



UNBL



WCMC



Why Spatial Data?

The use of spatial data can be transformative in the face of climate change, biodiversity loss, and development challenges. This is because it enables national governments, civil society organizations, Indigenous Peoples and local communities and researchers to make data-driven decisions to prioritize action and monitor progress towards their goals more accurately. Many countries request support when accessing high-quality spatial data so they can more meaningfully incorporate it into national planning, implementation, and monitoring. We created the [UN Biodiversity Lab \(UNBL\)](#) to meet this need.

[Learn more about UN Biodiversity Lab](#) 

[Watch the UNBL trailer](#) 

WHY UNBL?

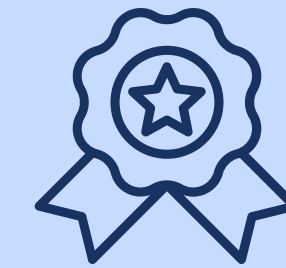
UNBL supports countries to use spatial data and analytical tools so that they can gain insight and better deliver on the Convention on Biological Diversity's (CBD) Kunming-Montreal Global Biodiversity Framework (GBF) and the 2030 Agenda for Sustainable Development



Democratize access to spatial data and analytic tools as a digital public good



Support decision-makers to leverage spatial data for insight, priority-setting, and implementation at the national level



Empower stakeholders to use spatial data for nationally-led monitoring and reporting



1,911

Registered users in 2022

141

Countries where users
have accessed UNBL

111,000+

Platform views in 2022

400+

Global spatial data layers

160

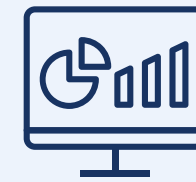
UNBL workspaces that enable
non-commercial users to incorporate
national data alongside global data

The UNBL platform has a broad range of features developed to facilitate users' needs



Rich Data

Find current and historic spatial data on nature, ecosystem services, climate change, and sustainable development with easy-to-use filters and keyword searches



Data visualization

Visualize global data to create easy-to-understand maps, unlocking the power of data to generate insights for decision-making



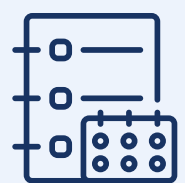
Dynamic metrics

The platform provides automatic summaries of biodiversity trends and environmental change at the national and sub-national levels



Secure workspaces

Use a UNBL secure workspace to connect to existing data repositories, upload data layers, and calculate dynamic metrics for specific places



Metadata

Access clear source information and other metadata for data confidence and quality assurance



Download and calculate

Download data for further analyses in desktop GIS software



Map downloads

Create maps for use in communication products, reports, and peer-reviewed publications



ELSA Tool

Create national spatial plans based on priorities for nature, climate, and sustainable development using the ELSA Tool (proof-of-concept currently available for Colombia, Costa Rica, and South Africa)

A map of Costa Rica with various colored overlays representing land use data. The map includes labels for San Carlos, Indio Maiz Biological Reserve, Liberia, Puntarenas, San Isidro de El General, Parque Internacional La Amistad, Buenos Aires, Limón, and Bocas Town. The word 'COSTA RICA' is also visible in the center of the map.

Explore how users have applied the UNBL in their work

The following pages provide a sample of current and past uses of the UNBL platform.

They show how the platform's easy-to-use interface and special features make it ideal for a wide variety of applications by national governments, UN agencies, civil society organizations, Indigenous Peoples, local communities and researchers.

Get an overview of environmental trends without GIS expertise

What is the state of biodiversity and human pressure in my area of interest?

Understand ICCAs' biodiversity contributions

USER TYPE | UN AGENCY & INDIGENOUS PEOPLES AND LOCAL COMMUNITIES



RICH DATA



DATA VISUALIZATION



DYNAMIC METRICS

The [SGP/ICCA GSI](#) (Global Support Initiative to territories and areas conserved by Indigenous Peoples and local communities, delivered by UNDP's Small Grants Programme) have used UNBL to visualize the prevalence of biodiversity in and around areas conserved by Indigenous Peoples and local communities (ICCAs) in Jordan.



Identify priority areas for intervention

Where should future programs, policies, or projects be focused?



Spatial prioritization

USER TYPE | NATIONAL GOVERNMENT



SECURE WORKSPACES



ELSA TOOL

[Costa Rica](#) has used systematic conservation planning to identify its [Essential Life Support Areas](#) (ELSAs), where action to protect, manage, and restore nature can best contribute to national priorities for nature and climate. The new proof-of-concept ELSA Tool in UNBL workspaces enables users to apply spatial prioritization to support action on Target 1 of the Global Biodiversity Framework (initially available for Costa Rica, Colombia, and South Africa).

Scenario planning

USER TYPE | NGO



SECURE WORKSPACES



DYNAMIC METRICS



DATA VISUALIZATION

In the Western Balkans, IUCN (International Union for Conservation of Nature) has used UNBL's 'secure workspace' feature to upload and integrate their own spatial data layers, allowing them to visualize and evaluate 'business as usual' scenarios against Forest Landscape Restoration intervention scenarios.

Monitor and evaluate the state of nature, as well as the impacts of activities or interventions

What are the effects of intervention approaches currently in place?



Monitor and enhance forest management

USER TYPE | NATIONAL GOVERNMENT



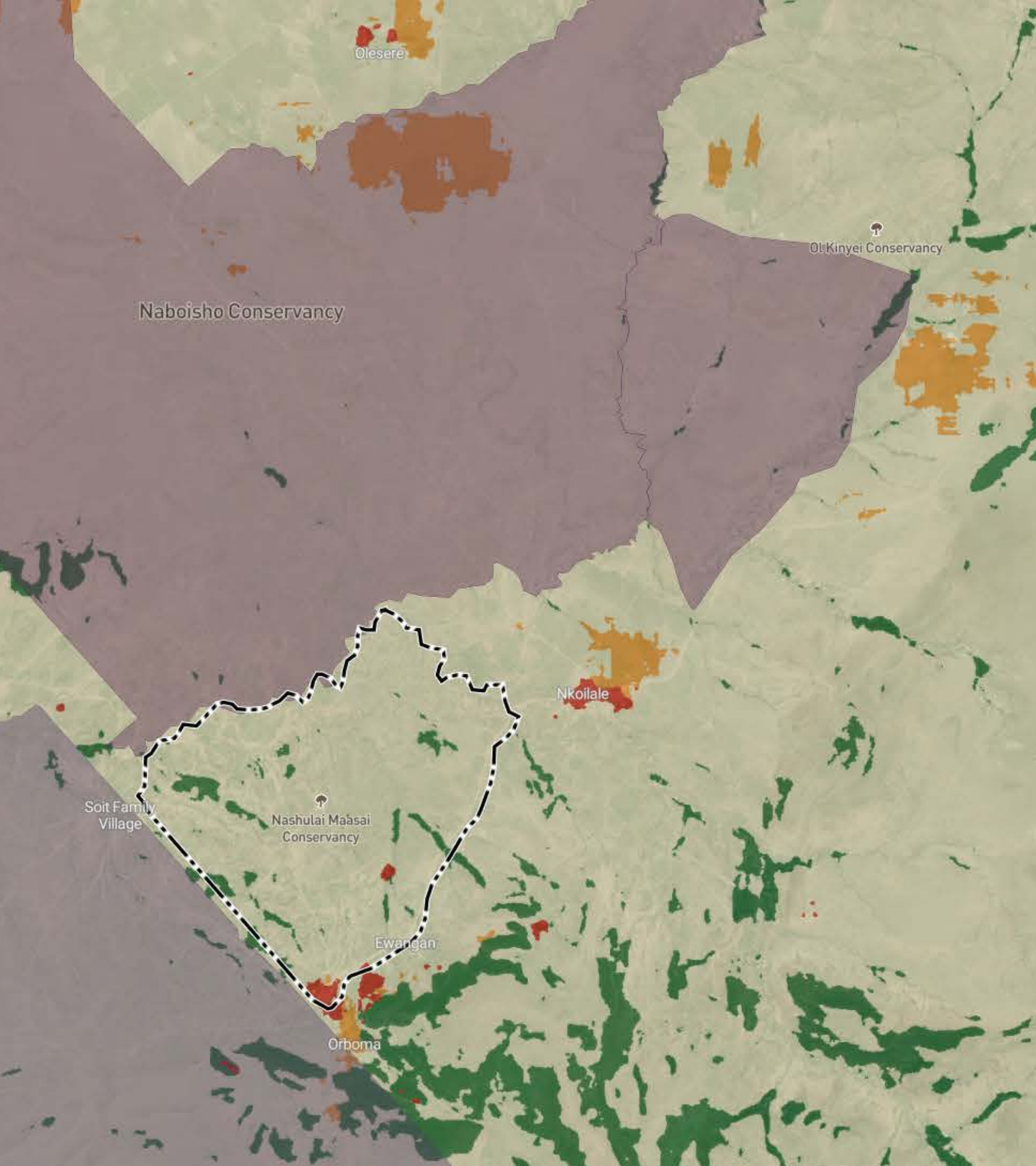
Haiti has relied on UNBL to access existing spatial data to monitor forest management and strengthen government decisions to make Haiti's forest policy more effective. UNBL helps Haiti make decisions on where restoration efforts should be intensified, in common agreement with institutions working in this sector.

Set performance indicators

USER TYPE | NATIONAL GOVERNMENT



The range of globally accepted datasets and indices available on UNBL have allowed practitioners in [Uganda](#) to set performance indicators for key sectors. They have also helped practitioners to select quantitative performance measures that can be used for interventions (e.g., irrigation policy, infrastructural budgeting, disaster risk proofing).



Manage environmental assets and Collaborate

How can we ensure that all stakeholders can collaborate and have equitable involvement in area management?

Equitable management

USER TYPE | NGO & INDIGENOUS PEOPLES AND LOCAL COMMUNITIES

 **SECURE WORKSPACES**  **DYNAMIC METRICS**  **DATA VISUALIZATION**

Use of the UNBL workspace has enabled [El Salvador's PRISMA Foundation](#) (Salvadoran Research Program on Development and Environment) to find more equitable management approaches, balancing the needs of Indigenous Peoples with environmental considerations within Protected Areas. Their UNBL workspace enables researchers and community members to collaborate on the project, even when they have little or no existing knowledge of Geographic Information Systems (GIS).

Report

How can my team access accurate data to report on biodiversity?

Rio Convention reporting

USER TYPE | NATIONAL GOVERNMENT



RICH DATA



DATA VISUALIZATION

In Uganda, practitioners expect their use of UNBL to result in long-term improvements to reporting for Rio Conventions, including CBD, the UN Framework Convention on Climate Change (UNFCCC), and UN Convention to Combat Desertification (UNCCD). This is because Uganda has already used UNBL to guide its Environmental and Social Impact Assessments, informing the allocation of financing for protection, restoration, and management of ecosystems.



Reporting on biodiversity agreements

USER TYPE | NATIONAL GOVERNMENT



DATA VISUALIZATION



DYNAMIC METRICS



SECURE WORKSPACES

UNBL played a key role in supporting an 81% increase in the use of spatial data in official national reports on biodiversity. In the last report, 55 nations created at least one map using UNBL support. Thirteen of these nations relied on the UNBL to produce 70 percent or more of the maps they included in their 6NR. New features coming in 2023 will support future reporting under the new Global Biodiversity Framework.

Download best of class global data layers to calculate crucial environmental information for national needs

What insights can be generated through further analysis of data available within UNBL?

Carbon stocks

USER TYPE | NATIONAL GOVERNMENT RESEARCH INSTITUTION



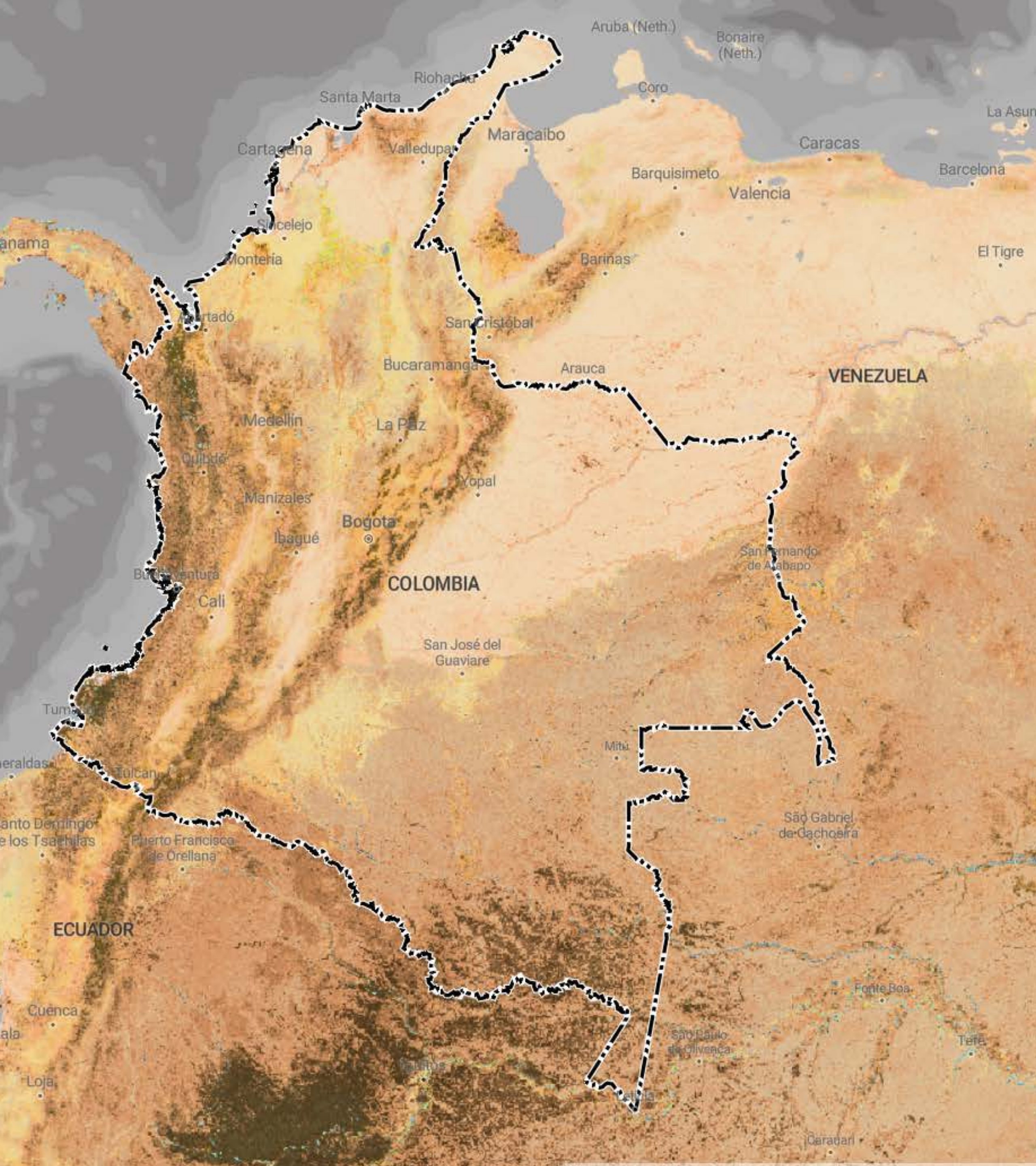
RICH DATA



DOWNLOAD AND CALCULATE

Colombia has been using UNBL to access best-of-class global data for a PEER-USAID (Partnerships for Enhanced Engagement in Research – US Agency for International Development) project to estimate total carbon stocks in dry tropical forests areas, one of the most critically endangered ecosystems in Colombia.





Communicate key messages

How can we communicate analyses or plans in a persuasive way?

Maps as a visual aid

USER TYPE | RESEARCH AND ACADEMIA




RICH DATA



MAP DOWNLOADS

Dr Melinda Moir, a researcher from Western Australia, has used UNBL to generate maps of Biodiversity Intactness for [a paper on the status of insect biodiversity in the southwest of Australia](#). She suggests that the maps provided by UNBL help “the conservation message [in the paper] carr[y] more weight.”



At the heart of the UNBL Strategic Plan for 2025 and 2030 is support for Parties to deliver on the Global Biodiversity Framework. Stay tuned for new developments and products that will utilize the cutting-edge technology behind UNBL to provide customized services to support national-level planning, implementation, and monitoring of the Framework.

“Data is the lifeblood of the societies of today and the future - that includes revealing new insights that can drive climate action and restore our natural world. By providing open access to spatial data sets and real-time analytics as a digital public good, the UN Biodiversity Lab aims to spur much-needed efforts by countries and communities to protect our planet's irreplaceable biodiversity and spur progress across the Global Goals.”

Achim Steiner
UNDP Administrator

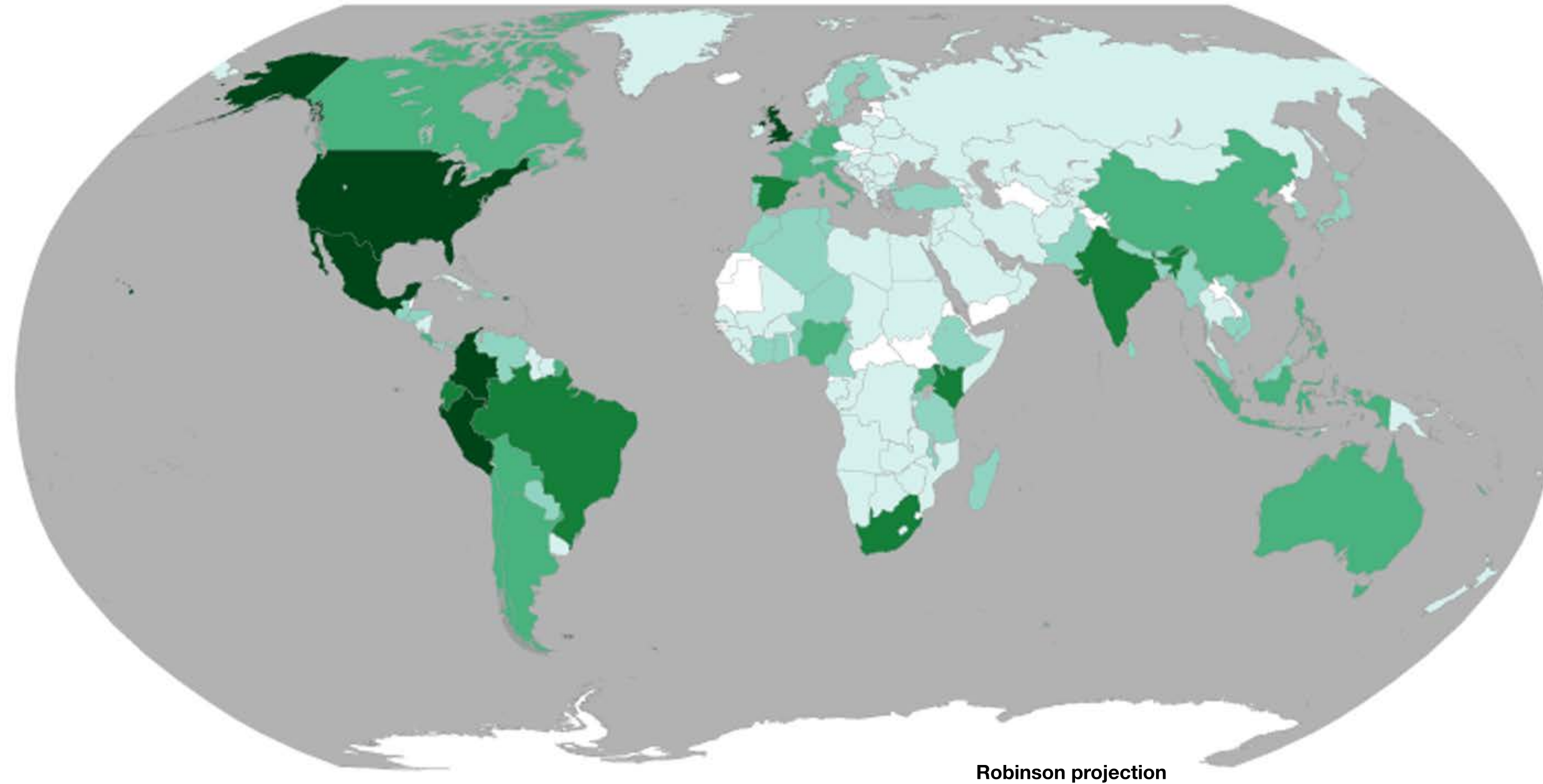
“The world [came together] in December [2022] to agree on new global biodiversity targets that will shape action for nature in this critical coming decade. UNBL will be a critical tool to support Parties around the world to use the power of spatial data for planning, implementation and monitoring of this post-2020 Global Biodiversity Framework based on their unique national needs and context.”

Elizabeth Mrema
Executive Secretary of the UN Biodiversity Convention.

“The health of our natural and human systems will determine the future of our societies, economies and planet. UNBL enables us to harness spatial data to increase transparency on the state of our planet and to generate insights about where to prioritize action for nature that delivers powerful dividends for climate action and sustainability.”

Inger Andersen
UNEP Executive Director

UN Biodiversity Lab Active Use Countries



KEY



Fewer active users

More active users

DISCLAIMER

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. The final status of the Abyei area is not yet determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Esri, FAO, NOAA, USGS

Basemap: United Nations Geospatial, 2023

TESTIMONIALS

Governments & Government Research Institutions

“ UNBL has facilitated the review and use of information that complement[s] national layers. [In our] project, UNBL has served as an open repository where users can easily review not only ELSA results but data used during the [research and management] process. Official national repositories are not so user friendly.”

Susana Rodríguez Buriticá
Alexander von Humboldt Biological Resources Research Institute, Colombia

“ As the first country to pilot the ELSA methodology in 2019, Costa Rica has seen just how impactful it can be in supporting policies that get to the heart of our biodiversity and development challenges. We are proud to collaborate with UNDP to lend our expertise once again to the improvement of the ELSA tool, this time supporting a version on UNBL that can be scaled up to support all countries.”

Rafael Monge
Ministry of Environment and Energy, Costa Rica

“ Dynamic metrics via UNBL are critical for monitoring the status of nature in Uganda. The platform enables us to track trends in tree cover loss, fire activity, vegetation, and more to better plan interventions and assess the impact of our work at NEMA.”

National Environmental Management Authority of Uganda

UN Agencies and Intergovernmental Funds

“ As a data scientist, I appreciate the openness of the platform. Every organization generates data and works hard to make it understandable. By sharing across organizations, we can unlock additional ways to use the same data and maximize return on investment.”

Imai Jen-La Plante, Ph.D.
Green Climate Fund

“ I think at GEF SGP [Global Environment Facility Small Grants Programme] and UNDP level, all interventions should have integration to UNBL as it will speak for them in a spatial way that is becoming the norm for location-relevant interventions.”

Anas Khasawneh
Small Grants Programme & ICCA Global Support Initiative, UNDP Jordan

“ The UN Biodiversity Lab has provided Peru with a central location to be able to access, visualize, and download spatial data layers produced by the NASA Life on Land project for Peru to support reporting on Sustainable Development Goal 15, Life on Land. UNBL offers us a user-friendly interface where policymakers across multiple government agencies can easily access and use the data to support national reporting and decision-making.”

Patricia Huerta
UNDP Peru

NGOs

“ The statistics and data [we] obtained [from UNBL facilitate] analysis [which supports] research, dialogue, training, [and] communication, [ultimately making] territorial governance systems [more] inclusive, democratic, resilient and sustainable.”

Oscar Diaz
PRISMA Foundation

“ The Workspace feature is fantastic; I've been looking around a bit and once again am struck by how well-aligned it is with some of the ambitions we've had.”

Kim Fisher
MERMAID Lead Software Engineer, Wildlife Conservation Society

Indigenous Peoples and Local Communities

“ We are extremely grateful to the team at UNBL for your help in creating an invaluable new map of Nashulai Maasai Conservancy –and for opening our eyes to the ways spatial analysis, combined with our traditional knowledge systems, can be applied to support critical decisions for sustainability in our ancestral lands. Biodiversity protection, climate change adaptation and food security are pressing priorities for our people. It is a time of unprecedented challenges. As a local Indigenous community with limited resources it is just incredible for us to have the power of the UN Biodiversity Lab at our fingertips.”

Tom Muema
Nashulai Maasai Conservancy, Kenya

Research and Academia

“ I was very surprised and pleased at how easy the tools within the UN Biodiversity Lab were to use.”

Dr Melinda Moir
Entomologist



UNBL

How can I get involved?

Additional resources on spatial data and integrated spatial planning


[General information](#) 

[Watch the ELSA trailer](#) 

[Integrated Spatial Planning' Workbook](#) 

1

Access more than 400 data layers that spark insights on nature, climate, and sustainable development

[Register an account with UNBL using advice in our user guide](#) 

[Click here to view a demo](#) 

2

Securely upload and analyse national-level data, calculate dynamic indicators, and create your community of practice

[Request a secure workspace](#) 

3

Learn how to use UNBL to support your work

[Explore our training materials](#) 