

### **Executive Summary**

The relationship between nature and human development has been an evolving interaction that constantly reshapes our societies, economies, and the planet. To help achieve sustainable outcomes, access to reliable and timely spatial data on biodiversity is fundamental. Spatial data enables stakeholders' visualization of interactions between human activities and environmental trends on interactive maps, thus enabling them to prioritize action, as well as to monitor and report on trends over time. This use of spatial data is increasingly relevant to public and private decision-making.

Parties to the Convention on Biological Diversity (CBD) adopted the Kunming-Montreal Global Biodiversity Framework (KMGBF) and associated package of decisions at the 15th meeting of the Conference of the Parties (COP15) in December 2022. The Framework comprises four overarching goals and 23 action-oriented targets that seek to address the biodiversity crisis, promote sustainable use, and encourage the fair and equitable sharing of benefits arising from the use of biodiversity and genetic resources. At the 16th meeting of the Conference of the Parties (COP16), held in October 2024, the focus shifted to implementation of the Framework, Target 1 of the Framework calls on countries to undertake participatory, integrated, and biodiversity-inclusive spatial planning, for which spatial data is crucial. Likewise, the application of the monitoring framework of the KMGBF (Decision 15/5 and Decision 16/31) to create the Seventh National Report (7NR), due in February 2026, will require spatial data availability, among others, to provide consistent, standardized, and scalable tracking of the goals and targets. An analysis released in 2024, developed by UNDP and UNEP-WCMC, shows that 41% of headline indicators and 34% of component indicators have metadata that recommends the use of spatial data.

To create sustained impacts towards the achievement of the KMGBF, as well as related international agreements, it is essential that national decision-makers have access to spatial data for planning, monitoring, and reporting. Many countries have robust national spatial data, but it may be siloed across different servers or actors and not easily accessible. For other countries, access to accurate spatial data remains out of reach due to major capacity gaps, high server costs, and expensive software. Additionally, facilitation of automated analyses may enable rapid decision-making and thus be advantageous for any country.

The UN Biodiversity Lab (UNBL) was created to enable governments and other non-commercial stakeholders to have access to the best available global data to support action for nature, climate, and sustainable development.

The UNBL mission is three-fold:

- To democratize access to spatial data and analytic tools as a digital public good.
- To support decision-makers to leverage spatial data for insight, priority-setting, and implementation at the national level.
- To empower stakeholders to use spatial data for nationally-led monitoring and reporting.

UNBL is overseen by a partnership between the CBD Secretariat, the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), the UN Development Programme (UNDP) and the UN Environment Programme (UNEP).

This annual report presents the key activities, outcomes and achievements of the UNBL Partnership in 2024.

### UNBL by numbers in 2024:









114,263

660+

3,213

platform views from

attendees in

registered users from

30,262

unique users.

18

**UNBL** events and trainings.

157

countries.



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



1,103

global data layers grouped in

269

422

new data layers datasets, added in 2024 including



responses to user questions.



new communication

# **UN Biodiversity Lab** at a Glance

UN Biodiversity Lab (UNBL) is a free, open-source platform that supports country-led efforts to use spatial data and analytic tools to generate insight that can lead to the implementation of impactful measures for biodiversity-inclusive sustainable development. The platform seeks to support this transformation by enabling national experts to combine user-provided national data in a single repository, supplement them as needed with UN-vetted global datasets, and use the platform's tools to visualize, overlap and analyze them for national decisionmaking. Users can use new tools added in 2024 to run biodiversity-inclusive spatial planning analyses to support the delivery of Target 1 of the KMGBF and to display area-based indicators and metrics for their country to facilitate monitoring and reporting on the KMGBF, subject to national needs and preferences. UNBL strives to develop functionality that does not require GIS expertise and to make all materials available, to the extent possible, in English, French, Portuguese, Russian, and Spanish.

UNBL combines the latest
technology, the best
available global data,
password-protected
workspaces to upload users'
own data, user-friendly
analytics, and a powerful
UN-led partnership to
support national action
for nature, climate, and
sustainable development.





# UNBL's value proposition

In an increasingly complex landscape of tools, platforms, and resources, UNBL strives to offer user-driven solutions that are nationally relevant, policy-driven, and can be customized based on country needs. We work to reduce fragmentation by forging partnerships with similar initiatives and with custodians of essential public good data, all with a focus on meeting the needs of our end users. UNBL is evolving while focusing on its core strengths:

- UNBL is a platform and a decision-support system that can be used by governments to plan, monitor, and report on KMGBF implementation.
- UNBL is built for governments, but usable by all it is a tool serving CBD Parties, but also used by non-governmental organizations, researchers, and Indigenous Peoples, local communities, and Afro-descendants.
- UNBL is developed in response to global policy processes — it directly supports Targets 1-12 of the KMGBF, and can be used to support action on nationally determined contributions on climate change (NDCs), land degradation neutrality (LDN) targets, and the Sustainable Development Goals (SDGs).
- UNBL is backed by UN agencies and the CBD Secretariat it brings legitimacy, trust, and national ownership that private platforms can't match.
- UNBL is used in real-world policy decisions it has supported national policy development in several countries, including Colombia, Costa Rica, Ecuador, Peru, and South Africa, and national reporting, contributing to an 81% increase in the use of spatial data between the fifth and sixth national reports to the CBD.

As we look towards 2025, we have an unparalleled policy window as countries work to revise their national biodiversity plans under the CBD, as well as the equivalent national policy documents for action on climate change and land degradation. These policy documents will guide national action for the next five years, one of the most critical windows to bend the curve on biodiversity loss and to address the climate crisis. UNBL exists to support this critical work.

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### 2024 | UNBL activities in 2024

# 1 UNBL governance

The UNBL Partnership works together to shape the UNBL vision, mission, and activities to support the use of spatial data to generate insight and impact for conservation and sustainable development. Our governance activities include strategic planning, priority setting, relationship building, and fundraising.

In 2024, the UNBL Partnership focused on the implementation of our 2022-2030 Strategic Plan through operationalization of US\$2 million in funding from the Gordon and Betty Moore Foundation to further develop UNBL to support countries in their work around planning, monitoring, and reporting on the Convention on Biological Diversity's (CBD) Kunming-Montreal Global Biodiversity Framework (KMGBF). As a central element of this work, we actively followed key CBD negotiations to identify areas UNBL could support, worked to reduce fragmentation by building partnerships with related initiatives, and initiated work with seven countries to provide capacity building and technical support around using spatial data for the development and implementation of National Biodiversity Strategies and Action Plans (NBSAPs) and production of the Seventh National Report (7NR) to CBD. In addition, the UNBL team attended key events where the tool was presented and organised webinars to deliver training and capacity development to enhance awareness of the platform offerings, including how to use UNBL for access to data, metrics or spatial analysis see section 4).

### Specific activities in 2024 included:

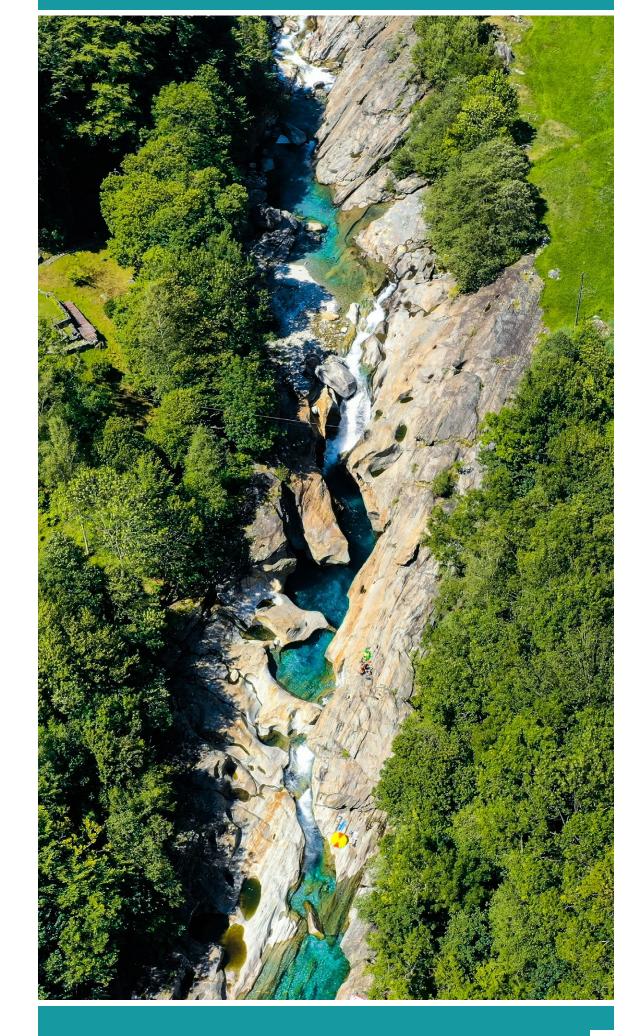
- Review of key negotiation topics under CBD with respect to the use of spatial data to support planning, monitoring and implementation of the KMGBF: the UNBL Partnership closely followed negotiations and decisions under CBD related to spatial data, as well as feedback and commentary from Parties (see Box 1). Building on these decisions, we are exploring how we can directly support both Parties and the newly established <a href="CBD Subregional Technical and Scientific Cooperation">CBD Subregional Technical and Scientific Cooperation</a> (TSC) Support Centres.
- National work with seven pilot countries to support the use of spatial data for national action on the KMGBF: the UNBL Partnership initiated work with government and UNDP Country Offices in Cuba, the Dominican Republic, Ecuador, Ghana, Malawi, South Africa, and Sri Lanka through the 'UNBL-GBF Mapping Project'. These pilot countries will engage in two workstreams around (1) spatial planning, and (2) monitoring and reporting, selecting activities that best meet national needs for NBSAP update, NBSAP implementation, and development of the 7NR. This work will provide tangible use cases for UNBL that can be shared with other CBD Parties to support broader uptake and use of spatial data and planning to support implementation of the Framework.

- Partnership building to support countries to implement KMGBF Target 1 on biodiversity-inclusive spatial planning: the UNBL Partnership convened our second Expert Advisory Committee on Spatial Data and Planning, bringing together 23 experts from Parties, UN agencies, NGOs, and academia who together shaped the development of an integrated spatial planning tool on UNBL (see Section 2). In parallel, we also brought together a coalition of countries, tools, and publications advancing spatial planning approaches that can support national implementation of Target 1 though a side event at the UN Biodiversity Convention (CBD COP16) (see Section 4). Our goal with these initiatives is to reduce fragmentation, encourage collaboration, and clearly communicate about tools and other resources that could be used to advance work related to biodiversity-inclusive spatial planning, as called for in <a href="CBD/COP/DEC/16/12">CBD/COP/DEC/16/12</a> on scientific and technical needs.
- Collaboration with data partners, platforms, and institutions to support monitoring and reporting on the KMGBF: the UNBL Partnership built relationships with spatial data partners and custodians highlighted in the metadata associated with the KMGBF monitoring framework (CBD/COP/16/INF/3) to add these data, where available, to UNBL. In addition, the UNBL Partnership has developed relationships with other platforms offering support around monitoring and reporting, including BON in a Box, the CBD Online Reporting Tool, and Target Tracker, with the goal of building institutional and technical partnerships to provide integrated support to Parties as the work towards preparation of the 7NR.



# How does UNBL's vision and work connect to relevant CBD documents and decisions regarding the role of spatial data in implementation of the KMGBF?

- UNBL is being further developed to provide access to global spatial data that will be essential to **implementation as well as monitoring and reporting** on the GBF.
- As of December 4th, per the <u>CBD Online Reporting Tool (ORT)</u>, 132 Parties have submitted updated targets, of which **91.86% can be mapped to the spatially relevant targets** (Targets 1-12).
- Additionally, about **half of Parties** have defined specific component, complementary and/or national indicators that they would use in addition to the headline indicators to monitor progress.
- An analysis developed by UNDP and UNEP-WCMC in the <u>Technical Report "Using Spatial Data to Support the Development of Plans for National Monitoring Systems for the Kunming-Montreal Global Biodiversity Framework" indicates that 41% of headline indicators and 34% of component indicators in the KMGBF monitoring framework, all related to Targets 1-12, encourage the use of spatial data for monitoring and reporting on the KMGBF.</u>
- UNBL explores pathways to provide access to spatial data and indicators for the private sector, aligning with emerging disclosure frameworks.
- The availability of global data to fill national data gaps for the headline and component indicators is variable: of the spatial headline indicators 73% (11 out of 15) have global data available and of the spatial component indicators 91% have global data available (20 out of 22). The availability of global spatial data exceeds non-spatial data: overall only 30% of the headline indicators have global data available and 31.25% of the component indicators have data available.
- Parties have expressed **inequalities in their ability** to generate, organize, and share biodiversity-relevant data and a need for capacity building and development as well as scientific and technical cooperation (summarized in <u>CBD/COP/16/INF/24</u>).
- Parties have likewise identified that work **could be advanced around biodiversity-inclusive spatial data** as part of work to address scientific and technical needs to support the implementation of the KMGBF (CBD/COP/DEC/16/12).
- CBD/COP/16/13 points to the importance of the newly selected regional and subregional technical and scientific support centres (TSCs) to provide region and country specific capacity building. Various centres noted in their remarks at COP16 side events the potential for them to draw from global platforms such as the Global Knowledge Support Service for Biodiversity (GKSSB) and UN Biodiversity Lab, among other existing platforms and tools.



## 2 UNBL development

UNBL is one of the most technologically advanced platforms in terms of geospatial visualization and analytics available. Our team of software engineers ensures UNBL technology evolves to keep up with technological innovation and adapts to user needs through feedback-driven updates, user testing, and national customization based on capacity and needs. In 2024, we implemented a series of new developments to enhance the UNBL technical infrastructure, refined pre-calculated country-level metrics, and released a new implementation of revised integrated spatial planning methodology to support national action for KMGBF Targets 1, 2, and 3.

### Specific activities in 2024 included:

- UNBL technology stack enhancements: Upgrades to core libraries on both the front and back end to keep the platform up to date; implementation of deployment pipelines to streamline the deployment process; dockerization of the code to make development easier; reconfiguration of the cloud infrastructure of the platform to optimize for performance and reduce costs.
- **Dynamic metrics:** UNBL released a major upgrade to the eight dynamic metrics on the platform, including global land cover, protected areas, tree cover loss, biodiversity intactness index, terrestrial carbon density, enhanced vegetation index, terrestrial human industrial index and monthly fire activity. These metrics are displayed pre-calculated for 193 countries, 5 cross-boundary areas and 2,676 other jurisdiction areas. This upgrade brings a more robust approach through the utilization of an advanced open-source library to perform the calculations, the graphical displays have been improved to better reflect trends or data, and the text summaries and documentation have been reviewed.



**ELSA Integrated Spatial Planning Tool:** The ELSA Integrated Spatial Planning Tool is the result of five years of collaborative development across Parties, the UNBL team, and an Expert Advisory Committee to create an open-access, biodiversity-inclusive spatial planning tool to support work around the KMGBF. The ELSA Integrated Spatial Planning Tool implemented in UNBL is supported by a scientific manuscript submitted for publication in the peer-reviewed journal One Earth, with 44 co-authors from all 13 initial pilot countries and leading academic experts on Systematic Conservation planning and available as a <u>bioRxiv preprint</u>. From Q3 of 2025 all Parties can freely use the ELSA Integrated Spatial Planning Tool to create a spatial prioritization map to identify where area-based targets for restoration (KMGBF Target 2), protection (KMGBF Target 3), and sustainable

management (KMGBF Target 10) can maximize impacts for commitments on biodiversity, climate, and human well-being (KMGBF Targets 1-12) simultaneously. UNBL designers and software developers worked together to implement the ELSA Integrated Spatial Planning Tool on UNBL to enhance user experience and code responsiveness and reliability. The ELSA Integrated Spatial Planning Tool will be rolled out with 7 pilot countries and for all users of UNBL in 2025.

### What Key Features Does UNBL Offer?

integrated spatial planning tool.

The <u>UN Biodiversity Lab (UNBL)</u> provides a set of features that support country-led efforts to use spatial data and analytic tools for planning, monitoring, and reporting on their national biodiversity strategies and action plans. These features can also support other user groups working at the intersection of biodiversity, climate change, and sustainable development. The platform is available in English, French, Portuguese, Russian and Spanish and does not require GIS experience to use.

UNBL features will be updated in 2025. Current and future features include:

### **Current Features Future Developments** <u>Secure workspaces</u> for non-commercial users Secure workspaces will be enhanced with to upload and manage national spatial data, user-friendly features to seamlessly connect tag by NBSAP target and indicator, and share to data from diverse national and global privately with a curated group of users repositories in a single workspace New metrics will continue to be added for dis-Push-button calculation of dynamic metrics at the national level and display of select headplay of select KMGBF indicators and additionline indicators. Access to over 1,000 global spatial data layers including data referenced in the metadata of the KMGBF monitoring framework, curated for national use on biodiversity, ecosystem services, and human well-being to fill national data gaps, as needed. Curated data collections for policymakers that Data collections will continue to be updated could be used to calculate indicators to monibased on relevant CBD decisions and recomtor implementation of the KM-GBF at national mendations. level as well as on objectives related to protected areas (Target 3), restoration (Target 2), and nature-based solutions for climate change (Target 8). Extensive documentation and guidance to en-Dedicated technical support will be provided to countries on spatial data relevant for the able new users to easily apply UNBL for their KMGBF, including at meetings of the SBSTTA needs. and COP. Ability to develop prioritized spatial plans for KMGBF Targets 1, 2 and 3, that provide powerful co-benefits for Targets 4-12 using the ELSA

## 3 UNBL data

The UNBL Partnership regularly conducts horizon scanning to ensure the platform includes the latest data relevant to nature, climate, and sustainable development. This process helps maintain accuracy, relevance, up to date, and that all UNBL data meets our quality standards. The global data made available through the platform is intended to support countries to fill national data gaps, as appropriate, for work at the national level. Over the past year, this work focused on adding data that can be used in the context of the KMGBF monitoring framework to support governments as they begin work to prepare the 7NR for CBD.

### In 2024, this included:

#### **Newly released data collections**



The UNBL Data to Support the Monitoring framework of the Kunming-Montreal Global Biodiversity Framework data collection, developed throughout 2023 and released in April 2024, is available in English, French, Spanish, Portuguese, and Russian. This data collection provides a curated list of global spatial datasets that could be used to calculate indicators to monitor implementation of national biodiversity strategies and action plans. The KMGBF monitoring framework data collection

has gathered the current available and sharable datasets from different custodian agencies and was updated based on the outcomes of the 26th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA26) and the 16th Conference of the Parties (COP16) to the Convention on Biological Diversity.

#### **UNBL** data criteria



In 2024, the <u>UNBL data criteria</u> were revised and updated to strengthen the review process for new spatial datasets added to the platform. These criteria ensure that datasets are suitable for decision-making by assessing their policy or decision relevance, terms of use, accessibility, frequency of update, temporality, geographic coverage, transparency, scalability, and authoritativeness, to determine their suitability and readiness to support biodiversity and sustainability goals.

### **Data filtering**



We introduced a new hierarchical data filter, the "Policy" filter on UNBL. This is available in the UNBL Map View, by selecting the Layers tab and then clicking on Filters, it has been released to enable users to easily identify spatial data that can be used for calculation of headline, component, and complementary indicators of the KMGBF monitoring framework.

#### New data added by the UNBL Team

In 2024, 454 new data layers, primarily associated with the KMGBF were identified and added to the platform by the UNBL Data Team. All these new additions were reviewed against our <u>UNBL data criteria</u>, and made available on the UNBL public platform.

### **Data submissions received from users and partners**



In 2024, 9 new dataset submission requests were received from UNBL users and partners; including a regional dataset submitted by the CBD Technical and Scientific Cooperation (TSC) Observatory of Sahara and Sahel (OSS), one of our first efforts to complement our global data portfolio with regional data to better support needs highlighted by Parties and TSCs.

7 data layers submissions met our UNBL

data criteria and were added to the UNBL public platform, including the following datasets:

- Total Ecosystem Capability (TEC) Ecosystem Natural Capital Accounts (ENCA) for Africa, 2001-2020
- The ICCA Registry
- Global Biophysical Typology of Mangroves
- Global Distribution of Modelled Mangrove Biomass
- Global Critical Habitat Screening Layer Drill
- Critical Natural Assets
- Prioritized areas for nature>s contributions to people and biodiversity

### **4** UNBL training, capacity-building and events

In 2024, the UNBL Partnership delivered training and capacity development, including high-level events at major international fora and tailored on-demand sessions. Our efforts focused on enhancing awareness and providing stakeholders with the tools needed to leverage UNBL for diverse applications, promoting the integration of spatial data into initiatives aimed at conserving biodiversity and supporting its sustainable use.

### Technical guidance and scientific papers released in 2024 include:

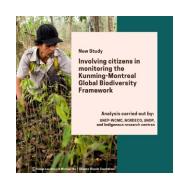


<u>Using Spatial Data to Support the Development of Plans for National</u>
<u>Monitoring Systems for the Kunming-Montreal Global Biodiversity</u>
Framework

This guidance aims to support Parties to undertake a detailed assessment of available national spatial data and spatial tools that can be used as part of a national monitoring system for the KMGBF. Parties can use this document to: (1) review indicators that require spatial data for their calculation, (2) identify, view, and download the spatial global data that are referenced in the indicator metadata available on the Kunming-Montreal Global Biodiversity Framework Indicators website and in CBD/COP/16/INF/3/Rev.1 associated with CBD/COP/DEC/16/31\*. as of July 2025, and that could be used to

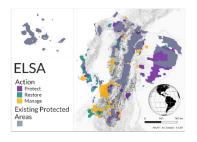
calculate indicators to monitor the implementation of national biodiversity strategies and action plans, and (3) access checklists and guidance to identify existing national spatial data as well as national data gaps. The technical guidance has been updated following the decisions at the twenty-sixth meeting of the Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA-26) to the Convention on Biological Diversity (CBD). It will be updated in 2025 following the decisions of the Sixteenth Conference of the Parties (COP16).

This guidance is available in <u>English</u>, <u>French</u>, and <u>Spanish</u>, and was an offering for the Global Biodiversity Framework Early Action Support (EAS) Project.



Research paper: Involving citizens in monitoring the Kunming— Montreal Global Biodiversity Framework

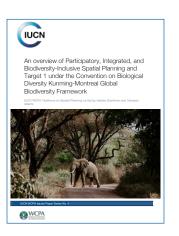
UNEP-WCMC, Nordic Foundation for Development and Ecology (NORDECO), UNDP and Indigenous research centres collaborated on this analysis, to showcase how citizen scientists can contribute towards halting and reserving global biodiversity loss. The UNBL team contributed to the spatial indicators assessment used in this study. The analysis highlights the importance of citizen engagement in achieving global goals to stop and reverse biodiversity loss, outlining strategies to enhance public participation in biodiversity monitoring.



# An operational framework to map Essential Life Support Areas (ELSAs) for biodiversity, climate, and sustainable development

This pre-print manuscript led by UNDP showcases the ELSA process carried out for Ecuador, where the use of real-time scenario analyses enabled diverse stakeholder groups to collaborate to assess national priorities for nature, climate, and sustainable development, view trade-offs and synergies, and arrive at a spatial plan to guide national action. ELSA presented an actionable

approach for Ecuador, and 12 other pilot countries, to create a spatial plan aimed at fulfilling their national and international commitments to nature, including to the KMGBF.



An overview of Participatory, Integrated, and Biodiversity-Inclusive Spatial Planning and Target 1 under the Convention on Biological Diversity Kunming-Montreal Global Biodiversity Framework

UNBL contributed to this IUCN WCPA led paper series No. 4 on with a case studies focused on the 'Mapping Hope through integrated spatial planning: the case of Ecuador'. It showcased the use of integrated spatial planning frameworks that are adaptable to national circumstances and national targets on nature, climate, and sustainable development. This approach relies on the use of real-time scenario analyses to enable diverse stakeholder groups to collaborate together to rank national priorities and view trade-offs that result from conflicting priorities, thereby fostering dialogue and collaboration.

[UNBL workspaces] provide decision-makers with the best spatial data available to place nature at the heart of sustainable development.

Anayatzin Sagrario Mendoza Castro Estancia Posdoctoral en Modelación Climática Extraplanetaria en el centro de ciencias de la Complejidad UNAM México

### Events and trainings held in 2024:

# Help Desk of the Early Action Support (EAS) Project, CBD SBSTTA-26, UNEP Headquarters, Nairobi



UNBL was showcased as a tool to support Parties in the use of spatial data for the EAS for the KMGBF. The help desk was visited by 68 Parties.

# Using Spatial Data to Support the Development of Plans for National Monitoring Systems for the Kunming-Montreal Global Biodiversity Framework



UNBL presented the webinar <u>Using Spatial Data to Support the Development of Plans for National Monitoring Systems for the KMGBF in English, French, and Spanish</u>. This event was part of the GEFEAS project webinar series and focused on the technical support available to support Parties in their assessment of national monitoring systems and the development of national monitoring action plans. Experts shared recommendations to support Parties on identifying spatial data for indicator calculation based on the KMGBF monitoring framework and the work of the Ad Hoc Technical Expert Group (AHTEG) on Indicators.

The event was attended by 102 national stakeholders charged with implementing early action for the KMGBF.

### 5<sup>th</sup> Regional Workshop of the COPERNICEA project



The "Regional Cooperation for New Ecosystem Accounting Indicators in Africa - COPERNICEA" project is an initiative in the regional landscape to establish six Africa countries with an operational and self-reliant system in Ecosystem Natural Capital Accounting (ENCA). The regional workshop highlighted countries' efforts to combat desertification, explored data and integrating ecosystem accounts into policy decisions to include natural capital in national strategies and plans, in order to achieve the targets of the Kunming-Montreal Global Biodiversity Framework by 2030.

On June 28, 2024, UNBL presented in the panel "The role of research in the implementation of ENCA-Capacity building and Database", with an introduction of the public platform, key functionalities, and the

AfrikENCA data published on UNBL.

The event was attended by over 50 attendees.

### Workshop on the power of data for decision making for the government of Paraguay



In August 2024, UNDP county office in Paraguay hosted a three days' workshop with the government of Paraguay on the power of data for decision making. UNBL was invited to present in a data deep-dive session, where we introduced the use of spatial data for climate policy, the technical support from UNBL for countries in using spatial data for national decision-making and nature-based actions.

The participants included 30 decision-makers in the Government of Paraguay from various Ministries/government entities, including the Ministry of Environment, the Ministry of Education, the Ministry of Finance and so on.

### **Nature Transition Support Project workshop in Ghana**



In August 2024, the UNBL team attended the inception workshop of the Nature Transition Support Project in Ghana. UNBL presented on the key functionalities to support Ghana's national implementation of the KMGBF, and the integrated spatial planning project to support Ghana's mapping of priority nature-based actions.

The workshop was attended by around 30 national stakeholders from government, including the

Ministry of Environment, Science, Technology and Innovation, the Ministry of Finance and National Development Planning Commission, UNDP country office and universities.

### National Ecosystem Assessment (NEA) Initiative's Global Workshop



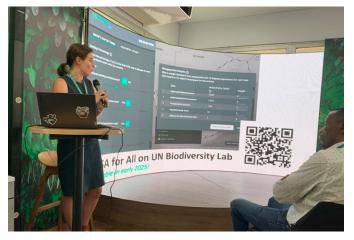
National Ecosystem Assessment Initiative Global Workshop

17 – 20 September 2024 - Cambridge, United Kingdom

In 2024, the Global Workshop took place in Cambridge from 17 - 20 September. UNBL was demonstrated to participants in an interactive, hands-on session that stimulated discussion and feedback.

The National Ecosystem Assessment Initiative's (NEA Initiative) Global Workshop takes place annually to facilitate knowledge exchange, share project updates and lessons learned, and identify key priorities related to the implementation of the assessment process and the use of assessment findings. The NEA Initiative at UNEP-WCMC is funded by the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

#### **CBD COP16 event**



Putting Biodiversity-Inclusive Spatial Planning on the Map: How Spatial Intelligence is Being Harnessed to Operationalize Target 1 in National Contexts

On 22 October 2024, UNBL convened this dynamic side event at the CBD COP16, which was held at the GEO Pavilion. The event drew a full room of over 35 participants, underscoring the growing interest in biodiversity-spatial planning in support of the KMGBF targets.

The session showcased national applications of spatial prioritization tools that are supporting countries implementing Target 1 of the KMGBF. Colombia, Mozambique, and South Africa presented their experience using key tools including the enhanced ELSA Integrated Spatial Planning Tool on UNBL, the Marxan Planning Platform, and WePlan Forests. The event emphasized the importance of integrating spatial intelligence into national planning to effectively conserve biodiversity and sustainably manage country biodiversity resources, reinforcing the value of collaboration and knowledge sharing across organizations.

UNBL organized this event in collaboration with a diverse group of partners with a central goal of building collaborations across key experts involved in advancing spatial planning approaches to support delivery of KMGBF Target 1. Participating institutions included the Secretariat of the Convention on Biological Diversity (CBD), Food and Agriculture Organization of the United Nations (FAO), Humboldt Institute, IUCN WCPA Task Force on Spatial Planning, The Nature Conservancy, South African National Biodiversity Institute (SANBI), Government of Tanzania, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), Wildlife Conservation Society (WCS) Mozambique.

### UNBL at the NBSAP Help Desk, CBD COP16, Cali, Colombia



UNBL was featured at the NBSAP Help Desk during CBD COP16 in Cali, Colombia. This interactive space provided an opportunity to showcase the UNBL platform's enhanced functionalities and demonstrate its value as a tool to support Parties in the use of spatial data in supporting the development and implementation of National Biodiversity Strategies and Action Plans (NBSAPs).

Over the course of the event, the NBSAP Help Desk welcomed representatives from 95 Parties, reflecting the increased interest and value in the use of spatial data tools to support the national implementation of the KMGBF.

### UNBL presence at other major events at the CBD COP16, Cali, Colombia

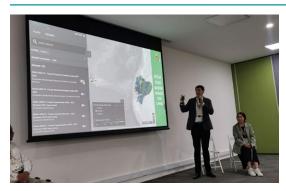


During the CBD COP16, UNBL was featured in four major events, highlighting UNBL functionalities and national level applications of the ELSA Integrated Spatial Planning Tool. These presentations demonstrated how spatial data and decision-support tools can help Parties in advance of the implementation of the KMGBF.

UNBL was showcased at the following high-profile sessions: 6th Science Policy Forum for Biodiversity, Gender

and Environment Data Conference, Seizing the Nature-Climate Ambition Opportunity, and  $\underline{A}$  global knowledge service for biodiversity (GKSSB) – supporting Parties' needs for monitoring implementation of the KMGBF.

UN World Data Forum (UNWDF), Leveraging new forms of spatial data for achieving global and national goals for biodiversity and sustainable development. Medellin, Colombia



At the 2024 <u>UN World Data Forum (UNWDF)</u> the UNBL team together with the Governments of Ecuador and Peru organized the panel session event <u>Leveraging new forms of spatial data for achieving global and national goals for biodiversity and sustainable development.</u> The event delved into how country-driven development and the use of spatial data, spatial indicators and spatial prioritization planning tools like ELSA can support the implementation of national and global targets for nature and sustainable development, sharing

country use cases stories from Ecuador and Peru. The UNBL team presented the enhanced UNBL features, and national use of UNBL and the ELSA methodology in Ecuador and Peru.

The event was presented in English and Spanish and was attended by over 70 participants.

#### UN World Data Forum (UNWDF), Medellin, Colombia



UNBL actively engaged with a variety of stakeholders through its presence at the UN Pavilion and UNDP Booth during UNWDF. These spaces served as a key platform to showcase both current and upcoming functionalities of UNBL.

### **UNEP Digital Day**



On 19 November 2024 UNBL was demonstrated remotely to attendees at UNEP Digital Day taking place in Nairobi. The Digital Day is an opportunity to learn more about key UNEP initiatives in digital transformation, provide feedback, and express interest in potential engagement. UNEP digital solutions that help tackle the triple planetary crisis were presented.

### **Cambridge Conservation Initiative (CCI) GIS Day**



### 19TH NOVEMBER 2024

Manatee Room, David Attenborough Building, Pembroke St, Cambridge CB2 3QZ



Cambridge Conservation On November 19th, 2024, UN Biodiversity Lab (UNBL) was demoed as a tool designed to empower conservation and sustainable development decisions for the GIS Day 2024, hosted by the Cambridge Conservation Initiative (CCI), a collaborative partnership dedicated to biodiversity conservation. It was a full-day event centered on fostering collaboration and innovation in conservation through GIS and remote sensing.

The day featured discussions on data justice, GeoAl, and collaborative opportunities, alongside interactive case study challenges.

#### UNEP Regional Environmental Information Network (REIN) - Geoinformation Working Group



On 20 November 2024, UNBL presented its current and upcoming functionalities during the <u>Geoinformation Working Group meeting</u> of UNEP's Regional Environmental Information Network (REIN). This group is formed of a network of environmental data experts focused on reinforcing the science-policy interface in the Latin America region and strengthening technical capacity at the national level.

The event was attended by over 30 attendees from Ministries of Environment from across Latin America.

### **UNDP Data Thursdays Webinar Series**



On November 21, 2024, UNBL was invited to present at UNDP's Data Thursday series on "Data for Nature: Leveraging Data and Digital Technologies for Biodiversity". UNBL presented how data and digital public goods can be used to

enhance biodiversity strategies and action plans, with an introduction of the UNBL platform and key functionalities.

The online event was attended by over 70 attendees worldwide.

### Data to Policy Network | The X-Change: Climate Data



On November 25, 2024, UNBL was invited to present in the Data to Policy Network learning series "The X-Change: Climate Data", hosted by the UNDP Chief Digital Office. The event is designed for policymakers, individuals in policy-related roles,

and those closely collaborating with policymakers. During the event, UNBL provided introduction of the platform, and types of data country can access to gain insights on climate, biodiversity and sustainable development agendas

The event was attended by over 30 attendees.

### **UNU Artificial Intelligence Network AI for Nature Webinar**



On Nov 25, 2024, UNBL was invited to present in Dialogue for Action series webinar focusing on AI for Nature, organized by the United Nations University Global Artificial Intelligence Network (UNU Global AI Network) and WWF Hong Kong.

Al for Nature webinar aims to showcase use cases and case studies that highlight how Al tools assist with present and future, nature conservation and monitoring objectives. The UNBL team has

provided an introduction of the UNBL platform during the webinar and insights on ways to use Al technology to advance geospatial data and analysis.

The event was attended by around 50 attendees.

### **WILDLABS Virtual Hour**



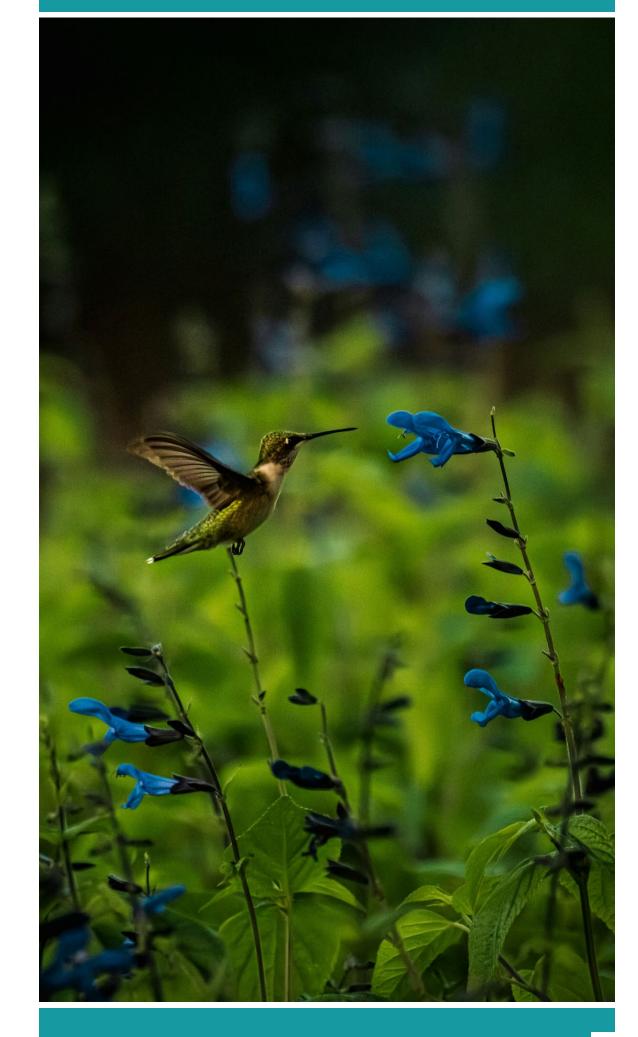
On December 4th, 2024, UN Biodiversity Lab (UNBL) was demoed as a tool designed to empower conservation and sustainable development decisions. The WILDLABS Variety Hour is a monthly interactive community event for those interested in conservation technology. It offers a platform for sharing projects, discovering new tools, and connecting with peers. The gathering aims to foster a sense of community and inspire new ideas among conservation tech professionals and enthusiasts from around the globe. You can expect speed talks, expert insights, and networking opportunities.

# **5** UNBL user outreach

The UNBL Partnership supports users directly to access and leverage UNBL's functionalities to advance national and sub-national work towards conservation and sustainable development. In addition to our training and capacity building program, we work one-on-one with our users to create workspaces tailored to meet their needs and address their inquiries.

### In 2024, this included:

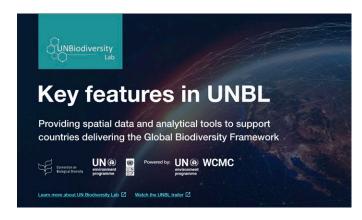
- Workspaces: The UNBL Partnership created 37 secure workspaces requested by users to create a community of practice, connect their own data through their own data servers, and calculate dynamic metrics for specific areas of interest, leading to a total of 227 workspaces active on the platform. In addition, 3 workspaces created for UNDP country offices and governments were updated through UNEP-WCMC and UNDP's Prioritizing Nature Project that supported countries in developing national roadmaps to achieve Target 3 of the KMGBF. Across the 227 workspaces granted on UNBL, 16.3 % are for government users, 36.6 % are for academic users in universities and research institutes, 24.2 % are for NGOs including the Worldwide Fund for Nature (WWF), World Resources Institute (WRI), Wildlife Conservation Society (WCS), Birdlife International, Endangered Wildlife Trust (EWT), Rainforest Alliance, International Union for Conservation of Nature (IUCN), etc., and 6.1 % are for UN agencies.
- One-on-one support: The UNBL Partnership responded to 100 + email requests for support from users around accessing data, creating workspaces, uploading data, potential collaboration, and general troubleshooting.
- Co-creation of workplans to support use of spatial data for national action to support the KMGBF: Through funding from the Gordon and Betty Moore Foundation, the UNBL team developed workplans with Cuba, the Dominican Republic, Ecuador, Ghana, Malawi, South Africa, and Sri Lanka for the 'UNBL-GBF Mapping Project' to support national activities for use of spatial data to support planning, monitoring, and reporting on the KMGBF that will be implemented in 2025.
- Technical support to GEF-eligible Parties around assessing needs for monitoring and reporting: In collaboration with the GEF-funded Early Action Support (EAS) Project, the UNBL team provided feedback on request to over 10 countries around the development of their national monitoring plans for CBD.
- UNBL user survey: The UNBL team developed and disseminated a user survey between October-November 2024. During the time it was live, 64 responses were collected, enabling the team to gain insight into how the UNBL platform is being used who is using it, how users are arriving on the tool and what their experiences are. This information will be used to make evidence-based decisions around future work (e.g. site development and serving users) needs, as well as messaging and marketing). Respondents identified themselves as working in diverse fields, including academia (38%), NGOs/NPOs (20%), national governments (13%), and others. Respondents from different sectors differed in what they reported using UNBL for, with 49% of them reporting to have used or planning to use the site to support work on NBSAPs development, reporting or monitoring. Most UNBL features (e.g. global data layers, dynamic metrics, workspaces, data collections, user guides) were reported as being somewhat or very useful to respondents. The Protected Areas Data Collection and the Ecosystem Restoration Data Collection received some of the most positive ratings, with 76% and 75% of respondents, respectively, rating it as somewhat or very useful. Suggested improvements included data download, searches, and country-/area-specific aspects.



## 6 UNBL communications

The UNBL Partnership builds high-level communication resources to raise awareness of the platform and encourage its use. It also aims to establish the UNBL as a trustworthy resource for national-level planning, implementation, monitoring and reporting for the KMGBF.

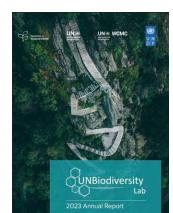
In 2024, we produced brochures, press releases, and a newsletter, including:



# UNBL Features to Support National Action on the KMGBF Brochure

The brochure explores existing features and upcoming new features on UNBL that can support Parties around their commitments to the CBD and the KMGBF. It is the ideal resource for users who are curious about updates and upcoming developments that can support national needs for KMGBF planning, implementation, and monitoring.

The brochure is available in <u>English</u>, <u>French</u>, <u>Portuguese</u>, <u>Russian</u>, and <u>Spanish</u>, and was promoted at CBD COP16 and UNWDF.



### **UNBL 2023 Annual Report**

 $\label{lights} \mbox{Highlights key activities and accomplishments of the UNBL Partnership in 2023.}$ 



Welcome to the UN Biodiversity Lab (UNBL) Newsletter!

### **UNBL Newsletter**

Our newsletter highlights current and forthcoming UNBL functionalities designed to support national action around the KMGBF as well as UNBL's planned presence at CBD COP16 and UNWDF. The newsletter was shared in English and Spanish to UNBL's mailing list of 1,382 registered users, helping to keep the community informed and engaged with the latest developments.



Ciencia y Tecnología





#### Minam y NASA elaboran información para abordar crisis climática y pérdida de biodiversidad

Trabajo colaborativo se desarrolla como parte de los proyectos "Priorizando la



### **Press releases in Peru**

Press releases were developed in collaboration with the Ministry of Environment of Peru to showcase the country's engagement in the UNWDF. The press coverage was picked up by two national newspapers <u>El Peruano</u> and <u>La Adina</u>, featuring Peru's national use of UNBL.

Visualization and simple user interface.

Academic based on the Netherlands in response to 'What do you like most about UNBL?'

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### **Looking forward**

2025 offers an unparalleled policy window as countries work to revise their NBSAPs under the CBD, as well as the equivalent national policy documents for action on climate change and land degradation. These policy documents will guide national action for the next five years, one of the most critical windows to bend the curve on biodiversity loss and to address the climate crisis. UNBL exists to support this critical work.

### Key UNBL activities on the horizon for 2024 include:

### 1 UNBL governance

The UNBL Partnership will continue to build relationships with key partners supporting national action around the KMGBF and its monitoring framework, to refine activities in support of the UNBL Strategic Plan 2022-2030, and to fundraise for sustained engagement.

### 2 UNBL development

The UNBL Partnership will develop and release a variety of new features including dynamic metrics, web interface enhancement, filtering system, and the ELSA Integrated Spatial Planning Tool on UNBL to support planning, monitoring, and reporting on the KMGBF.

### 3 UNBL data

The UNBL Partnership will work to enhance data standards and back-end programming to enable users to seamlessly combine national and global data layers for national and subnational spatial analyses. In addition, we will focus efforts on enhancing our regional and national data offerings through the platform.

### 4 UNBL training and capacity building

The UNBL Partnership will focus training and capacity building to support low- and middle-income countries to use spatial data and planning to support NBSAP updates, NBSAP implementation, and 7NR development. This will include UNBL trainings for countries that are part of the UNBL-GBF Mapping Project working to provide spatial support for national implementation of the KMGBF.

### 5 UNBL user outreach

UNBL user outreach: The UNBL Partnership will work directly with Cuba, the Dominican Republic, Ecuador, Ghana, Malawi, South Africa, and Sri Lanka to provide tailored spatial support for NBSAP development and implementation, as well as monitoring and reporting in the 7NR. In addition, we will continue to provide high-quality assistance to all users in planning, monitoring, and reporting on the KMGBF, as well as present at selected events on biodiversity conservation and sustainable development.

### **6** UNBL communications

UNBL communications: The UNBL Partnership will focus on the development of user feature stories that communicate how countries are using UNBL to support national action on the KMGBF. We will also be rolling out a series of communication and guidance materials as well as participating in strategic events at meetings of the CBD SBSTTA to promote the release of the ELSA Integrated Spatial Planning Tool on UNBL. Finally, we will be updating our guidance materials and implementing more regular updates to our users about new development and data available on the platform through LinkedIn and our newsletter.

In addition to these core UNBL offerings, to ensure that we can continue to deliver relevant services for the countries we work with and beyond, in 2025 UNBL will develop a three-tiered service model that is scalable, flexible, and tailored to country needs, from open-access (Tier 1) to light support (Tier 2) to co-developed national partnerships (Tier 3). This model is designed to support the entire policy cycle, including planning (e.g. spatial prioritization), implementation (e.g. national biodiversity plans, restoration), and reporting (e.g. KMGBF indicator calculation and 7NRs). With development of the platform fully managed within the UNBL partnership by industry-leading experts, we plan to adapt to user needs through feedback-driven updates, user testing, and national customization based on capacity and needs.



### **Partners & Donors**

Special thanks go to the following donors and partners who have made the UNBL Partnership's achievements possible:

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PERMANENT MISSION OF DENMARK TO THE UN IN NEW YORK

Ministry of Foreign Affairs of Denmark





### Convening partners







### **Technical Partners**







### Powered by



### **UNBL** Team

Learn about the team behind this work on the **UNBL** team page.

### **UNBL Social**

Follow our UNBL partner accounts & #UNBiodiversityLab for regular updates:

- NBSAP Forum and UNBL: <u>Twitter | Facebook</u>
- UNDP: <u>Twitter</u> | <u>LinkedIn</u> | <u>Facebook</u>
- UNEP: <u>Twitter</u> | <u>LinkedIn</u> | <u>Facebook</u>
- UNEP-WCMC: Twitter | LinkedIn | Facebook



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