



Latin American and the Caribbean Engagement Meeting for the Biodiversity Information for Development Programme

Webinar (11 Dec. 2024) & Regional consultation

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Executive summary

The Global Biodiversity Information Facility (GBIF) hosted the Latin America and Caribbean Engagement Webinar as part of the Biodiversity Information for Development (BID) programme, funded by the European Union. The meeting was held in a virtual format on the 11th December 2024. It was followed by an online consultation process via a multilingual survey, the results of which are also summarized in this report.

This report contains three annexes: [Annex I](#) includes the list of participants in the webinar, [Annex II](#) describes the format of the meeting and summarizes the presentations and discussions, and [Annex III](#) details the analysis of the regional survey, which identifies regional priorities and recommendations for the implementation of the BID programme in the Latin America and Caribbean region.

The virtual meeting strengthened the engagement of the biodiversity data community from the start of the BID programme by identifying regional needs for the upcoming BID call for proposals, fostering synergies with existing initiatives, and encouraging broad participation in all the programme's actions. It introduced GBIF and the BID programme, featured insights from past grantees, and presented the plans for the new phase of BID, including goals and timelines. The GBIF Data Products team highlighted regional data gaps, while a panel discussion explored data mobilization and capacity needs.

The multilingual survey gathered further valuable feedback from close to 70 people from all across the Latin America and Caribbean region, identifying priority data needs, challenges, key stakeholders, and strategies to enhance data use, impact, and programme improvements.

The meeting and the survey pointed to the need for the BID programme to focus on closing data gaps, enhancing data accessibility, and integrating diverse knowledge sources. Priorities include digitizing critical datasets, improving data quality, and engaging stakeholders—especially Indigenous Peoples, local communities and the private sector—while adhering to *FAIR* (Findable, Accessible, Interoperable, Reusable) and *CARE* (Collective benefit, Authority to control, Responsibility, Ethics) principles. Capacity-building through targeted training in data management and analytical tools is essential to strengthen regional expertise.

Collaboration with national and regional networks, alignment with global biodiversity goals, and streamlined funding processes will maximize impact. Expanding outreach and demonstrating the practical benefits of biodiversity data in conservation and policy making will drive long-term engagement and sustainability.

The outcomes of the meeting and survey will inform the implementation of future BID activities in the Latin America and Caribbean region.

Background

The [Global Biodiversity Information Facility](#) (GBIF) is an international network and open data infrastructure funded by the world's governments and designed to provide free and open access to biodiversity data. GBIF's mission is to support research and inform decision-making by enabling anyone, anywhere to discover and use information about all forms of life on Earth.

The [Biodiversity Information for Development](#) (BID) programme, funded by the [European Union](#) and implemented by GBIF, seeks to strengthen the capacity of developing countries to mobilize and share biodiversity data. By improving access to data, information, and knowledge, the BID programme aims to support the effective implementation of the [Kunming-Montreal Global Biodiversity Framework](#) (GBF), contributing to global efforts to halt biodiversity loss and promote sustainable development.

The new phase of the BID programme, running from August, 2024 to July, 2029, will focus on Africa, Latin America and the Caribbean, and the Pacific regions. Planned activities include capacity development workshops and competitive calls for project proposals focused on the mobilization, standardization, and publication of biodiversity data through the GBIF infrastructure. The programme aims to foster a strong regional community of practice dedicated to the sharing and reuse of biodiversity data, supporting scientific research, and integrating biodiversity information into decision-making processes.

Objectives of the Latin America and the Caribbean Engagement Meeting for the Biodiversity Information for Development (BID) Programme

As part of the BID programme's efforts to strengthen the use of open biodiversity data in research and decision-making to support the achievement of global biodiversity targets, Sustainable Development Goals (SDGs), and the UNESCO Recommendation on Open Science, GBIF organized a suite of regional meetings in the BID target regions. These regional meetings aim to identify the specific capacity and information needs required to support the development of national indicators and the implementation of relevant global frameworks.

The BID engagement meeting for Latin America and the Caribbean followed a virtual format and was held on the 11th December 2024. This event brought together representatives from GBIF Participant nodes, biodiversity data-holding institutions, the research community, regional support centres for the Convention on Biological Diversity (CBD), and other

initiatives involved in the collection, sharing, and use of biodiversity data across the Latin America and the Caribbean region.

During the meeting, a multi-lingual online consultation was launched to enable participants to share their views on the topics discussed (see [Annex III](#)).

The primary objectives of the meeting and consultation were to:

- Discuss approaches to strengthening the community with those currently engaged in activities related to open biodiversity data.
- Identify key capacity-building and data requirements to inform the development of the next BID call for proposals aimed at mobilizing biodiversity data in the Latin America and the Caribbean region.
- Explore opportunities for synergies between ongoing and upcoming regional initiatives and the BID programme, including potential areas for training, data sharing, and the integration of regional data flows into BID-supported activities.
- Encourage broad participation in future BID calls for proposals by engaging prospective applicants, reviewers, mentors, trainers, and partners.

As a key activity of the current phase of the BID programme, the discussions on regional priorities held during this meeting and inputs from the subsequent regional consultation will play an important role in shaping the regional approach to biodiversity data mobilization in the Latin America and the Caribbean region to be implemented under the BID programme.

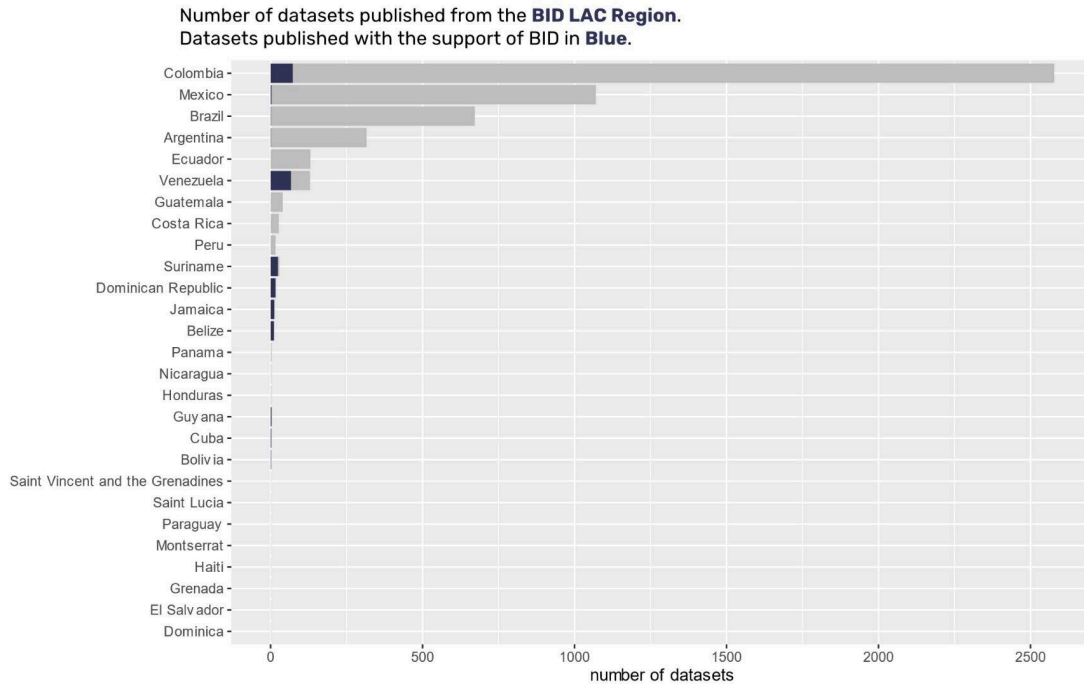
Key outputs of the meeting and regional consultation

1. Analysis of Data Availability and Gaps for the Latin America and the Caribbean region (LAC) in GBIF

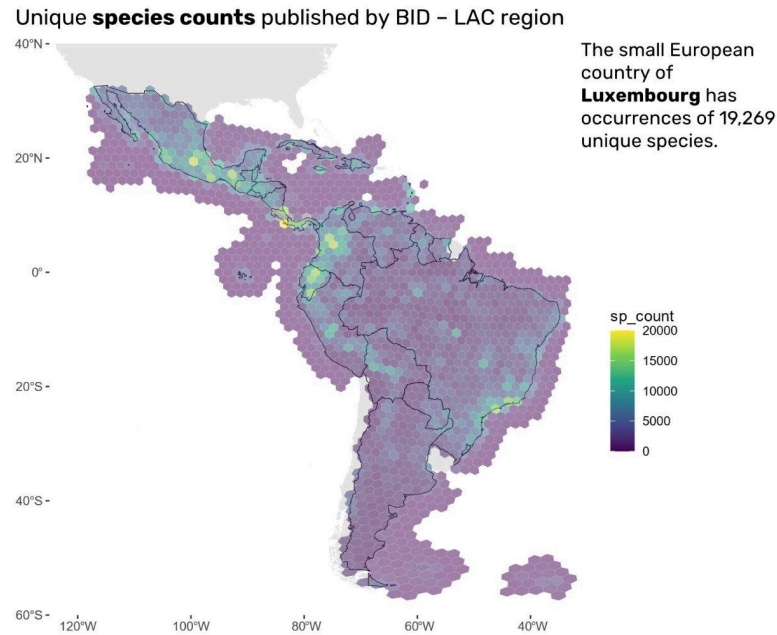
We performed a data analysis on the data currently available through GBIF relating to the BID eligible countries and areas from the Latin America and Caribbean (LAC) region (Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Venezuela). This analysis was focused on finding occurrence data gaps that could be filled through further mobilization.

A data gap is a place where we suspect there should be occurrence records, but there are not any. In GBIF mediated occurrence records, this can mean a lack of records in certain regions, taxonomic groups, or time periods. Gaps can also exist in publishing, where occurrence records are predominantly published by researchers or institutions outside the BID country or area. In general, it is difficult to know with certainty what occurrences are actually missing, or what gaps need to be filled. Typically, unknown gaps are going to be quite prevalent in undersampled regions, and known gaps will be quite rare. The BID LAC region is likely to be undersampled for many taxonomic groups.

For the LAC region, the BID programme has supported publishing of only a few datasets. The BID LAC region has published a large number of datasets. However in the figure below, we can still see a gap in local publishing. A few countries/areas have published only a few datasets or none at all, with the exception of repatriated eBird records. All countries get citizen science eBird records repatriated to the country of origin.

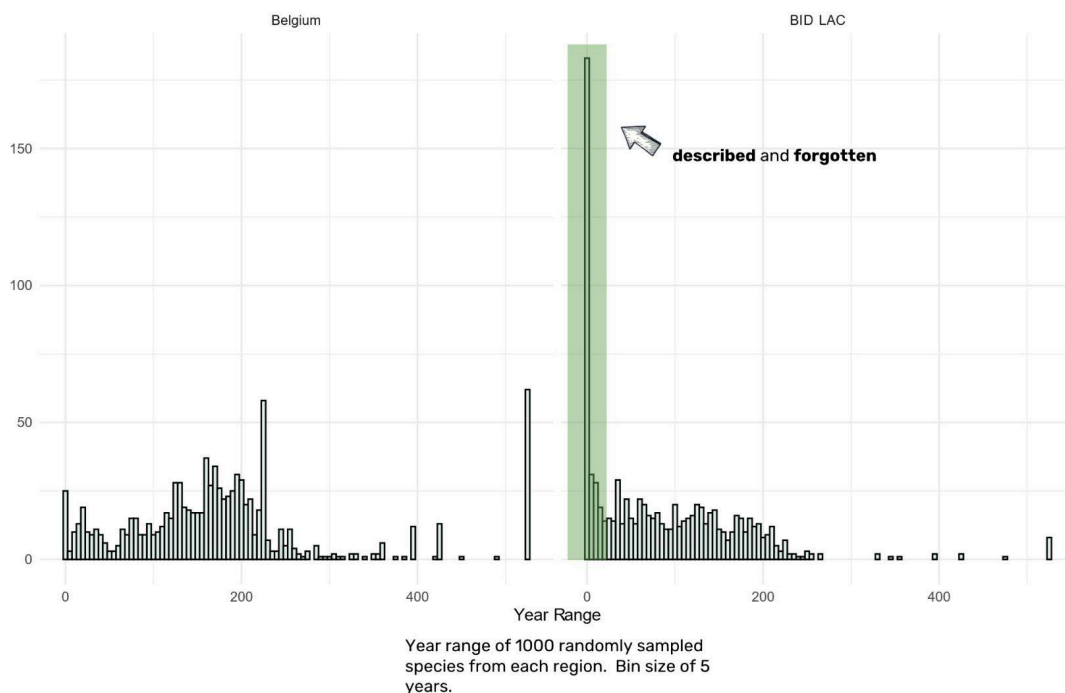


Raw occurrence counts can often mask data gaps, as a high number of records does not necessarily indicate good coverage. Species counts are an effective way to highlight data gaps in occurrence records, as they can reveal under-sampled taxa or regions. Below is a map of the BID LAC region, with lighter colors indicating higher species counts from those hexagons. The dark purple color in many of the EEZ sea areas indicates a low species count of <1000 unique species known for that area.



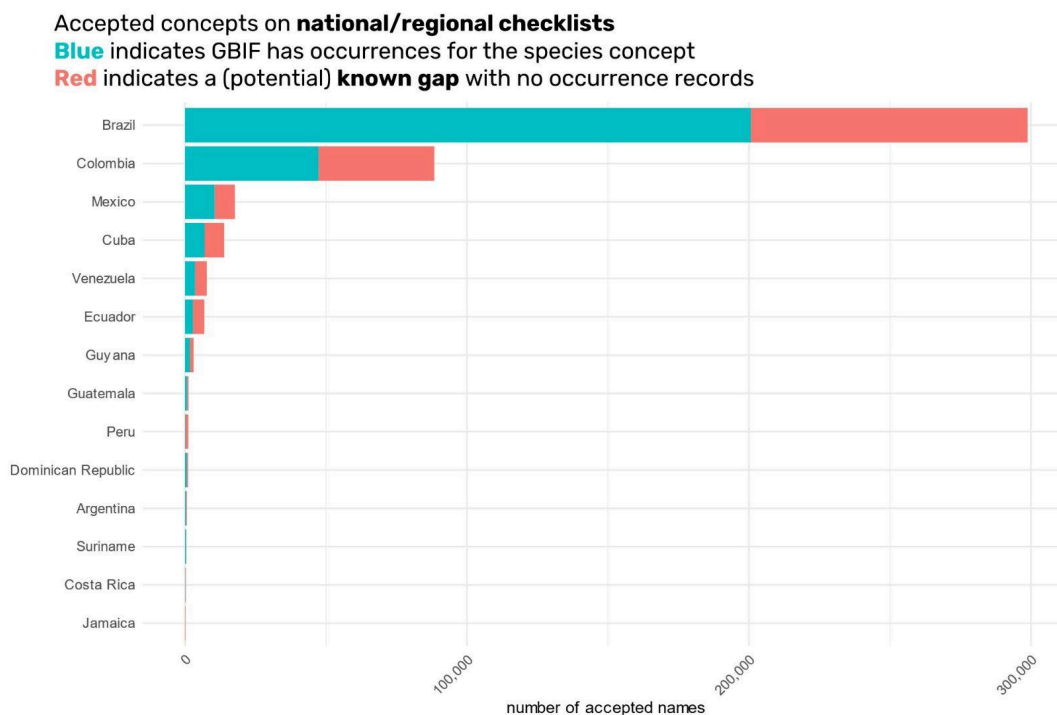
Here we use Luxembourg as a useful comparison because, despite its low expected species richness, it has been extensively sampled. This makes it good for highlighting data gaps in less well-sampled regions by providing a comparison to a country that we do not expect to be very species rich, but well sampled. In the figure above, we see that even the most well-sampled hexagons in the region are almost never greater than the species richness of Luxembourg (with the exception of one hexagon in Costa Rica), strongly indicating significant data gaps in the region.

Temporal gaps occur when a species is initially recorded or described, but subsequent occurrence records for that taxon are missing or scarce over time. Temporal gaps can be found by looking at a taxon's year range, or the time between the first and last occurrence record. Newly described species and undersampled species are expected to have short year ranges. This lack of follow-up data can indicate an absence of monitoring or insufficient sampling efforts, making it difficult to track changes in the species' or population status.



In the figure above, we see that the BID LAC region has a large amount of “described and forgotten” species. These species were described, with occurrences being published to GBIF, usually through a foreign natural history museum, and then no more occurrences were shared for that species. In this figure, each bar represents 5 years, with the height of the bar indicating the number of species with occurrence only within that interval. This graphic indicates a large number of species with temporal gaps (and likely some newly described species). Species with only a few occurrences in a narrow time range are difficult to use for IUCN risk assessments. Belgium is included as a comparison. Belgium is expected to be well sampled and continuously monitored. The year range histogram reflects that Belgium likely has few temporal gaps.

National checklists can reveal data gaps by providing a baseline of expected species within a country, against which occurrence records can be compared. While checklist datasets are not as information rich as occurrence datasets, they are useful for identifying known data gaps. The BID LAC region has published a fair amount of checklist data, seen in the graphic below. We can see there are many known gaps in the BID LAC region. Known gaps are, of course, better than unknown gaps.



The analysis of the LAC region, revealed many data gaps and a strong need for data mobilization in the region. Unless a country publishes a somewhat comprehensive national checklist, known gaps are rare, and we seldom have strong knowledge of what exact species occurrences are missing occurrence records, and these unknown gaps are expected to be the largest gaps for undersampled countries and regions.

2. Regional Recognition of BID as a Contribution to Targets 20 and 21 of the Kunming-Montreal GBF

The Latin America and Caribbean Engagement Meeting and regional consultation underscored the importance of the Biodiversity Information for Development (BID) programme in advancing regional efforts toward achieving [target 20](#) on capacity building and [target 21](#) on data accessibility of the Kunming-Montreal Global Biodiversity Framework (GBF).

It was acknowledged that the BID programme plays a critical role in supporting national and regional efforts to meet global biodiversity targets through the mobilizing of biodiversity data, the building of individual, institutional, national and regional capacity, and the facilitating of data-sharing mechanisms.

3. Recommendations from the Region on Priority Impact Areas

a. Regional Consultation Analysis and Respondents

The online survey (see [Annex III](#)) was disseminated in three languages (Spanish, English and Portuguese) and was available from December 12, 2024 to January 20, 2025.

In total, the survey received 66 responses, of which nine were anonymous. The survey was answered by people who identified themselves as members of academia (35.9%), research institutions (25%), non-governmental organizations (18.8%), governments (12.5%), GBIF nodes (6.3%) and finally, the private sector.

The survey comprised 22 questions, 19 of which were open ended, and generated a large amount of information that was later categorized at the time of generating this report. The open-ended questions were analyzed based on categories commonly used in the GBIF community to facilitate analysis. The examples provided, the names of the mentioned institutions, and the described actions reflect the respondents' input and do not represent an official GBIF position.

b. Mobilization of Data Sources

The regional consultation results highlight pressing needs for biodiversity data mobilization in the LAC region. Priorities include digitization and data publishing, enhancing data accessibility so that it can be reused, and capacity building to strengthen human resources. Key areas of focus are on supporting the mobilization of monitoring data, addressing data gaps, and strengthening biological collections. Conservation efforts require data to be mobilized, for example to support IUCN Red List assessments, for invasive species detection and control, and to increase knowledge of the state of strategic ecosystems such as coral reefs, mangroves, and tropical forests.

There is a need to engage Indigenous Peoples and local communities in the region in data mobilization. The survey results underscores the need to prioritize inclusivity, ensuring that these communities—who are often the primary stewards of biodiversity—have a voice in data initiatives. Their traditional knowledge, combined with scientific data, provides a more comprehensive understanding of ecosystems, species distribution, and conservation priorities. Involving them also strengthens the ethical dimensions of biodiversity data sharing, fostering equitable collaborations and ensuring that data benefits local communities.

The consultation further highlighted the importance of diversifying data sources, for example by integrating DNA metabarcoding and agrobiodiversity data. DNA metabarcoding plays a vital role in biodiversity assessments, enabling rapid species identification, detecting cryptic species, and improving ecosystem monitoring. Making such data available enhances research on species diversity, food security, and climate resilience, benefiting both conservation and sustainable resource management efforts. Similarly, agrobiodiversity data is essential for safeguarding traditional crops, promoting sustainable agriculture, and ensuring food sovereignty. By integrating these data types into biodiversity information systems, we can support adaptive management strategies, strengthen policy decisions, and promote resilience against environmental changes.

The mobilization of private sector data, promotion of open data policies, and alignment with regional initiatives will further enhance biodiversity data accessibility and impact. It is a strategic opportunity to drive innovation and foster sustainable decision-making. The survey outcomes suggest that private-sector involvement remains limited in the LAC region, yet their contributions could be transformative for biodiversity conservation and sustainable development.

In the responses collected in the regional consultation, respondents mentioned several GBF targets (targets 1 to 14 and 19 to 22), relating them to different actions in which they are involved at the institutional level. In some cases, respondents also provided concise examples of actions for which biodiversity data are needed relating to the GBF targets, which are listed below. We highlight how GBIF's activities align with specific GBF targets.

GBF Target	Examples of related priority data needs highlighted by respondents	Potential broader contributions from GBIF's activities
Target 1: Plan and Manage all Areas To Reduce Biodiversity Loss	Strengthening monitoring and registration systems for native and threatened species.	Species occurrence data to inform spatial planning, helping identify key biodiversity areas (KBAs), ecological corridors, and priority sites for conservation and sustainable land-use strategies.
Target 2: Restore 30% of all Degraded Ecosystems	Restore degraded ecosystems.	GBIF data supports ecosystem assessments and restoration planning, including monitoring species reintroductions, habitat recovery, and ecosystem functions over time.
Target 3: Conserve 30% of Land, Waters and Seas	Improve access to biodiversity by population, favoring the increase and quality of conserved areas, whether within reserves or urban spaces.	Contribution to identifying and assessing protected areas and Other Effective Area-Based Conservation Measures by providing data on species richness, endemism, and habitat connectivity.
Target 4: Halt Species Extinction, Protect Genetic Diversity, and Manage Human-Wildlife Conflicts	Species and population data needs for the process of updating the list of threatened species.	GBIF data is used to track threatened species distributions, support ex-situ and in-situ conservation efforts, and guide species action plans.
Target 6: Reduce the Introduction of Invasive Alien Species by 50% and Minimize Their Impact	Incorporation of data on exotic-invasive species and the subsequent calculation of establishment indicators of said species.	Distribution data for invasive species, supporting early detection, risk assessment, and management strategies to prevent biodiversity loss.
Target 10: Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries, and Forestry	Maintenance of biodiversity and sustainable use of terrestrial and aquatic ecosystems.	GBIF facilitates access to agrobiodiversity data, helping monitor crop wild relatives, pollinators, and soil biodiversity for sustainable food systems.

<p>Target 11: Restore, Maintain and Enhance Nature's Contributions to People</p>	<p>Collection and accessibility of up-to-date data on interactions between species.</p>	<p>GBIF data supports the assessment and management of ecosystem services, including pollination, water regulation, climate resilience, and disaster risk reduction.</p>
<p>Target 13: Increase the Sharing of Benefits From Genetic Resources, Digital Sequence Information and Traditional Knowledge</p>	<p>Increase the sharing of benefits from genetic resources, digital sequence information and traditional knowledge.</p>	<p>GBIF contributes to documenting genetic diversity, supporting conservation planning and sustainable use strategies.</p>
<p>Target 14: Integrate Biodiversity in Decision-Making at Every Level</p>	<p>Information needs to carry out various analyses at different levels, on topics such as: environmental restoration, sustainable use of biodiversity, conservation planning, reviewing species trade issues.</p>	<p>GBIF engages with the private sector, governments, and civil society to promote biodiversity data integration in corporate sustainability, environmental impact assessments, and national policies.</p>
<p>Target 20: Strengthen Capacity-Building, Technology Transfer, and Scientific and Technical Cooperation for Biodiversity</p>	<p>Capacity building remains a significant priority, as strengthening technical skills in data collection, standardization, and analysis, such as through tools like GIS, species distribution models, Artificial Intelligence, and biodiversity monitoring frameworks, will empower stakeholders to generate and use high-quality data</p>	<p>GBIF strengthens institutional and technical capacity in data mobilization, data management, and biodiversity informatics through training, mentoring, and community engagement</p>
<p>Target 21: Ensure That Knowledge Is Available and Accessible To Guide Biodiversity Action</p>	<p>Support the incorporation of data and information from indigenous and local communities. Enhance data mobilization for species, particularly in regions with high biodiversity but limited data available.</p>	<p>GBIF promotes data access and use, as well inclusive data governance, by recognizing several kinds of biodiversity data and knowledge, facilitating data mobilization, and ensuring equitable data access and benefit-sharing.</p>
<p>Target 22: Ensure Participation in Decision-Making and Access to Justice and Information Related to Biodiversity for all</p>	<p>Generation and dissemination of knowledge, strengthening scientific cooperation and ensuring that conservation actions are inclusive and equitable.</p>	<p>GBIF fosters inclusive participation in biodiversity science by promoting diversity in research, capacity-building, and decision-making processes.</p>

c. Addressing Capacity Needs for Effective Biodiversity Data Management and Sharing

The importance of developing and strengthening capacity to enable increased data access was highlighted by most of the respondents.

This strengthening of capacity relates to a broad range of topics including everything from digitization and publication to improving the quality of available open data—addressing issues such as incomplete data, outdated taxonomy, lack of georeferencing, and involuntary errors. It also includes the capacity needed to fill data gaps (either in a given area or time, or for specific taxon groups), to manage checklists, such as lists of native, invasive and introduced species and threatened species, and for the integration of Indigenous knowledge, private sector data, and DNA-derived data.

Training is seen as a key need for effective biodiversity data management and sharing. Topics such as the [Darwin Core standard](#), data publishing through the [Integrated Publishing Toolkit \(IPT\)](#), database management, data cleaning and standardization were specifically emphasized by the respondents. The need for training in tools such as R, Python and the use of AI was also mentioned, as well as training in the *FAIR* and *CARE* data principles.

Finally, respondents highlighted the need for financing policies for the maintenance of collections, access to equipment, connectivity, technical support and training of human resources by governments.

d. Delivering Biodiversity Data for Use

The respondents had a diverse range of profiles from stakeholders in the academic, government, private and community sectors, as well as organizations and individuals dedicated to biodiversity conservation and sustainable development (for further details, see Annex III, [Part 4](#)). They identified a wide variety of topics for which the biodiversity data to be mobilized through the BID programme could be used including: conservation actions and management of protected areas, agriculture and land use; human health; international goals; human resources training and also research use. The following sections provide a detailed description of these topics, accompanied by examples from respondents demonstrating how biodiversity data could support each one.

Conservation actions and management of protected areas

- Actions for the management of protected areas and biological corridors as well as for ecological restoration projects. Ex-situ conservation actions.
- Establishment of control and mitigation strategies for introduced and invasive species.
- Strategic environmental assessments (whether marine, estuarine or freshwater ecosystems).

Agriculture and land use

- Application of biodiversity information to generate biological indicators of soil quality, optimize the use of agrochemicals, strategies for intensive agriculture, pest control, land use, among others.
- Generation of biodiversity baseline by richness and presence/absence for sustainable productive development in industrial contexts (such as green hydrogen and lithium).

Human Health

- Updated information and monitoring of vectors of interest.
- Planning of urban, rural and protected areas, their management and interaction.

International goals

- To be able to effectively carry out Non-Detrimental Extraction Assessments of wild species protected by the CITES convention.
- Periodic updating, categorization and recategorization of the national list of threatened species (IUCN Red Lists), as well as invasive exotic species.
- Generation of virtual platforms and biodiversity systems, whether at a regional, national or local level.

Training of human resources

- Complete training and updating of educators at different educational levels.
- Training of professionals (taxonomists, biotechnologists, geneticists, biologists, etc.).

Research use

- Correct identification of native, endemic, as well as exotic and invasive species.
- Integration of biodiversity data in global studies (evolution of vector-borne diseases, climate change, invasive species, etc.) and application of knowledge for better management of natural resources (biological pest control, control of water pollution, among others).
- Foundation of projects, whether research, education and/or conservation policies).

In addition, the need to minimize bureaucracy in terms of collecting and research permits was highlighted, as well as the need to be able to participate in the creation, modification and application of public policies by specialists. Another factor that was frequently mentioned was access to funds in order to facilitate activities that generate biodiversity data, its maintenance and analysis. Finally, the benefits of being able to access data under global standards, for its reuse for different purposes and at different scales, were frequently mentioned.

4. Suggested Mechanisms for Addressing Regional Priorities

a. BID Calls for data mobilization projects proposals

To enhance engagement across diverse user groups and maximize the impact of mobilized biodiversity data in the next BID programme call, the following strategies have been identified based on the regional consultation from the LAC region.

Projects must strengthen alliances with national and local organizations, academic institutions, NGOs, and private-sector stakeholders. Projects should also seek to establish protocols to integrate traditional and local knowledge while respecting CARE principles. Additionally, they should aim to foster collaborations with government agencies to incorporate biodiversity data into public policies and sustainable development strategies.

It is also crucial that proposals encourage biodiversity data publication by highlighting the benefits of open data, particularly for private nature reserves and conservation projects. Moreover, the BID programme should align with national biodiversity strategies to ensure long-term impact. Where relevant, private-sector actors—including those in agriculture, tourism, and biotechnology—should be engaged to promote sustainable practices linked to the use of biodiversity data.

To receive proposals aligned to the regional expectations, it is crucial that GBIF expands dissemination efforts through media, social networks, and scientific conferences to reach a broader audience. Focused outreach activities showcasing the practical benefits of open data, particularly for conservation and policy-making, should be developed. Sharing success stories and demonstrating how mobilized data aligns with global biodiversity goals (e.g., the Global Biodiversity Framework) would also help synchronize projects' efforts with institutional, national, and regional priorities.

b. Capacity Enhancement Workshops

To strengthen regional capacity in biodiversity data mobilization, according to the survey participants, the next BID call proposals should incorporate targeted training and knowledge-sharing initiatives. This includes considering the development of specialized capacity-building activities such as workshops, webinars, and training programs tailored to specific needs on topics including Darwin Core standards, GIS applications, species distribution modeling, and programming languages like Python and R. Additionally, providing accessible learning resources—such as manuals and online courses—would support both data mobilization and its practical application. Engaging users in cross-learning initiatives, interdisciplinary meetings, and data rescue efforts would further enhance collaboration and help preserve valuable historical records for future use.

To enhance the effectiveness of BID projects, providing permanent robust technical and logistical support is seen as essential. This includes offering informatics and technical assistance to facilitate the digitization, systematization, and mobilization of biodiversity data. Supporting ongoing projects and data mobilization initiatives would help align efforts, prevent duplication, and maximize impact.

c. Regional and Cross-Regional Support and Knowledge Sharing

To maximize synergies and enhance the impact of the BID programme, several ongoing projects and initiatives in the LAC region present valuable opportunities for collaboration. At the regional and international levels, programmes such as [AFD & GIZ](#), [IOCARIBE-GOOS & MBON](#), and the [CAF Strategic Ecosystem Conservation Program](#) contribute to biodiversity conservation and data mobilization. Additionally, [GEF-funded projects](#), particularly those focused in the Amazon, offer potential for collaboration.

At the national level, various initiatives assist biodiversity efforts. In Brazil, research and innovation programs like CNPq, FAPs, Pró Amazônia, and Amazônia +10 provide institutional support. Cuba's *Atlas of Cuban Biodiversity* serves as a key biodiversity information portal, while in the Dominican Republic, *Fondocyt* projects focus on biodiversity conservation. Paraguay's *Useful Plants of Paraguay* project seeks funding to support plant conservation efforts.

Citizen science and community-based projects in the region, such as *Hornero*, *Proyecto Vaquitas*, *Vi un Abejorro*, and *RedBioma*, engage the public in biodiversity monitoring at national or regional level, enhancing data availability. Additionally, research and technical programs, including Argentina's INTA initiatives, the *Defra Darwin Plus* funding scheme for UKOTs, and the EPIG Database, provide strategic collaboration opportunities.

Strengthening ties with these initiatives would foster collaboration, expand funding opportunities, and enhance biodiversity data mobilization in the LAC region.

d. Additional Opportunities to Strengthen and Sustain the Impact of BID

To enhance the impact of the BID programme and better address the needs of stakeholders in the LAC region, several strategic recommendations have been identified through the survey. These focus on outreach, community engagement, collaboration, project support, data governance, and incentives to ensure long-term sustainability and effectiveness.

Expanding awareness of BID's objectives and outcomes is seen as essential to increase engagement. This could be achieved through public events, social media campaigns, and partnerships with universities, media outlets, and conservation organizations. Communications ideally should be tailored to diverse audiences, including researchers, policymakers, and the general public. Highlighting success stories and case studies would further demonstrate the value of biodiversity data, particularly in decision-making and conservation efforts.

Strengthening human capacity is key to sustaining long-term biodiversity data mobilization. Engaging students and young professionals through training programs would support the building of the next generation of experts in biodiversity informatics. Regular workshops, technical training sessions, and resource materials—including manuals in local languages—would also improve accessibility. Additionally, special attention should be given to reaching remote and traditionally underrepresented communities, to ensure their inclusion in biodiversity data initiatives.

A stronger regional network would facilitate knowledge exchange and coordination. Establishing a BID community through frequent meetings and dedicated communication platforms can enhance collaboration. Strengthening partnerships with existing initiatives would prevent duplication of efforts and optimize resources. Aligning BID objectives with broader agreements, such as the *Escazú Agreement*, can further promote education, advocacy, and a human rights-based approach to biodiversity data governance.

Ensuring a smooth application and implementation process would encourage broader participation. Simplifying funding requirements while maintaining accountability would make BID projects more accessible. Providing administrative and financial guidance—especially in Spanish—would also improve communication with participating institutions. Additionally, equitable participation from both Caribbean and Latin American countries should be prioritized.

Adhering to international best practices such as the *FAIR* and *CARE* principles would ensure responsible data governance. Ongoing training on data management, open-access platforms, and digital tools would support long-term sustainability. Collaboration and capacity building to support the integration of biodiversity data with other relevant datasets, such as ethnobotanical and environmental information, will further enhance accessibility and usability. A continuous monitoring mechanism should be implemented to assess programme impact and refine strategies over time.

Encouraging participation in biodiversity data mobilization requires clear incentives. Showcasing the tangible benefits of data publication—such as its contributions to conservation policies, decision-making, and sustainable development—would help attract new stakeholders. Recognizing the efforts of contributors through awards, certifications, or integration into policy discussions can further motivate engagement.

Implementing these recommendations would strengthen the regional impact of the BID programme. It would also foster inclusivity, and ensure its long-term success in supporting biodiversity data mobilization across the LAC region.

Annex I: Webinar participants

1. Altagracia Espinosa (DO)
2. Amparo Vignolles (AR)
3. Amy Deacon (TT)
4. Ana Andrade (CO)
5. Ana Benavides (CO)
6. Ana Carolina Peralta (US)
7. Ana Moreno Arias (CO)
8. Ana Valeria Carranza (AR)
9. Analia Rivero (AR)
10. Andrea Alejandra Abarca (AR)
11. Andrea Carvajal Román (EC)
12. Andrea Fernández (EC)
13. Andrea Long (AR)
14. Angela Fuentes Pardo (SE)
15. Angelica Batista (CO)
16. Angie Natalia Medina Avellaneda (CO)
17. Anne-Sophie Archambeau (FR)
18. Benjamín Bender (AR)
19. Bertilde Rossi (AR)
20. Bonifacia Benitez de Bertoni (PY)
21. Camila Plata (CO)
22. Candy Ramírez Pérez (DO)
23. Carlos Iván Bonilla (CO)
24. Carolina Calvino (AR)
25. Carolina Castro Moreno (CO)
26. Carolina Peralta (US)
27. Cassio Carvalho (BR)
28. Cecilia Dominguez (AR)
29. Christian Mauricio Margarisca (EC)
30. Clara Baringo Fonseca (BR)
31. Cristina Damborenea (AR)
32. Daniel Pincén (AR)
33. David Iriart (AR)
34. David Maceira (DO)
35. Débora Cintia Chamorro (AR)
36. Diego Nuñez (EC)
37. Egly Verónica Pérez Pincheira (AR)
38. Eliana Walker (UY)
39. Elizabeth Barrientos (AR)
40. Emilia Lobo (AR)
41. Enrique Medianero (PA)
42. Erika Espinosa (CO)
43. Erika Montoya Cadavid (CO)
44. Esteban Meza Torres (AR)
45. Estela Elizabeth Rodríguez (AR)
46. Evangelina Perotti (AR)
47. Evelyn Araujo (EC)
48. Fabricio Emanuel Valdés (AR)
49. Fernando Martínez (AR)
50. Fiorela Delgado (CO)
51. Florencia Grattarola (UY)
52. Francisco Brusa (AR)
53. Francisco Cejas Rodríguez (CU)
54. Francisco Javier Sola (AR)
55. Francisco Martinez (EC)
56. Frank Muller-Karger (US)
57. Gabriel Pompozzi (AR)
58. Guillermo Deferrari (AR)
59. Héctor Ramírez (CO)
60. Hector Sato (AR)
61. Henry Diaz Lozano (PE)
62. Hermogenes Fernandez-Marin (PA)
63. Ilsa Maria Fuentes Marrero (MX)
64. Irene Zager (VE)
65. Jairo Hernán Solorza Bejarano (CO)
66. Jeannette Pérez-Benítez (VE)
67. Jimena Ponce (AR)
68. Jodey Peyton (GB)
69. Jonathan Velastegui (EC)
70. José Carrasco (PE)
71. Joxmer Scott (VE)
72. Juan Chimarro (EC)
73. Juan Fernandez (PA)
74. Juan Guillermo Ospina Pabon (CO)
75. Juan M Barrios (MX)
76. Juan Manuel Goyenette (AR)
77. Juan Pablo Rosas (CO)
78. Juliana Puentes (EC)
79. Juliana Rodríguez Ortiz (CO)
80. Karla León Cisneros (MX)
81. Keila Juarez (BR)
82. Keron Campbell (JM)
83. Kevin Giancarlo Borja Acosta (CO)
84. Laura Acheritobehere (AR)
85. Laura Califano (AR)
86. Laura Sanchez (CL)
87. Lauren Raz (CO)
88. Leisy Amaya (CL)
89. Lidia Raquel Scrivanti (AR)
90. Loraine Matias-Palafox (MX)

91. Luciana Cristóbal (AR)
92. Marcela Cepeda (CO)
93. Marcela Peralta (AR)
94. Marcelo Alfredo Gritti (AR)
95. María Alejandra Sosa (AR)
96. Maria Cecilia Melo (AR)
97. Maria Cynthia Valeria Sanabria (AR)
98. María del Huerto Benítez (AR)
99. María Elena Sierra Peña (CO)
100. María Eugenia Vicente (AR)
101. María Gutiérrez (AR)
102. María Inés Zamar (AR)
103. María Mora (CR)
104. Maria Paula Contreras (CO)
105. María Poliserpi (AR)
106. María Vera (PY)
107. María Victoria Sarasa (AR)
108. Melissa Rodríguez (PA)
109. Miguel Pinto (EC)
110. Mónica Valeria Pia (AR)
111. Nehru Narine (GU)
112. Pablo Dellapé (AR)
113. Paloma Shimabukuro (BR)
114. Paola Languasco (AR)
115. Patricia Ramos (MX)
116. Patricia Romo (EC)
117. Paula Zermoglio (AR)
118. Pedro Ríos Guayasamín (EC)
119. Quentin Groom (BE)
120. Raymond Owusu-Achiaw (GH)
121. Renato García (AR)
122. Ricardo Ortiz (CO)
123. Rocío Rudak (AR)
124. Ruth H. Bastardo (DO)
125. Ruth Rauber (AR)
126. Sandra Perdomo (CO)
127. Santos Niño (VE)
128. Sebastián Albanesi (AR)
129. Sergio Martinez (PA)
130. Sergio Roig Juñent (AR)
131. Solana Tabeni (AR)
132. Soledad Ceccarelli (AR)
133. Soledad Villamil (AR)
134. Sonia Mendes (BR)
135. Susana Devincenzi (AR)
136. Suzanne Davis (JM)
137. Teshia Jn Baptiste (GY)
138. Valentina Díaz (MX)
139. Valeria Arce (CO)
140. Verónica Cañedo (PE)
141. Victor Chocho (EC)
142. Victoria Werenkraut (AR)
143. Virginia Yanina Mogni (AR)
144. Weerin Kalpoe (SR)
145. Yohana Diztel (BR)
146. Yvan Satge (US)

Annex II: Format of the meeting

Webinar: Setting the Scene for the Next Phase of the BID Programme

The webinar on 11 December 2024 set the stage for the next phase of the BID programme, providing participants with a clear understanding of its scope, goals, and expected outcomes. To ensure inclusivity, the event featured simultaneous translation in Spanish, Portuguese, and English. A recording of the session is available here: [GBIF Event Recording](#).

Participants were reminded of the overarching goals of the BID programme, including its mission to enhance biodiversity data availability and capacity in developing countries. An overview of the programme's main activities and timelines was provided, outlining key milestones and opportunities for involvement.

Invited speakers reflected on their experiences from the previous phase of BID, sharing insights on the challenges and successes of data mobilization and capacity development in the region. These reflections provided valuable context for shaping the priorities of the next phase.

A video presentation by John Waller - Data Analyst at the GBIF Secretariat - offered an overview of the current availability of biodiversity data from the Latin America and the Caribbean region through GBIF. His presentation underscored significant gaps in data access and publishing, including geographic and temporal gaps, highlighting the critical need for enhanced data mobilization across the region. This emphasized the importance of facilitating access to local knowledge to effectively address these gaps.

Lastly, selected speakers shared their perspectives on the most pressing regional needs for biodiversity data mobilization, particularly in relation to the Kunming-Montreal Global Biodiversity Framework, during a panel discussion.

This session helped frame the consultation on priority regional data sources, stakeholders and capacity needs that was sent after the webinar to all participants.

Reflections on Experiences from the Previous Phase

Below are key insights from the panel discussions, along with links to the full presentation materials.

This session provided a valuable opportunity to reflect on the achievements and lessons learned from the last phase of the BID programme in the LAC region. Two previous grantees of the BID programme shared their experiences through insightful presentations, followed by a discussion guided by key questions.

Dr. Amy Deacon: Improving National Biodiversity Data Accessibility in Trinidad and Tobago (2021–2023)

Dr. Amy Deacon led the BID project “[Improving National Biodiversity Data Accessibility in Trinidad and Tobago](#)” [BID-CA2020-039-NAC], which mobilized thousands of biodiversity records from key institutions, including the University’s Zoology Museum, the National Herbarium, and the National Museum & Art Gallery. Through this project, significant data gaps in GBIF were filled using specimens from natural history collections. The initiative not only enhanced data availability for research and decision-making but also provided students, data providers, and collections staff with hands-on experience in standardizing, assessing, and publishing biodiversity data.

In response to the question, “*What practices would you recommend to other institutions or projects aiming to effectively mobilize biodiversity data in the LAC region?*”, Amy emphasized that while extensive guidance exists on data publishing—covering standards, cleaning, and publication tools—it is easy to underestimate the effort required to achieve project goals. She highlighted the iterative nature of quality control and the need for teams to be prepared to troubleshoot challenges throughout the process. Additionally, she underscored the importance of collaboration with national institutions and stakeholders to ensure that mobilized data is effectively used in research and decision-making. She cited partnerships with other BID projects, such as the project held by the Institute of Marine Affairs ([Marine Biodiversity Hub](#) [BID-CA2020-004-INS]), as a successful example of joint efforts in capacity building through workshops and shared resources, bringing together NGOs, government agencies, and other key actors.

Dr. Lauren Raz: Catalogue of the Fishes of Colombia

Dr. Lauren Raz led the project “[Catalogue of the Fishes of Colombia](#)” [BID-CA2020-030-USE], which developed an open-access, curated tool providing comprehensive information on the country’s marine and freshwater fish species. This national catalogue serves as a crucial resource for researchers and decision-makers, marking the first consolidated effort to compile and maintain updated information on Colombia’s fish biodiversity. The implementation of API technology allows government institutions to seamlessly access and utilize this data for managing fisheries and hydrobiological resources.

When asked, “*What has been the most significant impact of this project, both for your institution and for addressing Colombia’s national biodiversity information needs?*”, Lauren highlighted that for her institution, completing the catalogue was the fulfillment of a long-standing vision, overcoming challenges in digitization. More broadly, the project’s impact extends to the ichthyological community and the country as a whole, as it produced Colombia’s first comprehensive checklist of marine fish species—covering both the Pacific and Caribbean regions—as well as the most updated checklist of freshwater fish, documenting over 3,700 species. Given Colombia’s extraordinary fish diversity, this outcome is particularly significant. Additionally, the project’s sustainability is ensured by making the catalogue a long-term tool accessible to researchers and government institutions, facilitated by API integration for easy data access and use.

All presentations from the BID engagement meeting LAC 2024 are available at the following link: [Presentations from BID Engagement Meeting for Latin America and the Caribbean 2024](#)

Exploring Regional Needs for Biodiversity Data Mobilization - Summary of the Panel discussion

The regional perspectives panel brought together three speakers, who work in different initiatives that generate and manage open biodiversity data in Latin America and the Caribbean.

Dr. Sandra Perdomo Medina – Humboldt Institute

Sandra is Manager of Public Policy and Cooperation, Relations Department at the Humboldt Institute. She has extensive experience in the field of international relations, economics, social policy and biodiversity. After a brief introduction about the activities of the Humboldt Institute, Sandra detailed the new activities of the Humboldt Institute upon being designated as a *Convention on Biological Diversity (CBD) Subregional Technical and Scientific Cooperation Center* for Latin America and the Caribbean.

In response to the question “*How can the data resulting from the BID-GBIF programme be used in research and policy?*” Sandra mentioned a series of scopes, both at the national and regional level as the baseline information for defining National Biodiversity Strategy and Action Plan (NBSAP) targets and actions; national monitoring of NBSAPs and CBD National reports; regional overview of GBF advancement, shared challenges, and information gaps; multicountry research initiatives to inform transboundary decision making; identifying regional biodiversity trends, as well as knowledge gaps, among other possible activities.

Magister Víctor Chocho – Regional Representative of the LAC Nodes

Víctor is a biologist, with experience in the field of conservation and sustainable use of biodiversity. He works at the Ministry of Environment, Water and Ecological Transition of Ecuador, where the GBIF Ecuador node is located, for which he serves as node manager.

When asked, “*From your role as node manager of GBIF Ecuador and as regional representative of LAC, what do you think the impact of BID projects will be on the mobilization of biodiversity data?*”, Víctor referred to the information present in the LAC region, indicating that information must be shared and accessible in order to expand knowledge about biodiversity and to know what actions should be implemented for its protection and care.

Furthermore, he highlighted that the BID programme will not only help reduce this information gap, but also that the data generated can be used for decision making and thus respond to global goals (such as those of the CBD), and also national and regional goals.

Dr. Ana Carolina Peralta – OBIS Caribbean Node

Ana Carolina is a coordinator of the OBIS Caribbean Node, where she contributes to the mobilization of marine biodiversity data by supporting data publishers. The node also contributes to the support and implementation of training for new users. OBIS is the acronym

for Ocean Biodiversity Information System and has a marine data repository which works jointly with GBIF and is composed of regional and thematic nodes, mentions Ana Carolina.

In response to the question “*From your role, as an administrator of the Caribbean Node of OBIS, what do you think the impact of BID projects will be on the mobilization of biodiversity data?*” Ana Carolina considers that the impact will occur mainly in two areas. Firstly, we can expect an impact in marine sciences, promoting open and collaborative science and secondly, in academic environments by disseminating and strengthening the values of open data.

Regarding the impact on marine sciences, Ana Carolina expands her response by highlighting that information on the presence (or absence) of species is necessary for the evaluation of ecosystems. It is important to not only think about data mobilization, but also its reuse. There is a lot of information, such as in reports, gray literature, biological collections or even databases, that is not currently accessible, and being able to normalize and mobilize said information would make it available for use, for example, in decision making.

In the second impact area, Ana Carolina mentions the need to be able to generate data under the *FAIR* principles in academic environments, which, in addition to being reusable, provide greater visibility for both the scientist and the projects and institutions involved, expanding the ease of transfer of knowledge and even improve the possibilities of access to financing.

Regional consultation: Identifying regional priorities

The consultation for the Latin America and Caribbean region was conducted in three languages—Spanish, English, and Portuguese—to ensure broad inclusivity and engagement. The survey was open from 12 December 2024 to 20 January 2025, gathering over 60 responses from participants across the region.

The survey links are available below:

- Spanish: [encuesta regional sobre el Programa BID](#)
- Portuguese: [pesquisa regional sobre o Programa do BID](#)
- English: [regional survey on the BID Program](#)

The analysis of the survey results is available in [Annex III](#).

Annex III: Survey results analysis

GBIF Regional consultation for the Biodiversity Information for Development programme in Latin America and Caribbean

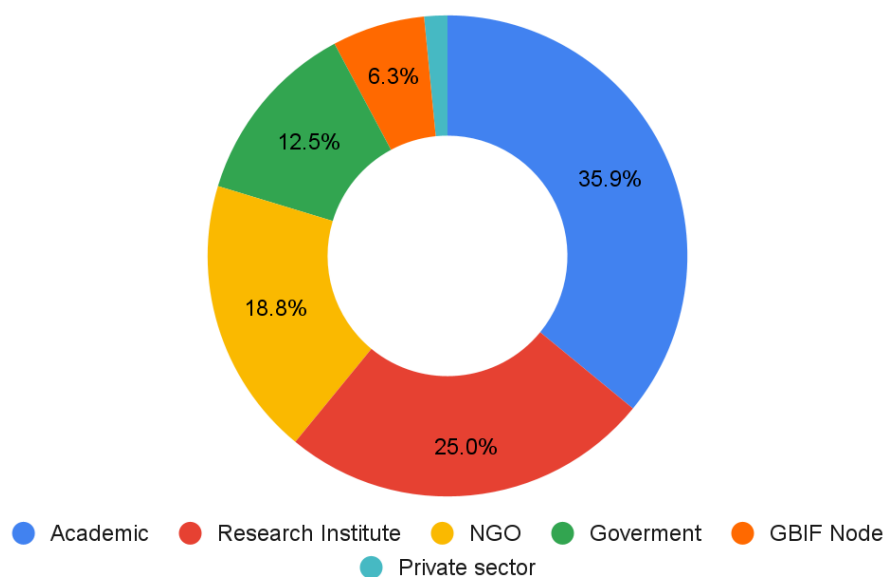
Overview of the survey participants

The survey was disseminated in three languages ([Spanish](#), [English](#) and [Portuguese](#)) and was available from December 12, 2024 to January 20, 2025.

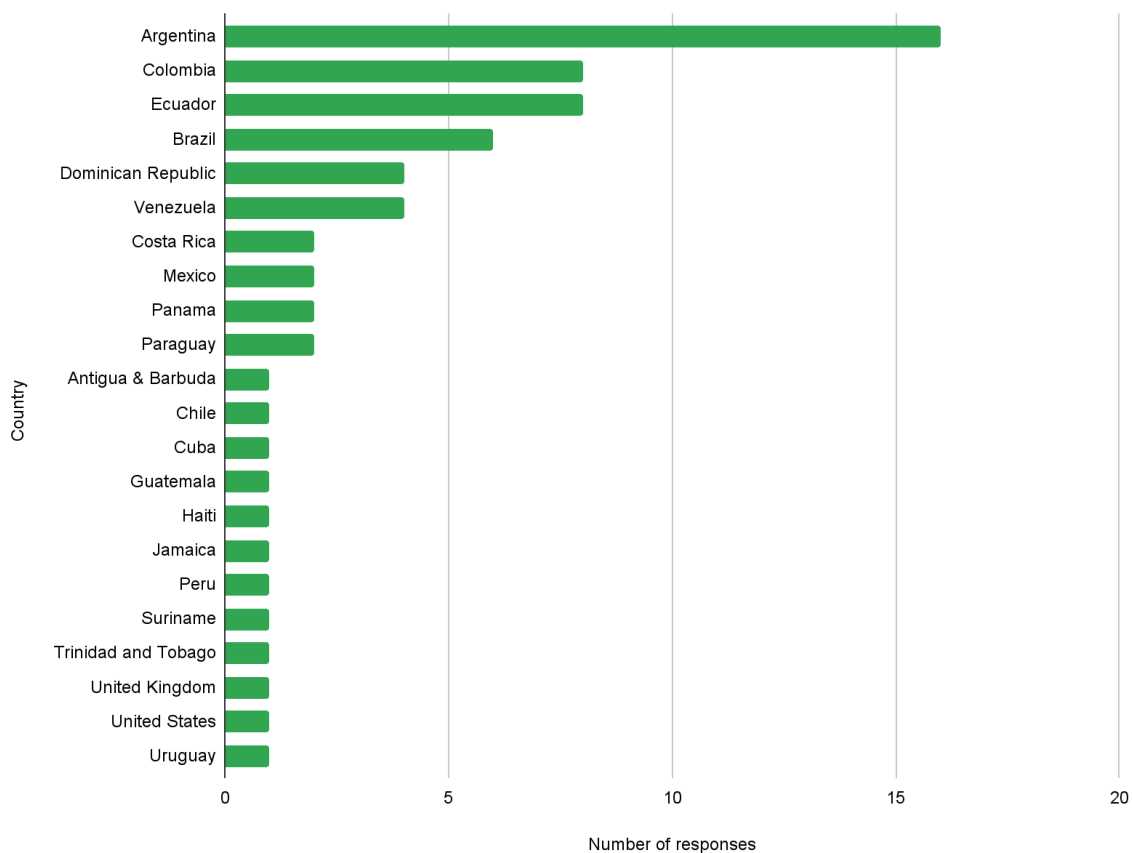
The survey was anonymous (if the participant so desired) with 22 questions, 19 of which were open, which generated a large amount of information that was later categorized at the time of generating this report.

In total, the survey received 66 responses, of which nine were anonymous.

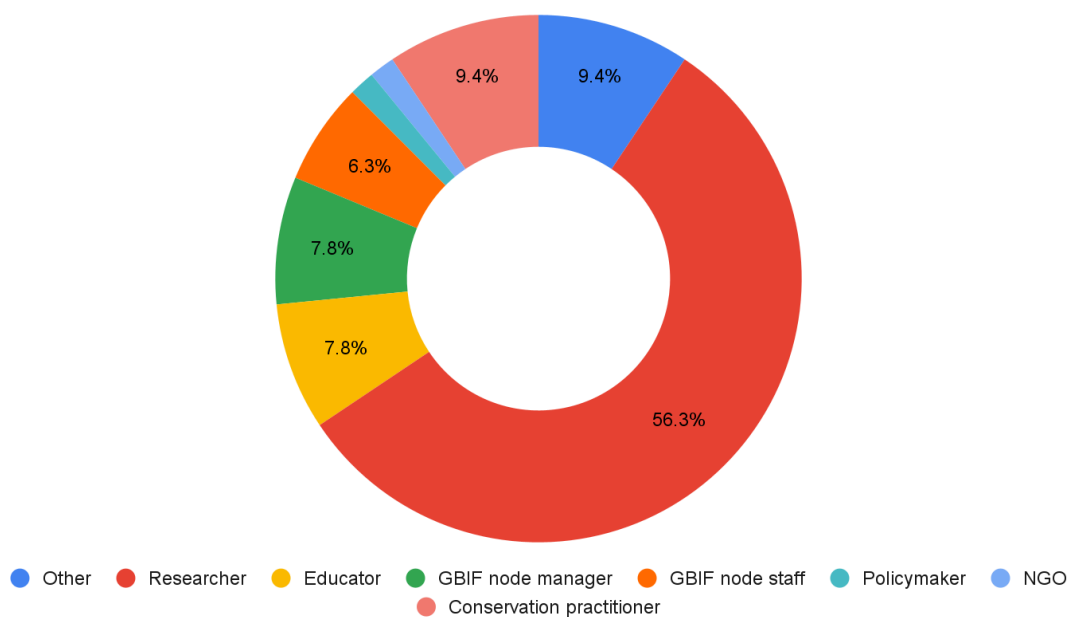
Institutional/sectoral affiliations of survey respondents



Participation by country



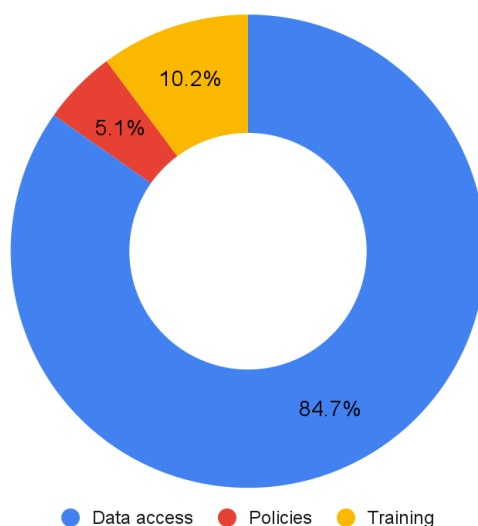
Participation by role



Part 1: Regional perspectives on biodiversity information needs

- **Please share your perspectives on any priority needs for biodiversity data within your institution, research areas, country, and/or region. Please refer to the targets of the GBF as relevant.**

We can summarize the needs for biodiversity data identified by the respondents as falling into three broad areas: data access, training, and policies.



From the free text responses received, a set of 20 terms were identified as priority needs, which are listed below.

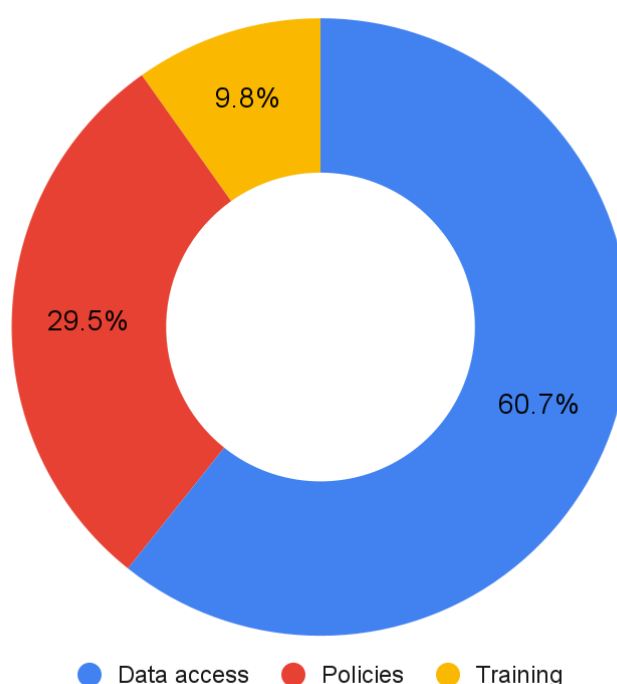
- | | |
|---|---|
| 1. Agrobiodiversity | 11. IUCN Red List |
| 2. Data use | 12. Exotic invasive species list |
| 3. Data quality | 13. Specialized biological groups (edaphic biota, insects, arthropods, cryptoflora, coastal species, deep-water species, fungi, bryophytes, aquatic macroinvertebrates, macrofauna) |
| 4. Data gaps (ethnobiology, natural history collections, protected areas) | 14. Human health |
| 5. Digitization and publication | 15. Human resources training |
| 6. Data rescue | 16. Strengthening natural history collections |
| 7. Open data | 17. Private sector data |
| 8. Monitoring data | 18. Genetic resources |
| 9. Copyright | 19. Indigenous community data |
| 10. Strategic ecosystems (tropical dry forest, marine and freshwater ecosystems, coral reefs, mangroves, humid forests) | 20. Native species list |

In the responses collected in the survey, respondents mentioned almost all of the GBF targets (targets 1 to 10, 12 to 14 and 19 to 22) in relation to priority needs for biodiversity data and to different actions in which they are involved at the institutional level. In some cases, respondents also provided concise examples of actions for which biodiversity data

are needed relating to the GBF targets, which are listed above (see [Mobilization Data Sources](#)).

- **Please provide any current examples of biodiversity-related actions being hindered by the lack of accessible biodiversity data**

As for the previous question on priority needs, the responses on biodiversity actions that were hindered due to lack of accessible biodiversity data can be categorized into three main areas: data access, training and policies. Although access to data is the most mentioned area, it is noteworthy that the policy item has greater relevance in this case.



From the free text responses to this question, 31 terms were identified to broadly categorize the activities that respondents considered blocked or difficult due to lack of access to information:

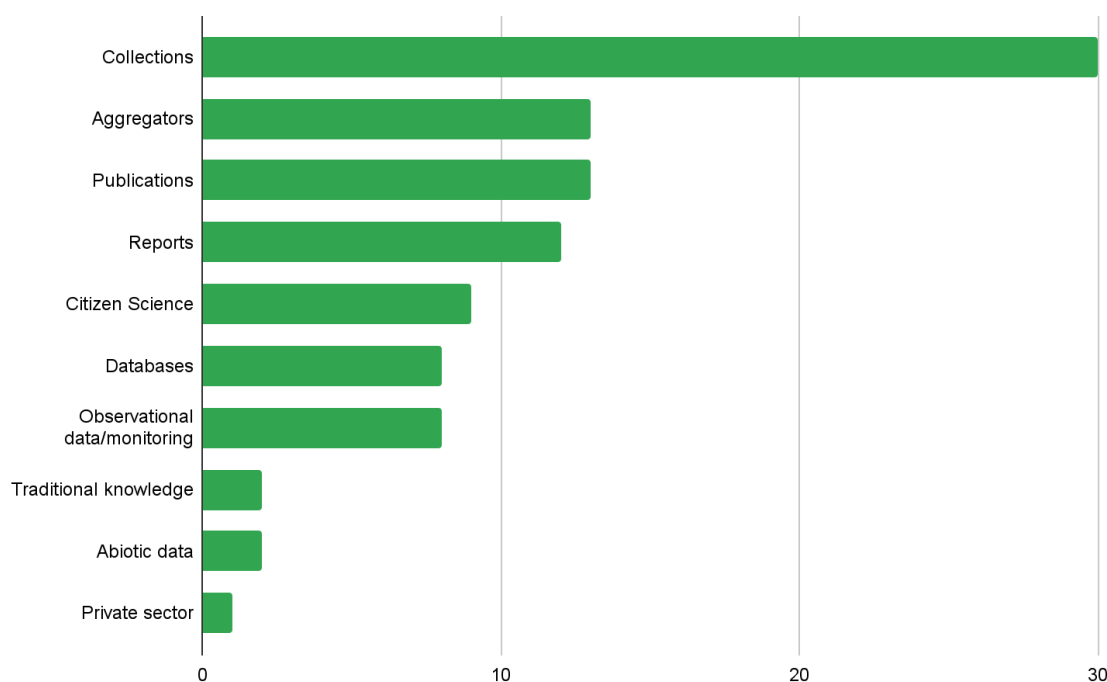
- | | |
|--|--|
| 1. Access to collections | 12. Endemic species information |
| 2. Access to territory / collection of information | 13. Environmental assessment |
| 3. Accessible databases | 14. Environmental education |
| 4. Biodiversity baseline | 15. Genetic data |
| 5. Bioindicators | 16. Human health |
| 6. Bureaucracy | 17. Human resources training |
| 7. Collection maintenance | 18. Human/nature conflict |
| 8. Conservation initiatives | 19. Incentives |
| 9. Data gaps | 20. Information in local language |
| 10. Data platforms | 21. Information on critically endangered species |
| 11. Data quality | 22. Information on invasive alien species |

- | | |
|---------------------------|--------------------------------------|
| 23. Monitoring data | 28. Species lists |
| 24. Planning management | 29. Tools |
| 25. Production systems | 30. Traditional knowledge management |
| 26. Red Lists | 31. Updated databases |
| 27. Science communication | |
-

Part 2: Mobilization of data sources

- **Which data sources are you aware of that the BID programme could seek to mobilize to improve data accessibility in the LAC region? Please list as many as possible with details of their scope.**

From the responses obtained, 10 potential sources were identified to mobilize data, the most frequent being natural history collections.



Additionally, several participants listed specific examples to take into account:

- [Biodiversity Information System of Ecuador - SiB-Ec](#) (Ecuador)
- [Biodiversity Research Program – PPBIO](#) (Brazil)
- [Carbon Map and Model](#) - Global Forest Watch
- [Corporation for the Sustainable Development of Urabá](#) - CORPOURABA
- [Environmental Impact Study/Environmental Impact Report](#) - EIA Rima (Brazil)
- [Flora & Funga do Brasil](#) (Brazil)
- [Forest Monitoring Platform](#) - FAO/SEPAL
- [iNaturalist](#)

- [Inter-American Biodiversity Information Network](#) – IABIN
- [Inter-American Development Bank](#) - IDB
- [IUCN Red List of Threatened Species](#)
- Latin American Botany Network – RLB
- Long Term Ecological Research Program – PELDs (Brazil)
- [Map of Life](#) – MOL
- [Marine Biodiversity Observation Network](#) – MBON
- [Monitora Program](#) - Biodiversity Monitoring System of the Ministry of the Environment (Brazil)
- [National Biodiversity Database – BNDD](#) (Ecuador)
- [National Council for Scientific and Technical Research](#) – CONICET (Argentina)
- [National Institute for Space Research](#) - INPE (Brazil)
- [National Institute of Agricultural Technology](#) - INTA (Argentina)
- [National Institute of Amazonian Research](#) – INPA (Brazil)
- [National Institutes of Science and Technology](#) – INCTs (Brazil)
- GBIF National nodes (SiBBr, GBIF Ecuador, SiB Colombia, GBIF Argentina)
- [National System of Digital Repositories](#) -SNRD (Argentina)
- [Ocean Biodiversity Information System](#) - OBIS
- [RedBioma](#)
- [SoilGrids](#) - ISRIC
- [Trinidad and Tobago Biodiversity Information System](#) -TTBIS (Trinidad & Tobago)
- [United Nations Convention to Combat Desertification](#) - UNCCD

Respondents also named some institutions that house natural history collections that could be relevant to involve in the BID programme:

DOMINICAN REPUBLIC

- Entomological collection of the Faculty of Agronomic Sciences
- Herbarium of the Pedro Henríquez Ureña National University
- IIBZ Collections
- ISA University Herbarium.
- Marine Biology Research Center
- National Botanical Garden
- National Museum of Natural History

PANAMA

- Gorgas Memorial Institute Collection
- Herbarium of the Autonomous University of Chiriqui
- Herbarium of the University of Panama
- Invertebrate Museum
- Museum of Malacology
- Vertebrate Museum

PARAGUAY

- Herbarium of the Faculty of Chemical Sciences (FCQ)
- Herbarium of the Faculty of Exact and Natural Sciences (FACEN)
- Herbarium of the National Museum of Natural History of Paraguay (PY)

PERU

- Universidad Nacional Agraria La Molina - UNALM
- Universidad Nacional Mayor de San Marcos - UNMSM

VENEZUELA

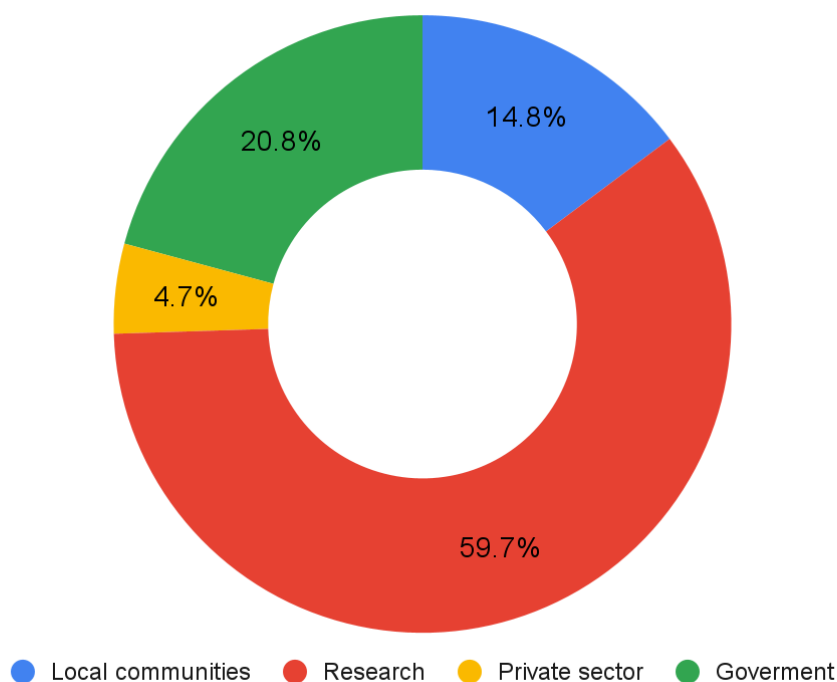
- Biological collection of the Margarita Marine Museum
- Coro Regional Herbarium
- Eastern Regional Herbarium of the University of Oriente (UDO)
- Entomological collection of the UCV-Maracay
- Herbarium of the University of Zulia
- Herbariums of ULA-Mérida MER, MERF, MERC
- IVIC mycological herbarium
- La Salle Science Museum
- Lizandro Alvarado University Herbarium (UCLA)
- Rancho Grande Ichthyological Museum
- UNELLEZ Bird, Mammal and Reptile Museum

TRINIDAD & TOBAGO

- University of West Indies, Zoology Museum

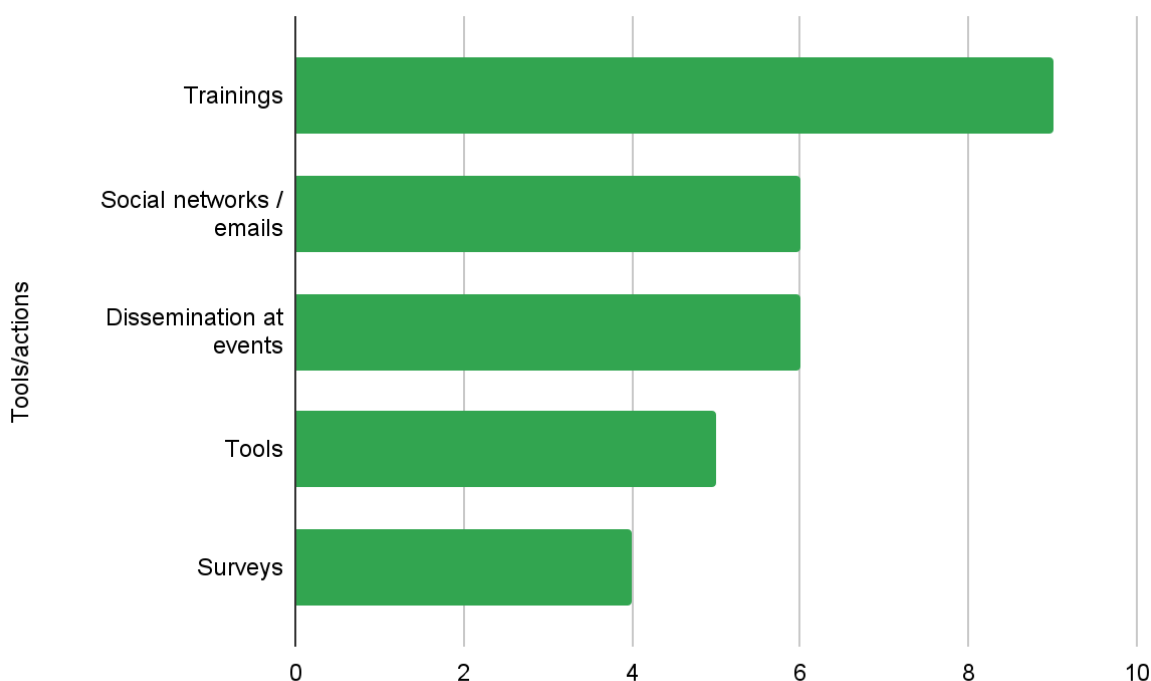
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- **Which data communities or stakeholders should be engaged through the BID programme to mobilize these data sources?**

The responses obtained were organized into four categories, in order of relevance: research, government, local communities and private sector.



- **How can we identify more data sources/stakeholders to involve in data mobilization through the BID programme?**

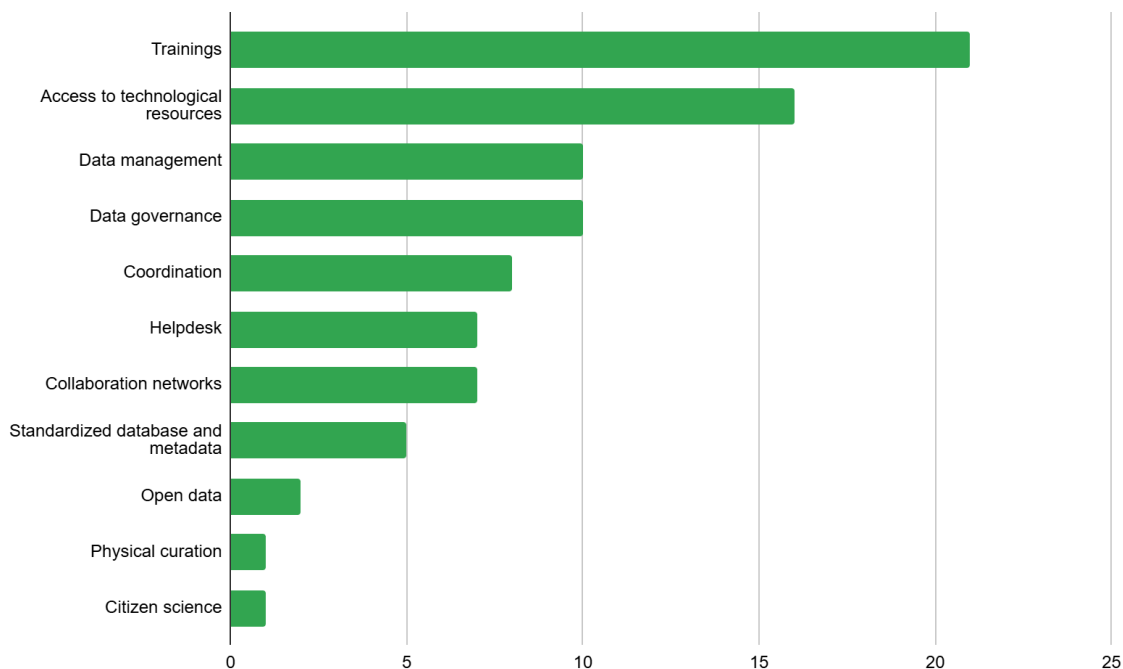
The responses revealed five key topics, with training emerging as the primary focus. While many respondents emphasized the need for in-person meetings, others highlighted the value of online training resources. Additionally, the term tools was frequently mentioned, referring to data management and analysis tools, as well as those designed to enhance data quality, including taxonomic tools, georeferencing tools, and date formatting tools.



Part 3: Capacity needs for effective biodiversity data management and sharing

- **Which capacity needs will the BID programme encounter in supporting data management and mobilization from the LAC region?**

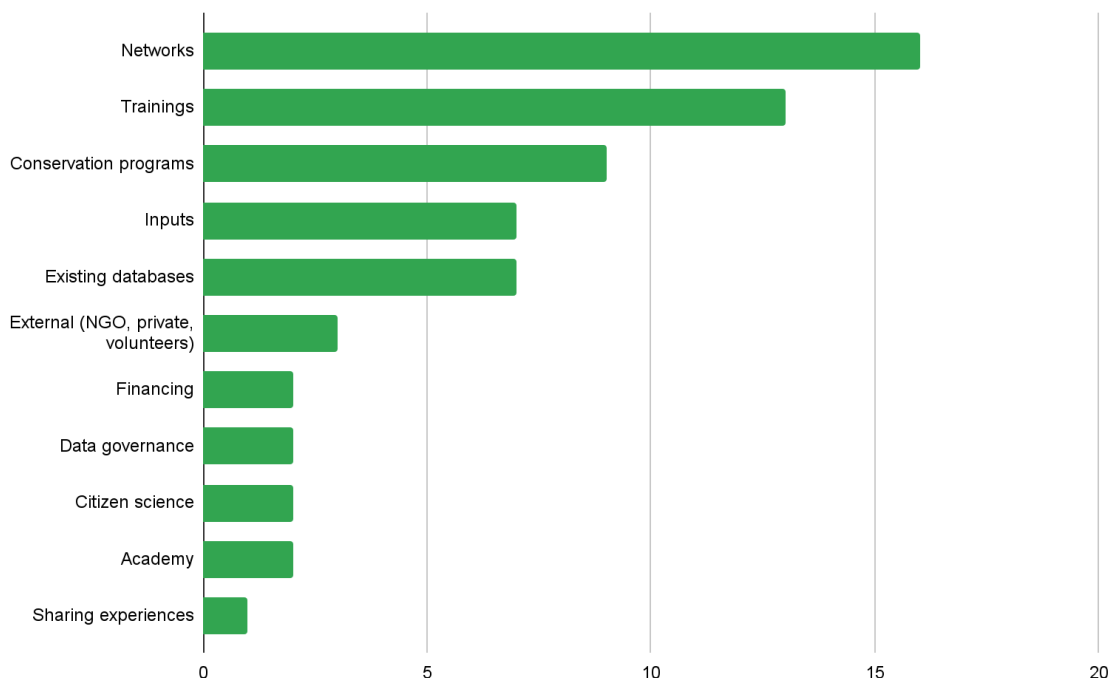
In line with the previous topic, training continues to be a key need for supporting the implementation of the BID programme. **Training** needs mentioned include topics such as Darwin Core standard, data quality, R, Python, AI, databases (e.g. Specify), CARE data principles, IPT, data-driven modeling. **Access to technological resources** includes equipment, connectivity and financing. **Helpdesk** refers to both the support given by GBIF staff (Secretariat, National Nodes), as well as trained personnel and support of other initiatives.



- **Are solutions already in place to support the development of capacity to address the needs you have listed above? Can you provide some examples?**

Regarding the solutions already implemented, the position of **networks** is notable. Networks such as GeoBON, RedBioma, Red Naturalia, RedBio, Germplasm Bank Network and the networks that bring together the nodes per GBIF region were mentioned.

Regarding **training**, reference was not only made to those generated by GBIF and its nodes, but also to those generated by initiatives such as [OBIS](#), [CBD](#), [MBON](#), [INVEMAR](#) and [IOC-UNESCO](#). As for the **external** category, for the private sector, initiatives such as Google and Amazon are mentioned.



Part 4: Delivering biodiversity data for use

- **Can you identify likely user groups for the data that will be mobilized through the BID programme in the LAC region?**

The responses to the survey highlight a diverse range of user groups likely to benefit from the data mobilized through the BID programme in the LAC region. These groups include stakeholders from academic, governmental, private, and local communities, as well as organizations and individuals dedicated to biodiversity conservation and sustainable development. Below is a summary of the identified user groups:

1. Academic and Research Community

- Universities, research institutes, and academic professionals (e.g., taxonomists, environmental engineers).
- Specialists in fields such as marine sciences, climate change, conservation, and ecological restoration.

2. Government and Policy-Makers

- National and local governmental authorities, including environmental agencies and protected area systems.
- Decision-makers involved in biodiversity policy, environmental planning, and economic development.

3. Non-Governmental Organizations (NGOs)

- Local and international NGOs focusing on biodiversity conservation, environmental sustainability, and community development.

4. Indigenous Peoples and Local Communities

- Indigenous and ethnic groups as key stakeholders in biodiversity initiatives.
- Local communities engage in conservation and sustainable use of natural resources.

5. Private Sector and Industry

- Actors from agriculture, fisheries, and other productive sectors.
- Industrial organizations, such as germplasm banks and pharmaceutical companies, utilise biodiversity data for innovation.

6. Environmental and Technical Professionals

- Environmental consultants, assessors, and technical personnel supporting conservation projects.
- Data analysts and data scientists working on biodiversity-related analyses.

7. Biological Collections and Museums

- Staff and specialists from herbaria, museums, and biological collections contributing to biodiversity data.

8. Media and Public Engagement

- Media outlets, social networks, and citizens interested in biodiversity awareness and communication.

The wide range of user groups underscores the importance of data mobilization in addressing regional biodiversity challenges. This diversity also highlights the potential for collaboration across sectors to maximize the impact of the BID programme.

-
- **How can we engage these user groups in the BID programme to ensure they are able to use the data being mobilized?**

Respondents provided a broad range of responses on how to engage the diverse user groups that had been identified in the BID programme. These have been summarized into the following strategies to ensure effective engagement of diverse user groups in the BID programme and to maximize the use and impact of mobilized biodiversity data:

1. Capacity Enhancement and Training

- Develop capacity-building activities, such as training programs, workshops, and webinars, tailored to specific needs (e.g., Darwin Core, GIS, species distribution modeling, Python, R).
- Provide accessible resources, including manuals and online courses, to support data mobilization and application.
- Involve users in cross-learning projects, interdisciplinary meetings, and data rescue initiatives to preserve historical records.

2. Tailored Communication and Outreach

- Disseminate information via media, social networks, and biological conferences and congresses to reach a wide audience.
- Implement targeted information campaigns to highlight the benefits and applied uses of published data, particularly in conservation and policy-making contexts.

- Share success stories and examples of data use to demonstrate alignment with global biodiversity goals (e.g., the GBF targets).
- 3. Strategic Partnerships and Collaboration**
- Create institutional alliances with national and local organizations, academic institutions, NGOs, and private-sector actors.
 - Establish protocols to integrate the knowledge of Indigenous Peoples and local communities while respecting CARE principles.
 - Encourage partnerships with government agencies to integrate data into public policies and sustainable development initiatives.
- 4. Inclusive and Needs-Based Approaches**
- Identify and address the specific needs and priorities of each user group, including Indigenous Peoples and local communities, local associations, and the private sector.
 - Expand the reach of the BID programme in the LAC region by engaging as many countries as possible and fostering collaborative regional initiatives.
 - Engage stakeholders through direct invitations, interdisciplinary projects, and adaptation plans for biodiversity conservation.
- 5. Technical and Logistical Support**
- Provide informatics and technical assistance to digitize, systematize, and mobilize biodiversity data.
 - Support existing projects and data mobilization initiatives to align efforts and avoid duplication.
 - Develop user-friendly platforms for data access and analysis, ensuring inclusivity and accessibility.
- 6. Incentives and Integration**
- Highlight incentives for publishing and using biodiversity data, particularly for private/public nature reserves and conservation projects.
 - Link the BID programme activities to national policies and strategies (e.g., National Biodiversity Strategies) to ensure alignment with long-term conservation goals.
 - Involve private-sector actors (e.g., agricultural, tourism, and biotechnology companies) in collaborations that link sustainable practices with biodiversity data.

These strategies reflect a collaborative, inclusive, and practical approach to engaging user groups, ensuring that biodiversity data mobilized through the BID programme can effectively support conservation, research, and sustainable development efforts across the LAC region.

Part 5: Recommendations for implementing the BID programme in the LAC region

- **Do you have any suggestions of networks, mailing lists, or other channels on which we can promote the BID calls for project proposals to ensure a strong response?**

Respondents provided many suggestions that are summarized into categories here.

1. Mailing Lists and Email Contacts

- **Regional and National Mailing Lists:**

- Colombian Botanical Garden Network and Colombian Association of Herbariums.
- IIBZ Mailing List (Dominican Republic) – available through IIBZ-UASD.
- Aliens-L (IAS mailing list).
- Peru-specific contacts

2. National and Regional Networks

- **Argentina:**

- Argentine Herbaria Network (RedHAr), Argentine Botanical Society (SAB), Argentine Restoration Network, Argena Network, Red Naturalia and Argentine Network of Forest Science and Technology (REDFOR.AR).
- Institutional networks such as INTA and CONICET.
- Specific local entities like the Tourism Agency of Córdoba and the Environmental Secretariat.

- **Ecuador:**

- ALPZA, AEZA, Ecuadorian Network of Roadkill Fauna, and the Ecuadorean Network of Herpetology.

- **Brazil:**

- Centro de Conhecimento em Biodiversidade, PPBio, PELD, and the Brazilian Citizen Science Network.

- **Colombia:**

- IDEAM and the Ministry of Environment.

- **Guatemala:**

- RedBioma.

- **Caribbean:**

- Marine Ecosystems Protected Areas (MEPA) Trust (Antigua & Barbuda).
- Jamaica CHM Newsletter.

3. Social Media Platforms and Online Channels

- **General Platforms:**

- Facebook, Twitter, LinkedIn, and Instagram – leveraging institutional and personal accounts.
- WhatsApp groups for GBIF, iNaturalist, and Citizen Science networks like eBird and iNaturalist.
- Specific networks like the Global Soil Biodiversity Initiative (GSBI) and Marine Biodiversity Observation Network (MBON).

- **Websites and Social Media for Institutions:**

- CONICET (Argentina): Webpage and social networks.
- National networks like Corantioquia (www.corantioquia.gov.co) and Cornare (www.cornare.gov.co) in Colombia.

- Web channels in Trinidad & Tobago and other national biodiversity-related platforms.

4. Scientific and Thematic Organizations

- National History Museums, research institutes, and scientific societies across the LAC region.
- Specific organizations like the Society for Conservation Biology (SCB), the Latin American and Caribbean Forum on Environmental Sciences (FLACAM), and the Latin American Botanical Network (RLB).

5. Citizen Science and Community-Based Networks

- Platforms like iNaturalist, eBird, and other citizen science initiatives.
- Engagement through WhatsApp and community-based social media groups.

6. Other Channels and Suggestions

- Dissemination through GBIF Nodes' diffusion channels.
- Participation in thematic networks and interdisciplinary forums.
- Promotion in scientific congresses and biodiversity-related events.
- Partnering with national and local biodiversity initiatives to align efforts.

These channels represent a mix of direct communication, strategic partnerships, and broad outreach efforts to ensure inclusive and effective promotion of the BID calls for project proposals across the LAC region.

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- **Are you aware of any other related projects or actions taking place in the LAC region in the coming years that the BID programme should link with?**

To maximize synergies and enhance the impact of the BID programme, the following projects and initiatives taking place in the LAC region were identified by survey respondents as potential opportunities for collaboration:

1. Regional and International Initiatives

- **AFD & GIZ:** Regional programs supporting biodiversity conservation and sustainable development.
- **IOCARIBE-GOOS & MBON:** Regional marine biodiversity and observation networks.
- **CAF Strategic Ecosystem Conservation Program:** Promoting conservation of strategic ecosystems across the region.
- **GEF Projects:** Global Environment Facility-funded projects with biodiversity components, especially in the Amazon.

2. National-Level Initiatives

- **Brazil:**
 - Government research and innovation support through CNPq and FAPs (State Foundations for Research Support).

- Specific Amazonian initiatives such as Pró Amazônia, Amazônia +10, and OTCA (Organization of the Amazon Cooperation Treaty).
 - **Cuba:**
 - **Atlas of Cuban Biodiversity:** A web portal showcasing Cuban biota (<https://cubanbiodiversity.com>).
 - **Dominican Republic:**
 - Fondocyt projects focused on biodiversity and conservation.
 - **Paraguay:**
 - **Useful Plants of Paraguay:** A project seeking funding to support plant conservation.
- 3. Citizen Science and Community-Based Projects**
- **Citizen Science Projects:**
 - Initiatives like *Hornero*, *Proyecto Vaquitas*, and *Vi un Abejorro*, which engage the public in biodiversity monitoring and data collection.
 - **RedBioma:** A network promoting biodiversity monitoring in the region.
- 4. Research and Technical Programs**
- **INTA Programs (Argentina):** National agricultural and biodiversity research initiatives.
 - **Defra Darwin Plus:** Supporting biodiversity-related projects in UK Overseas Territories (UKOTs), with potential for funding co-alignment.
 - **EPIG Database:** A resource for genetic and species data (<https://www.epigdatabase.org>).
- 5. Strategic Opportunities**
- **Kunming-Montreal Global Biodiversity Framework:** Future forums and initiatives supporting the implementation of this global framework.

Aligning the BID programme with these projects and initiatives can foster greater collaboration, strengthen funding opportunities, and amplify the reach and impact of biodiversity data mobilization in the LAC region.

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- **Do you have any other final recommendations for the successful implementation of the BID programme in the LAC region?**

To strengthen the BID programme's impact and ensure it meets the needs of diverse stakeholders in the LAC region, the following recommendations were compiled based on the input provided by the survey respondents:

1. Outreach and Visibility

- Organize public events to raise awareness of BID programme actions and outcomes.
- Utilize social media platforms, webinars, and partnerships with other organizations for widespread dissemination.
- Collaborate with universities, media outlets, and other institutions to reach broader audiences.
- Prioritize consistent, multi-level communication strategies, ensuring messages are direct and tailored to various audiences.

- Showcase success stories and case studies to demonstrate the value of biodiversity data and its applications, especially to decision-makers.

2. Community Engagement and Capacity Building

- Engage students to nurture a new generation of skilled professionals in biodiversity informatics.
- Facilitate frequent workshops and training sessions focused on data use, mobilization and technical skills.
- Generate materials and manuals in local languages, to ensure accessibility by participants.
- Build connections with stakeholders in remote areas, including local governments, Indigenous Peoples and traditional communities, and conservation-focused institutions, to provide support where it is most needed.
- Promote a collaborative and inclusive approach, integrating Indigenous Peoples and local communities, researchers, local governments, and the private sector from the outset.

3. Collaboration and Networks

- Foster collaboration through regional networks, including frequent meetings to build a BID community. Consider using platforms like [Discourse](#) for communication and resource sharing.
- Strengthen partnerships with existing networks, projects, and initiatives to build on established foundations rather than duplicating efforts.
- Align BID objectives with broader agreements, such as the Escazú Agreement, to foster education, advocacy, and human rights-based approaches.

4. Project Implementation and Support

- Simplify project funding requirements and ensure flexibility in implementation to accommodate diverse needs.
- Provide clear timelines, administrative-financial guidance, and progress-tracking mechanisms to ensure accountability and efficiency.
- Tailor support to the needs of each country, respecting local publication models and internal procedures.
- Offer administrative and financial guidance in Spanish to improve communication with recipient institutions.
- Facilitate the equitable participation of both Caribbean and Latin American countries.

5. Data Governance and Sustainability

- Promote ongoing training on data use and digital tools, especially for stakeholders in remote or underserved areas.
- Ensure data governance adheres to FAIR and CARE principles, safeguarding community rights and Indigenous data sovereignty.
- Strengthen the integration of existing data (e.g., ethnobotanical and environmental information) into accessible, open platforms.

- Continuously monitor programme impacts and adapt strategies to emerging needs for long-term sustainability.

6. Incentives and Recognition

- Develop incentives to encourage participation in biodiversity data mobilization and usage.
- Highlight the programme's benefits for biodiversity conservation, decision-making, and sustainable development to engage stakeholders.

Applying these recommendations will strengthen the BID programme's influence in the region, enhance inclusivity, and ensure its sustained effectiveness.