

An aerial photograph of a lush green forest. A winding river flows through the landscape, and a dam is visible in the upper right. The image is partially obscured by a dark blue overlay on the left and bottom, and a wavy blue graphic on the right.

Introduction to the Global Ecosystems Atlas

Presenter: Falko Buschke
Country Engagement Specialist



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ATLAS

Overview

1. Ecosystem maps in the Global Biodiversity Framework.

- What do we mean by ecosystem maps
- IUCN Global Ecosystem Typology

2. What is the Global Ecosystems Atlas?

3. How can the Global Ecosystems Atlas help you?

4. How you can contribute to the Global Ecosystems Atlas.



Ecosystem data in the Global Biodiversity Framework



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GLOBAL BIODIVERSITY FRAMEWORK

Indicators

- A.1. Red List of Ecosystems
- A.2. Extent of natural ecosystems
- B.1. Services provided by ecosystems
- 2.1. Area under restoration
- 3.1. Coverage by protected areas and OECMs
- 21.1. Biodiversity information



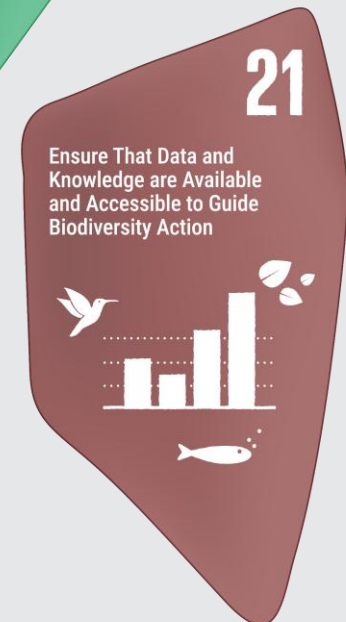
Plan and Manage
all Areas to Reduce
Biodiversity Loss



Restore 30%
of all Degraded
Ecosystems



Conserve
30% of Land,
Waters and Seas



Ensure That Data and
Knowledge are Available
and Accessible to Guide
Biodiversity Action



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National maps of ecosystem types

A dynamic complex of organisms and their non-living environment interacting as a functional unit, within a defined area.

Not to be confused with:

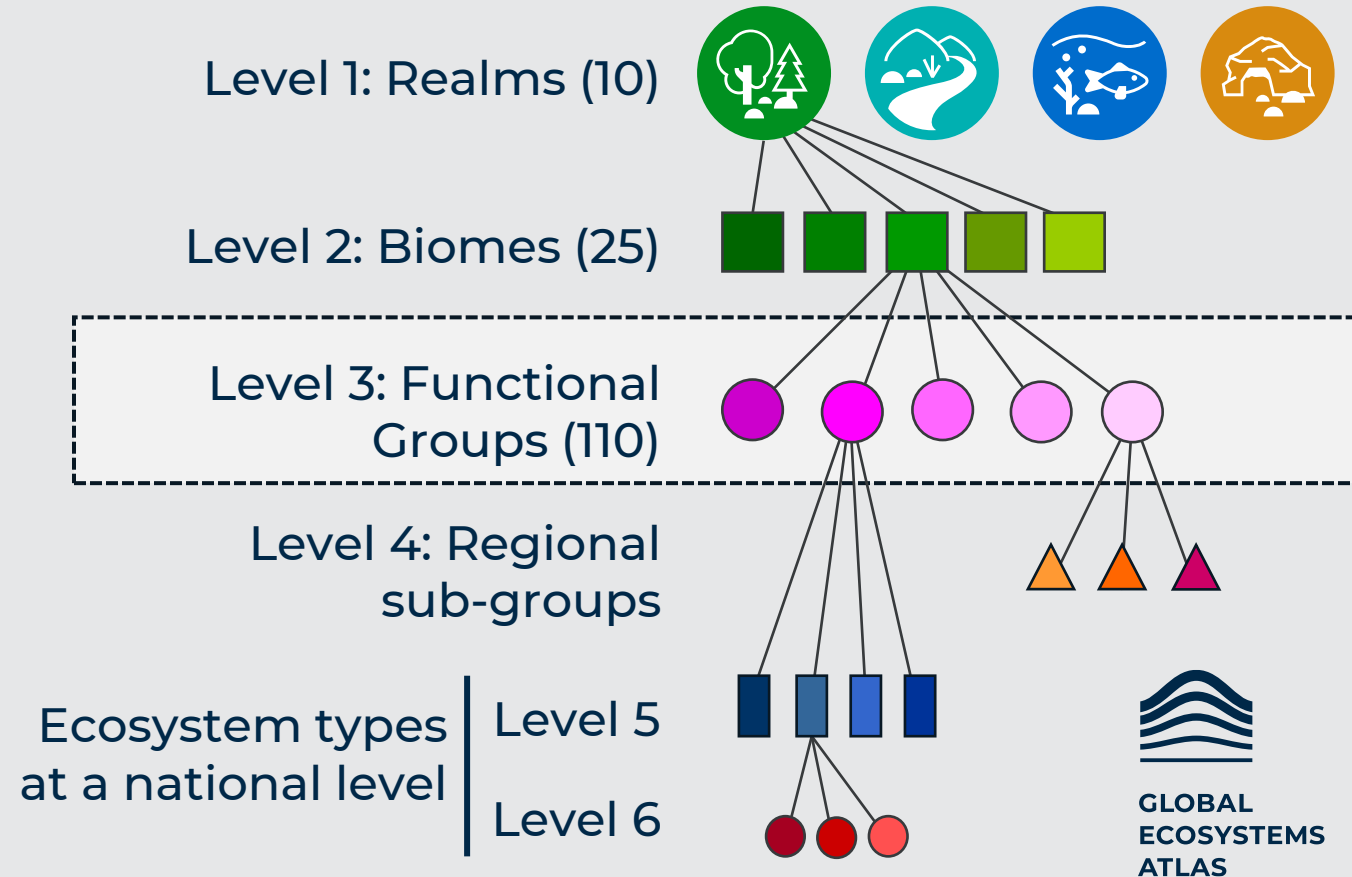
- Land-cover data
- Land-use data
- Species or habitat distributions

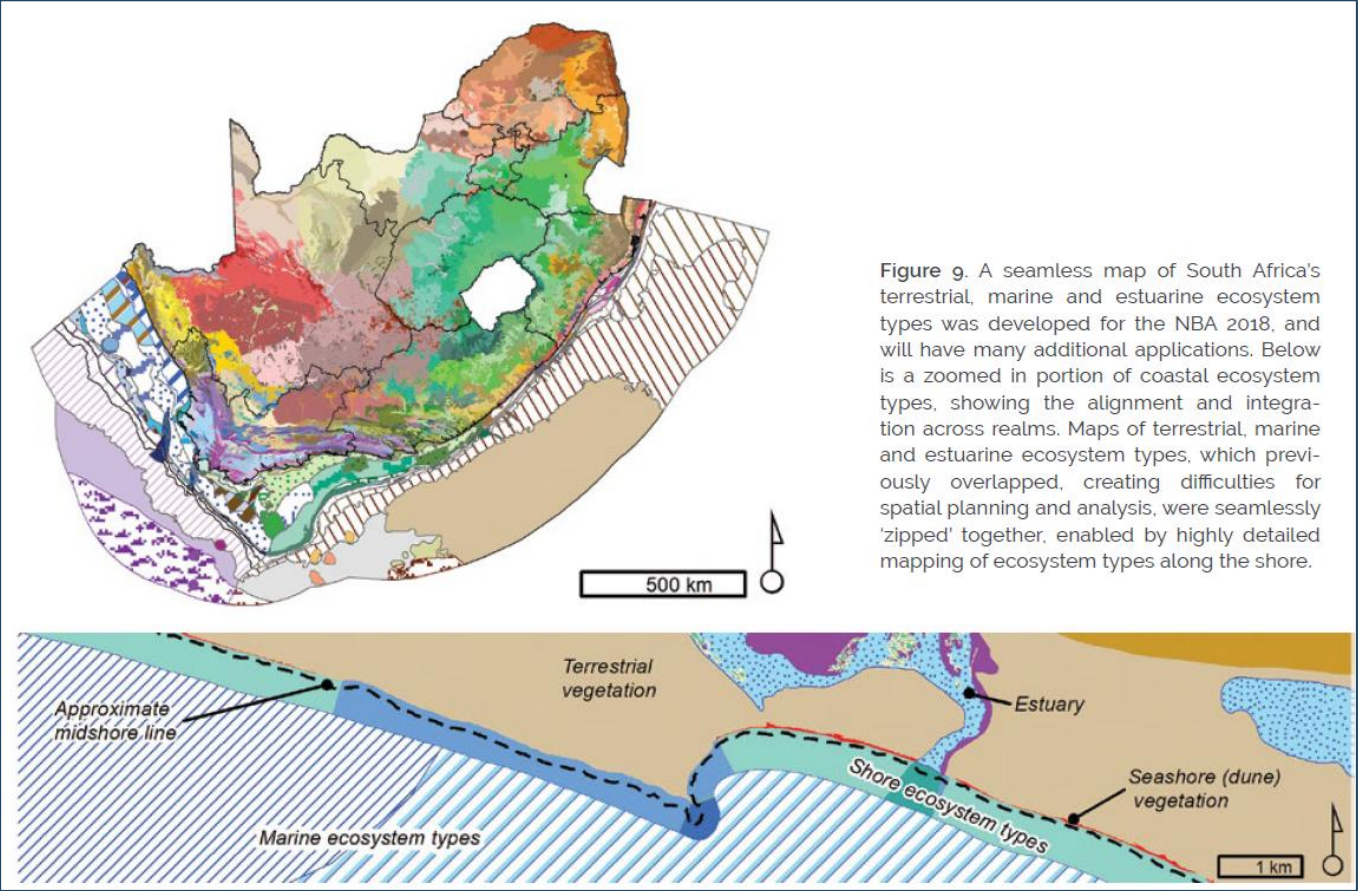
Not 'just' a map:

- Geospatial data + metadata
- Ecosystem classification + descriptors
- Technical report



Global Ecosystem Typology





Project Menu

- Project Home
- 2024 Vegetation Map
- VEGMAP Book Chapters
- 2009 Vegetation Map
- 2012 Vegetation Map
- Map versioning
- National Vegetation Database
- National Vegetation Map Committee and Associates
- Guidelines
- Submit updates and revisions
- Citing VEGMAP products
- Publications and resources
- 2018 Vegetation Map
- 2006 Vegetation Map

Contact

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Technical Documents

- TechnicalMotivation UpdatingMangroves V7_28052024 (1602.27 KB)
- TechnicalMotivation Southern Afrotropical Forest Langeberg (1264.95 KB)
- TechnicalMotivation RevisingHolocene Strandveldsv2_04032024 Reviewed ALS (586.54 KB)
- TechnicalMotivation NewNorthWest Vegetationmap_ALS (697.39 KB)
- TechnicalMotivation Miscellaneous SpatialEditsNVM2024v2 als (661.89 KB)
- TechnicalMotivation MinorChanges ElimFerricrete AGR review_Final (1506.09 KB)
- TechnicalMotivation Correcting the shape of SVcb 22 VhaVenda Miombo ALS (842.23 KB)

Spatial Datasets

- 2024 Beta National Vegetation Map (File Geodatabase)
- 2024 Beta National Vegetation Map (Shapefile)
- 2024 Beta National Vegetation Map App
- 2024 Beta National Vegetation Map KMZ Viewing Only
- 2024 Final National Vegetation Map (File geodatabase)
- 2024 Final National Vegetation Map (Shapefile)
- 2024 Final National Vegetation Map App
- 2024 Final National Vegetation Map KMZ Viewing Only
- 2024 National Vegetation Map Symbolology

Botts, E. et al. (2020) More than just a (red) list: Over a decade of using South Africa's threatened ecosystems in policy and practice. *Biological Conservation*, 246, 108559.

What is Global Ecosystems Atlas?

A cross-sector collaborative initiative to map and monitor the world's ecosystems and provide dynamic visualisations of natural environments.

Convened by the Group on Earth Observations (GEO).



Supported by:

Funded by:

In partnership with:



Data assets



Global Ecosystem Synthesis Map

World's first geospatial data product designed to represent the distributions of all the world's ecosystems (110 classes, 119 data bands)



Global Ecosystems Data Catalogue

A database that collates metadata on the world's existing geospatial data of ecosystems.



Global Ecosystems Atlas Application

Open access online analytical tool to support fast and accurate analyses of key ecosystem-related indicators and conservation targets.

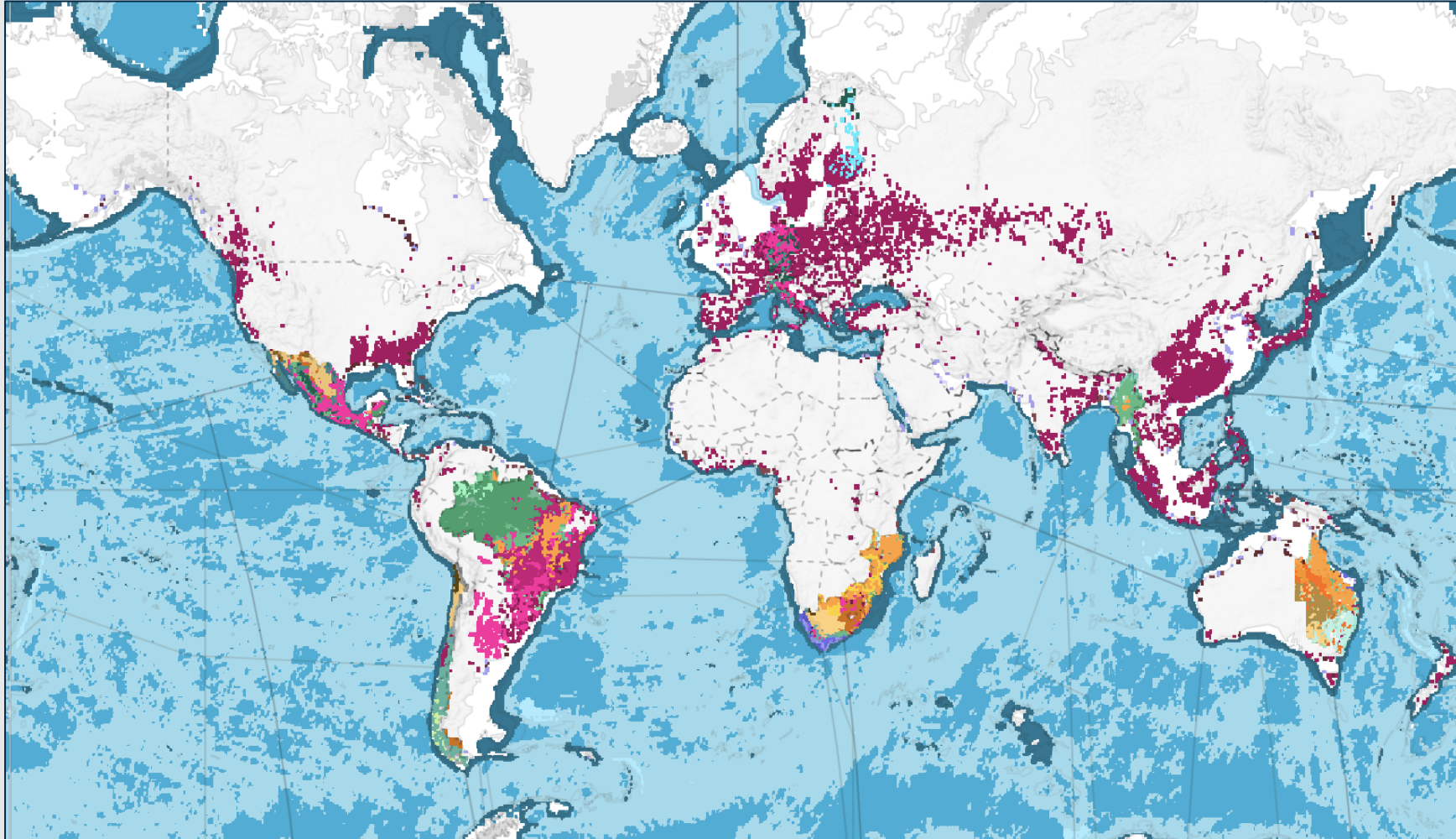


EcoTrain Training and Validation Dataset

Open access occurrence records of 110 global ecosystems to support spatial models of ecosystems, validate map products, and cross-reference maps to the Global Ecosystem typology

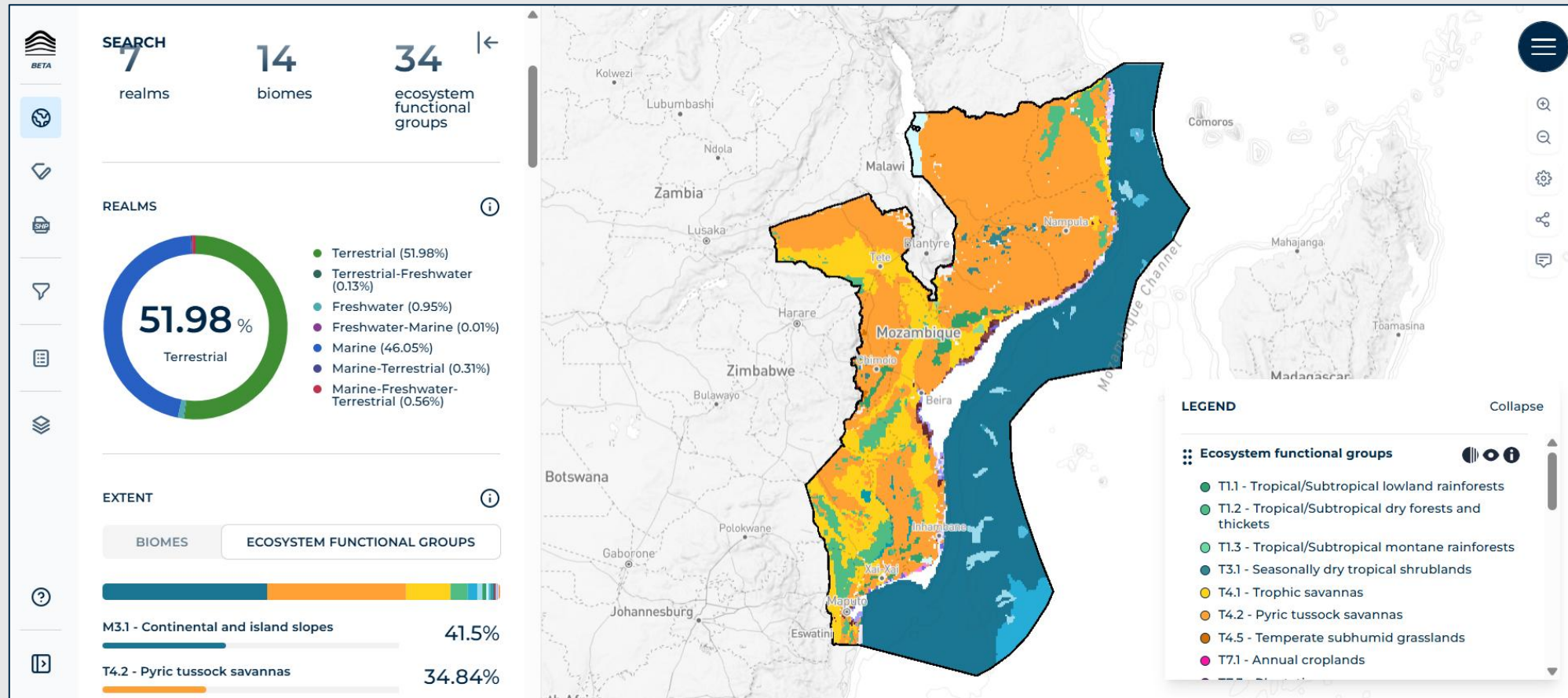


Synthesis map



Global Ecosystems Atlas Application

<https://globalecosystemsatlas.org/>



How can the Global Ecosystems Atlas help you?

Data products

- **Synthesis map** of ecosystem functional groups
- **Catalogue** of ecosystem maps
- **Validation** dataset

Web application

- **Explore** synthesis map online
- **Download** synthesis map
- **Link** to underlying national & global maps
- **Apply** analytical tools

Network of ecosystem mapping practitioners

- **Facilitating learning** and sharing of approaches.
- Consortium of **partners**.
- **Community** of users

Support to countries

- **Partnership** approach
- Embedded in national institutions
- Facilitating access to new **data and technologies**
- National mapping **accelerators**

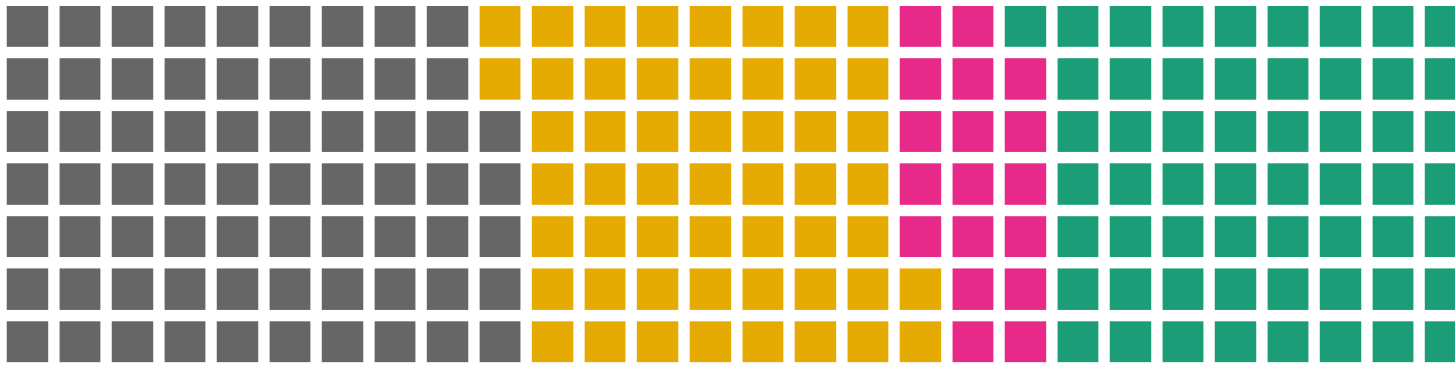
Resources for countries

- **Guidelines** for developing national ecosystem maps
- **Tools for cross-walking** national ecosystem types to the Global Ecosystem Typology
- **Training datasets** per ecosystem functional group



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Did not submit 7th National Report (34.7 %)
 Did not report Indicator A.2 (27.0 %)
 Indicator A.2 incomplete (9.2 %)
 Complete Indicator A.2 (29.1 %)



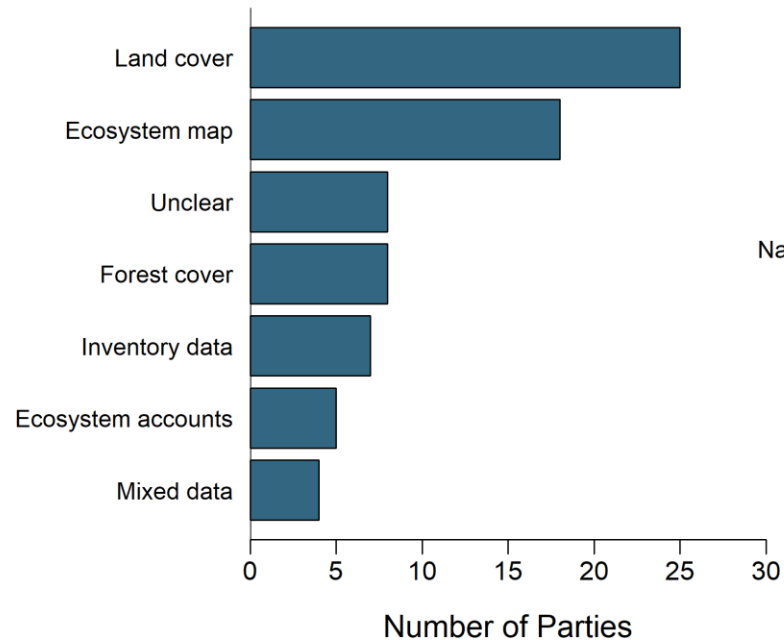
Convention on
Biological Diversity



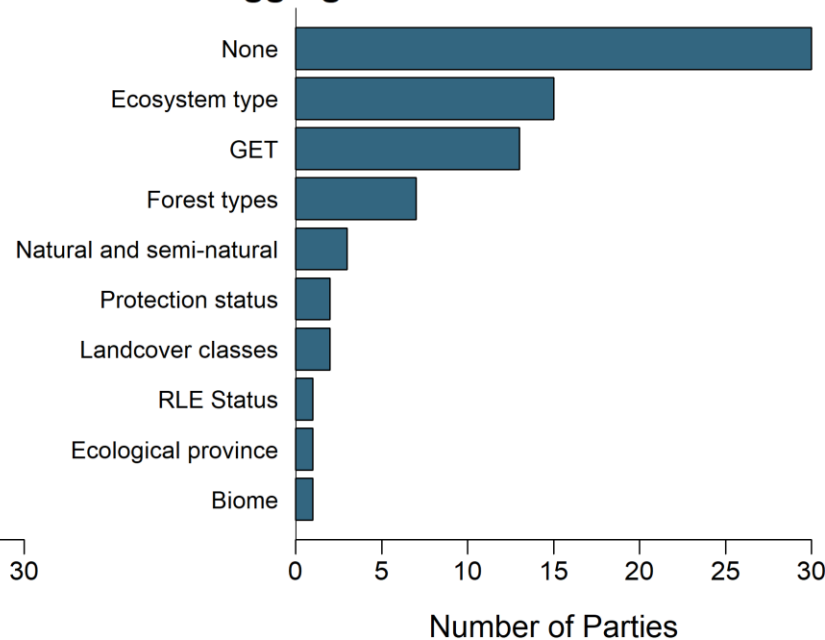
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GLOBAL BIODIVERSITY FRAMEWORK

a. Data sources



b. Disaggregation



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Contribute to the Global Ecosystems Atlas



- 1. Consolidate ecosystem data from all realms**
 - Inter-institutional collaboration
- 2. Cross-walk ecosystem types to Global Ecosystem Typology (Level 3)**
 - Local expertise
- 3. Contribute your data to the Atlas catalogue**
 - Quality control and validation
- 4. Identify gaps in spatial coverage**
 - Identify needs

Conclusions

Ecosystem maps are central to the Global Biodiversity Framework

- 2 Goals, 4 Targets, 6 Headline indicators

National ecosystem maps should be prioritised in NBSAPs

- Development of maps, monitoring of ecosystems

Tangible benefits for embedding in international initiatives

- Global Ecosystem Typology, Global Ecosystems Atlas

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