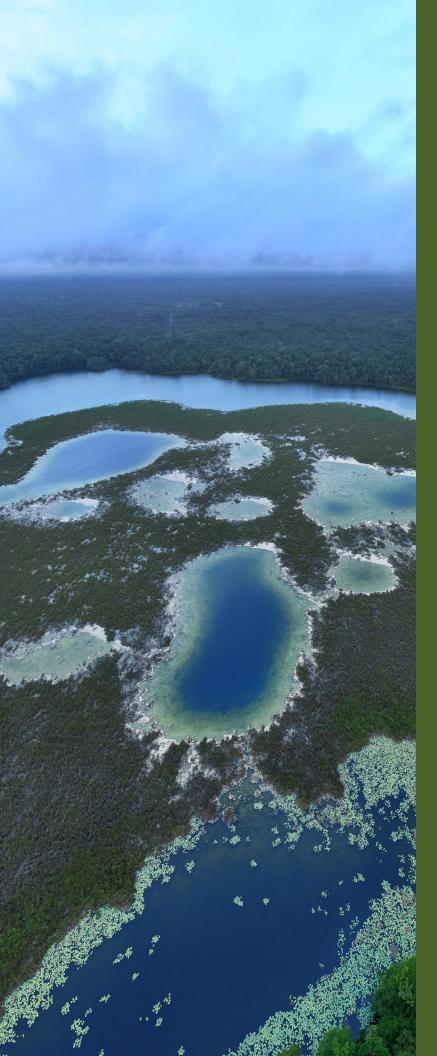


At least 35,000 people benefit from improved management of protected areas, community forests and forest concessions in the Maya Biosphere Reserve.



150 kilometers of riparian corridors have been restored in the Selva Maya region.







Why The Nature Conservancy

SCIENCE-BASED CONSERVATION

With the support of the Conservancy's global team, science guides informed decision-making at multiple scales, and in TNC Guatemala, the conservation team ensures that field projects follow cutting-edge science.

LOCAL TRUST

TNC Guatemala has cultivated close relationships with local and national communities and organizations

COLLABORATIVE TRANSFORMATION

TNC convenes diverse strategic stakeholders with the goal of establishing collaborative platforms for collaboration to promote systemic solutions in favor of nature conservation and social and economic sustainability.

SUSTAINABLE FINANCE

The Conservancy is working on different initiatives for sound financial mechanisms to achieve the highest possible investment in nature-based solutions.



www.nature.org/guatemala

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The Nature Conservancy Guatemala

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