

Capacity Enhancement Framework

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1. Executive summary

The Global Biodiversity Information Facility (GBIF) faces important capacity challenges in progressing towards the vision of “a world in which biodiversity information is freely and universally available for science, society and a sustainable future”. These challenges arise from the nature of GBIF as a growing global network of Participant countries, economies and organizations, each with different priorities and capacity assets and needs. Capacity enhancement is recognized as essential to underpin the sustainable performance of the GBIF Participant network and all its members, independent of their level of development.

Through GBIF, Participants have made significant progress in strengthening the capacity of the global community towards their shared vision. Much of GBIF's work can be seen as contributing to strengthening Participant capacity to mobilize, manage and use biodiversity data. However, GBIF has never had a single framework to encompass capacity enhancement activities that targets both the technical and functional elements of capacity on the individual level, the organizational level and the enabling environment.

With this framework GBIF repositions its capacity work in line with recent trends, and defines a common approach and language across the network. It proposes a cycle to guide Participants in this area, consisting of:

- Engaging stakeholders
- Assessing capacity assets and needs
- Formulating a capacity enhancement response
- Implementing that response
- Evaluating capacity enhancement

This framework will support the integration of capacity enhancement objectives in GBIF's strategic planning at the Participant and global levels and facilitate the alignment of capacity enhancement efforts with existing and new partners in the future.

2. Introduction and rationale

2.1. Definitions

In this framework, GBIF uses the definitions of capacity and capacity enhancement promoted by the Organization for Economic Cooperation and Development (OECD) and widely used in the development community.

Capacity is defined as “the ability of individuals, institutions and societies to perform functions, solve problems and set and achieve objectives in a sustainable manner”.

Capacity enhancement¹ is defined as “the processes whereby people, organizations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time”.

2.2. Why does GBIF need a capacity enhancement framework?

Since GBIF's establishment, there has been growing recognition of the need for capacity enhancement to enable GBIF to progress towards its vision. Participant countries and international organizations continuously need to enhance capacity to mobilize, manage and use biodiversity data, making the link between easily accessible biodiversity information, better-informed conservation and use of biodiversity, and sustainable development. With this framework, GBIF recognizes capacity enhancement as essential to the sustainable performance of the GBIF Participant network.

GBIF's capacity enhancement approach has typically focused on enabling and supporting mechanisms that share expertise between members of the network, through information exchange, collaborative activities, and training and mentoring programmes facilitated by the Participants and Secretariat. Many actions have targeted the establishment and advancement of Participant nodes and associated networks, helping to organize and implement national or thematic capacity enhancement activities, and thereby broadening their reach. The development of the node concept over GBIF's first decade has been an important step in ensuring that capacity enhancement actions can be anchored at the Participant level through sustainable networks and systems, serving the Participant's stakeholders in line with their needs and priorities.

Broadly speaking, much of GBIF's work contributes to capacity enhancement (see section 2.3). However, GBIF has tended to use the phrase ‘capacity enhancement’ to refer to specific mechanisms that target specific levels or areas of capacity, as with individual training and mentoring programmes and the institutional support via the Capacity Enhancement Programme for Developing Countries (CEPDEC). No single framework has articulated the many efforts of the whole GBIF community.

¹ The OECD refers to capacity development, whereas GBIF refers to capacity enhancement.

Box 1: About the Global Biodiversity Information Facility

The **Global Biodiversity Information Facility (GBIF)** is an international open data infrastructure, funded by governments. It allows anyone, anywhere to access data about all types of life on Earth, shared across national boundaries via the Internet. By encouraging and helping institutions to publish data according to common standards, GBIF enables research not possible before, and supports better, more informed decisions and outcomes for the planet's biological resources.

Located in Copenhagen, the **GBIF Secretariat** is charged with developing, executing and reporting on the GBIF work programmes. The tasks of the Secretariat include operating the GBIF.org website that gives access to millions of biodiversity data records, helping to coordinate the activities of the network, monitoring the use of GBIF-mediated data for science and policy, and operating central communication and collaboration services.

GBIF's members (referred to as **Participants**) are countries, economies and international organizations working together towards a vision of "a world in which biodiversity information is freely and universally available for science, society and a sustainable future". With the signature of GBIF's **Memorandum of Understanding**, all Participants commit to making the necessary arrangements to organize the publication and use of biodiversity information within their geographical and/or thematic scope, according to internationally agreed standards. This includes establishing a Participant node as the coordinating team designated by Participants to establish, strengthen and expand the GBIF-related activities of the country or organization.

In addition to its formal network of Participants, GBIF works in partnership with a number of biodiversity related organizations and initiatives, often formalized through the signature of specific Memoranda of Cooperation.

The **Governing Board** is the body through which GBIF Participants make collective decisions. Meeting once a year, it consists of a delegation (lead by the Head of Delegation) from each Participant country and organization. Three **standing committees**—the Science Committee, the Budget Committee and the Participant Node Managers Committee (which includes the Nodes Steering Group)—act as advisory bodies, each with its own terms of reference and with officers and members elected by the Governing Board. These groups provide recommendations on operational matters like the implementation of the GBIF work programme, financial issues and the work of the nodes in implementing GBIF-related activities on the national level.

GBIF's national Participants **fund** its core work through an annual basic financial contribution based on a formula linked to the country's GDP. Other Participants may make supplementary financial contributions to fund specific parts of the work programme or for other purposes agreed to by the Governing Board (including capacity- related actions). The Secretariat may also receive funds from additional sources, such as foundations, agencies, research councils and private companies, for work aligned with the GBIF Memorandum of Understanding, the strategic plan and work programmes.

More information about GBIF, its governance structure and funding model can found at GBIF.org.

GBIF faces significant, ongoing constraints to capacity enhancement while continuing to extend its global network, as each additional Participant brings both additional capacity and additional capacity needs. The governments and international organizations that form GBIF's network of Participants formalize their involvement through a Memorandum of Understanding. This non-binding agreement can lead to disparities in the support that individual nodes receive for GBIF-related activities, which affects the Participant's capacity both to contribute to and to benefit from GBIF. The greatest challenge faced by many Participants is maintaining and strengthening their capacity to support biodiversity data mobilization, management and use at a national level.

Recent advances in approaches to capacity development have highlighted the need to adopt a more holistic view of capacity in order to have a sustainable impact on performance (see review in [Learning Module 1](#)). In addition to considering three interlinking dimensions—the individual, the organization and the enabling environment, this notion of capacity places importance both on specific technical skills and knowledge as well as on functional capacities (or 'soft' skills) relevant to organizational and individual effectiveness. Similar trends have emerged in recent reviews of access to research infrastructures, which have included both functional and technical aspects as 'basic requirements' common to enabling research infrastructures in all scientific fields to be at the heart of the "knowledge triangle between research, education and innovation" (see [Annex XII](#)). Applying these latest trends to the network of GBIF Participants will ensure that capacity enhancement actions are as effective, efficient and sustainable as possible.

With this new framework, GBIF intends to:

- Reposition capacity enhancement activities as essential to strengthening the sustainable performance of the whole GBIF Participant network, in both the developed and developing world
- Provide the GBIF network with a common approach and language that reflects key concepts from the areas of capacity development and access to research infrastructure and applies them in programming capacity enhancement actions on all levels, including the monitoring and evaluation of their impact
- Fully integrate and incorporate capacity enhancement in strategic planning for GBIF at all levels

2.3. Capacity in the GBIF context

GBIF provides a context for capacity enhancement at the **national level** by Participants. Participating in GBIF supports national and sub-national governments in meeting commitments on transparency and open access to scientific data and fulfilling information requirements for meeting national and global commitments, including biodiversity-related targets and sustainable development goals. Joining GBIF can help Participant nodes coordinate the establishment or support of networks of biodiversity data holders and users while strengthening governance processes and research relating to biodiversity. Participant nodes often run training programmes and provide technical support services to build capacity in the mobilization, management and use of biodiversity data. Many nodes have also successfully initiated and implemented capacity enhancement partnerships with others across the GBIF network.

GBIF's **governance structures** provide opportunities for international and regional exchange between government representatives, practitioners and experts, enabling them to share approaches to planning, policy setting, engagement and implementation. In particular, the regular meetings of the GBIF Governing Board and Participant Node Managers Committee often act as platforms for developing collaborative projects, sharing technologies, identifying best practices and innovative approaches—all of which help enhance capacity within the GBIF network.

GBIF has pursued a [regional approach](#) through the Participant Node Managers Committee since 2008. Supported by regular meetings, these regional networks have become an important platform for capacity enhancement and partnerships, leading, for example, to the identification of regional priority areas for data mobilization and the development of regional action plans and collaborative projects.

Much of work of the [GBIF Secretariat](#) serves to support the work of the network and contributes to capacity development, in particular the role of coordinating activities of the network related to data mobilization, publishing and management. The Secretariat's role in capacity enhancement activities leans more toward facilitation than implementation: providing guidance, documenting best practices, collating training material, coordinating activities, and creating or aligning opportunities. The Secretariat plays a further role in enhancing capacity by facilitating projects with partners and through funding from external or supplementary funds.

Finally, the Secretariat sets aside a portion of its core funding specifically to co-fund or facilitate capacity enhancement actions taking place in the GBIF network through the [Capacity Enhancement Support Programme](#).

3. GBIF's approach to capacity enhancement

3.1. Main goal of capacity enhancement in GBIF

The overall goal of GBIF's capacity enhancement activities is that:

Countries and partner organizations have the capacity to continuously contribute to and benefit from GBIF as an international open data infrastructure for biodiversity, supporting research and promoting evidence-based decisions affecting life on Earth and sustainable human development

By pursuing this goal, GBIF's capacity enhancement activities simultaneously contribute to:

- **The vision** of “a world in which biodiversity information is freely and universally available for science, society and a sustainable future”.
- The goal identified in the [Global Biodiversity Informatics Outlook](#) of, “through biodiversity informatics, reaching a much deeper understanding of the world's biodiversity, and through that understanding, the means to conserve it better and to use it more sustainably”.
- The Convention on Biological Diversity's [Aichi Target 19](#) that “by 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved,

widely shared and transferred, and applied”.

Achieving this goal will depend on defining and meeting subsequent objectives that are relevant, concrete, achievable, measurable and time-bound. GBIF will outline objectives based on this framework and its strategic plans to ensure that capacity enhancement efforts align with the other objectives and link capacity and performance targets.

3.2. Values and guiding principles

With this framework GBIF adopts a number of **guiding principles for capacity enhancement** adapted from the [operational principles for effective capacity building of the Global Environmental Facility](#) (GEF) and the [capacity development guiding principles of the Food and Agriculture Organization of the United Nations](#) (FAO). These principles have been defined in line with the [2005 Paris Declaration and the 2008 Accra Agenda for Action](#). In doing so, GBIF recognizes that it is fundamental for capacity enhancement activities to be **Participant-driven and owned**, and **built on the existing capacities** within its network.

1. Participant ownership and leadership

GBIF is implemented through [formal partnerships](#) between Participant countries, economies, and biodiversity-related organizations to serve the need for an international open-data infrastructure. The ownership and leadership of Participants is thus important for all GBIF’s activities, and especially for capacity enhancement activities, to ensure alignment with the Participant’s capacity needs and development processes. This ownership and leadership should permeate all stages of the capacity enhancement cycle (see section 3.4).

2. Alignment with national priorities and self-assessed capacity needs

All capacity enhancement actions need to be demand-driven and closely aligned with Participant countries’ priorities. GBIF promotes the use of self-assessment as a tool for Participants to identify their capacity strengths and needs, and to set priorities for their capacity enhancement actions in the GBIF context.

3. Use of Participant systems and local expertise

Capacity enhancement actions within GBIF should make use of local expertise and existing Participant-level systems and networks, whatever their stage of development, to ensure these are strengthened in the process. It is important to avoid approaches that can undermine existing capacities at the Participant level, such as providing training or technical expertise exclusively through foreign consultants, or project designs in which the overall management responsibility devolves to a body that does not include those involved locally in the implementation of the actions.

4. Partnerships and regional engagement

GBIF promotes the alignment of its network’s capacity enhancement programmes and actions with those of other international initiatives relating to biodiversity, including those targeting access to biodiversity research infrastructures in general, the [Intergovernmental Platform on Biodiversity and Ecosystem Services](#) (IPBES) and the [Convention on Biological Diversity](#) (CBD). Capacity enhancement actions should also build on partnerships across the network of Participants to strengthen collaboration and exchange. GBIF supports Participant exchange at the regional level, recognizing regional similarities in priorities and the existence of regional policies and agendas relating to biodiversity and

capacity enhancement.

5. Multiple-level, holistic perspective

GBIF's capacity enhancement programmes facilitated at the international, regional and national levels seek to be comprehensive enough to support a range of actions, targeting both functional and technical capacity needs of individuals, organizations and the enabling environment (see section 3.3).

6. Customized approaches

Effective capacity enhancement is highly context-dependent. GBIF therefore seeks to design flexible programmes and projects that allow capacity enhancement actions to be tailored to the needs and contexts of Participants. This includes, for example, adapting to the languages and cultural and societal contexts of the target audiences.

7. Mutual accountability and transparency

All partners involved in capacity enhancement actions are accountable to each other for the ultimate results of the intervention, and transparency is essential to ensuring this accountability. GBIF places specific attention on monitoring and evaluation as tools for learning and adapting approaches. In the context of capacity enhancement projects, monitoring and evaluation should aim to use and strengthen existing Participant-level processes, rather than requiring parallel reporting systems.

3.3. Capacity types and dimensions in the GBIF framework

In order to meet the overall goal outlined in this framework, capacity enhancement actions need to target two broad capacity types: functional and technical capacities, occurring in three dimensions: the enabling environment, the organizational level and the individual level. These capacity types and dimensions should be considered when planning, implementing and evaluating capacity enhancement actions.

Capacity types

Technical capacities are the context-specific skills and faculties that enable Participants to mobilize, curate, manage, analyze and use biodiversity data, incorporating:

- *Biodiversity data mobilization capacity*: the ability to collect, digitize and publish biodiversity data
- *Biodiversity data management and curation capacity*: the ability to manage and curate biodiversity data, as a means of continuously improving data quality
- *Biodiversity data analysis and use capacity*: the ability to access, analyze and use biodiversity data

Functional capacities are those skills and faculties related to organizational and individual effectiveness required to make use of technical capacities, incorporating:

- *Planning and policy capacity*: the ability to formulate strategies, plans and policies based on relevant assessments
- *Engagement capacity*: the ability to initiate and sustain partnerships and networks
- *Implementation and evaluation capacity*: the ability to manage, fund, budget, implement and evaluate projects and programmes

Capacity dimensions

These capacity types can be seen as occurring in three dimensions:

- *Individual level:* the skills, knowledge, attitudes and creativity of the people who contribute to GBIF's overall mission
- *Organizational level:* the procedures, systems, policies and cultures of the organizations that contribute to GBIF's overall mission
- *Enabling environment:* the broader national contexts that contribute to GBIF's overall mission, including political commitment and vision; policy and legal frameworks; budget allocations and processes; governance; incentives; and culture, value systems and social norms

3.4. A cycle for capacity enhancement action

In programming capacity enhancement actions at all levels, GBIF adopts a cycle based on that proposed by the [United Nations Development Programme](#).

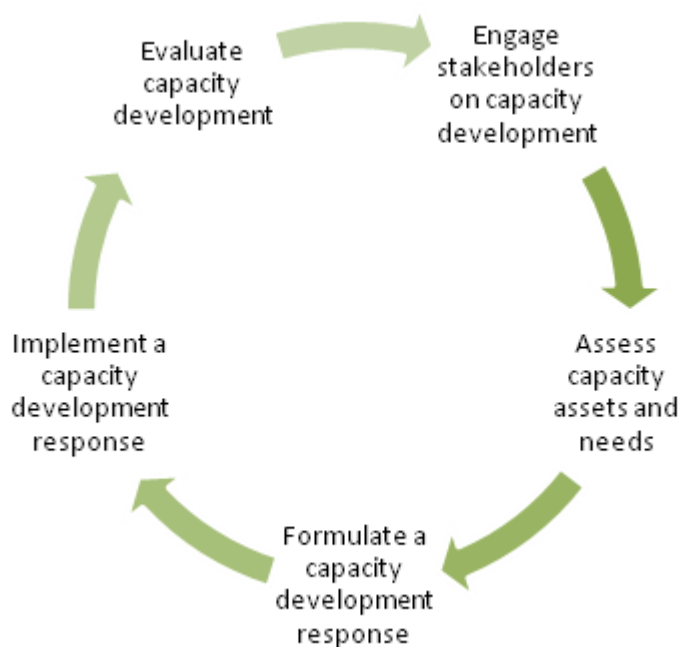


Figure 1: The UNDP capacity development cycle

1. Engage stakeholders on capacity enhancement

To ensure country ownership and leadership in capacity enhancement actions, it is important for the GBIF Participants and their representatives to engage their stakeholders and others from the GBIF network.

The critical first step in this process is the designation or establishment of a Participant node that can engage with and eventually coordinate capacity enhancement actions within a network of biodiversity data holders, biodiversity knowledge holders and biodiversity data users. Active participation in the GBIF governance bodies and standing committees provides a forum for engaging with others on issues relating to capacity enhancement and working with biodiversity information. Nodes can often initiate specific partnerships with potential partners working on capacity enhancement in biodiversity-related areas (for example, biodiversity informatics curricula at the university level).

2. Assess capacity assets and needs

Assessments of capacity at the Participant level prior to programming capacity enhancement actions should ensure that they are based on a comprehensive view of all capacity types and dimensions.

Such assessments should enable the inclusion of both quantitative and qualitative data in the baseline measurement, and will inform the development of an action plan.

Participatory assessments may develop a common understanding and language around the capacity types and dimensions, leading to an increased ability to share experiences with others from the GBIF network.

GBIF regularly updates a set of self-assessment guidelines as to support Participants carrying them out. Results can be shared with others from the GBIF network and used in the preparation of project proposals (for example, under the [GBIF Capacity Enhancement Support Programme](#)).

3. Formulate a capacity enhancement response

The design of capacity enhancement responses should build on identified capacity strengths in order to tackle capacity needs. Transparent prioritization of the identified needs can help Participants in planning. It can be helpful to try to combine ‘quick wins’ (activities that are likely to produce relatively short-term results) with longer-term plans and objectives. Likewise, it is worth considering indicators for measuring progress along the way, not just at the end of the project.

GBIF provides a rich context for capacity enhancement, with opportunities for actions at international, regional and national levels that can ultimately serve national capacity enhancement (see section 2.3). Examples of approaches, tools and techniques in use across the GBIF network are shown in Box 2. GBIF has [programmes to support and co-fund actions](#) that fit within a Participant’s overall capacity enhancement priorities in step two above. At this stage, it is also important to consider aligning with other related actions taking place at the Participant level to ensure synergies and partnerships and to avoid competing approaches.

4. Implement a capacity enhancement response

Participants lead capacity enhancement actions in GBIF, making use of existing networks, organizational structures and expertise. The establishment and further growth of Participant biodiversity information networks or facilities is a key mechanism for ensuring that capacity enhancement actions are anchored in long-term national structures and processes.

The types of institutions and teams designated by Participants to act as nodes vary widely. This diversity is important to ensure that joining GBIF serves the Participant’s biodiversity information needs and strengthens existing networks, structures and processes, rather than establishing new GBIF-focused entities. GBIF maintains [guidance for Participants on how to establish effective Participant nodes](#).

A large part of the implementation phase will involve fitting or translating general approaches across GBIF to the Participant context. This can include analyzing which of the available tools, practices, learning materials and processes Participants can adapt for their use.

Box 2. Capacity enhancement approaches, tools and techniques

Programming capacity enhancement actions includes selecting which approaches, tools and techniques are best adapted to target needs around specific capacity types and dimensions. The GBIF network has successfully employed the following:

Strategic meetings

Such gatherings bring together stakeholders who can define common policies, make agreements and implement them. They can have different components—knowledge exchange and dissemination, for example, or engagement—but these additional components must always contribute to a clear objective or agreement. These meetings are suitable to target the enabling environment and the organizational levels of capacity.

Development of capacity enhancement strategies

Creating a realistic programme that leverages strengths and addresses capacity needs with resources and tools available requires direct communication with stakeholders. Developing such strategies ensures the effectiveness of investments in capacity enhancement, targets prioritized needs (instead of aiming at easy targets), and both shapes and benefits a long-term vision while affecting all dimensions of capacity.

GBIF advocacy in public forums

These actions usually target the enabling environment, preparing the ground for follow-up actions while defining the particulars of specific collaboration agreements.

Targeted capacity enhancement projects

Specific time-bound projects often target specific capacity needs. Ideally, these projects should encompass comprehensive capacity enhancement strategies that identify and prioritize broader capacity needs. Depending on the nature of the projects and the actions they include, they can target any of the dimensions of capacity and can often draw funding from national or international sources.

Mentoring actions and targeted support visits

Participants in the GBIF network work together in targeted fashion to address specific capacity needs, often building lasting collaborations. Mentoring projects provide an effective means of addressing capacity needs of GBIF Participant nodes, as they rely on partners that have addressed similar issues in their own contexts. In other cases, shorter, targeted collaborations and support visits may address specific problems more effectively.

Workshops and courses, both online and face-to-face

Workshops and courses are knowledge dissemination actions, usually targeted at the individual dimension of capacity (although is not uncommon for activities to aim simultaneously at other dimensions). It is essential to design these actions with the specific needs and current capacities of the learners in mind, rather than focusing simply on available workshop expertise.

Production and adaptation of documentation and other learning materials

Documentation is still one of the most efficient mechanisms to sustain capacity after the implementation of many of the actions listed above. These learning materials can take the form of written documents, presentations, sound recordings, videos, or diverse online training resources, among others. Documentation can target any of type or dimension of capacity. For example, manuals, guides and courses traditionally target the individual dimension, while white papers, briefs, and strategic documents usually target the organizational and enabling environment dimensions.

Establishing communities of knowledge and expert networks

Communities and networks of practice can help to ensure that individuals who receive training on a specific topic remain engaged in a (virtual or traditional) community and share experiences once they start putting their newly developed skills into practice. Social media networks and mailing lists and the GBIF [Community Site](#) can provide platforms for supporting such groups:

Participants seeking to program capacity enhancement actions can request help from the GBIF Secretariat in identifying, for example, relevant partners, learning resources, local or regional experts, examples and best practice for inclusion in training or mentoring programmes. The Secretariat can also support the implementation phase through a coordinating role that ensures alignment with other key partners at global or regional scales and provides platforms for collaborative work across the GBIF network, such as online communities and regular meetings.

The GBIF network provides sources of expertise and support to draw upon during the implementation phase. Using established mechanisms helps ensure and support regular contact between members of the GBIF community while strengthening capacity enhancement projects and broadening their reach.

5. Evaluate capacity enhancement

Evaluating the results of capacity enhancement actions should involve and inform the stakeholders in the most transparent way possible, closing the five-step cycle. Capacity enhancement results should be reflected in improved efficiency and effectiveness. Although it is typically easier and cheaper to measure outputs than outcomes, trying to understand the broader impact of any actions is a critical point for reflection.

Capacity self-assessment, based on the types and dimensions presented in section 3.3, enables Participants to evaluate results within this framework.

3.5. Capacity enhancement actors in the GBIF network

The overall goal of this framework targets the capacity of GBIF's growing network of Participant countries and international organizations. This network includes numerous actors—governments, organizations and institutes focused on biodiversity, and broad range of individuals. These actors may already engage in the GBIF network in some way, but they may also include new relevant stakeholders that GBIF seeks to engage with either at the international, regional or national level. The actors are classified into broad stakeholder groups in Box 3.

Box 3. Stakeholders in the GBIF network

The [GBIF communication strategy](#) identifies six audiences that represent different groups of individual and institutional stakeholders for GBIF. While the groups may overlap and individuals may engage with GBIF in multiple roles, each has distinct interests, needs and roles to play in advancing toward GBIF's vision. These audiences are summarized below.

The GBIF network

This group includes node managers, staff and governance members; heads of delegation and other Governing Board delegates; advisory committee members; Secretariat staff and contractors; and relevant staff in affiliate organizations.

These are the both the **main leaders of GBIF's capacity enhancement work** (through which the capacity of the other groups can be targeted) and the target of many actions.

Data holders

This group includes, among others, current GBIF data publishers; natural history collection curators, informaticians and scientists; field biologists; citizen scientists, voluntary recording networks and observation aggregating sites; authors, editors and publishers of scientific research; custodians of historic biodiversity-related literature and multimedia archives; and organizers and practitioners of surveys and monitoring programmes carried out for public agencies, protected area management and non-governmental organizations.

Capacity enhancement action involving this group mainly seeks to **encourage and support biodiversity data mobilization**: data digitization, data collection and ultimately publication of their data through the GBIF network.

Biodiversity knowledge experts

This group includes zoologists, botanists, mycologists and other species specialists; taxonomists; ecologists; expert networks (e.g. IUCN, Birdlife); and nomenclatural associations.

Capacity enhancement actions involving this group seek to **support biodiversity data management and curation**: continuously improving the quality and fitness-for-use of the data mobilized by the GBIF network, and demonstrating that the work of these groups benefits from strong biodiversity information facilities, at national and global levels.

Data users

This group includes ecologists, including macroecologists and biogeographers; species distribution modellers (includes analysts of climate change impacts, invasive species risk, human disease vectors); conservation practitioners, including protected area planners; environmental impact analysts and strategic spatial planning authorities; genetic resources experts (for crop diversity, medicinal compounds etc.); and the ecosystem assessment community.

Capacity enhancement action involving this group seeks to **support biodiversity data use**: reusing the data accessible through GBIF to support biodiversity science and environmental research, ultimately to support evidence-based decision-making.

Funders and executive decision-makers

This group includes national government ministry and agency officials; research funding agencies; intergovernmental convention officials and national delegates; and global foundations.

Capacity enhancement actions targeting this group seek to develop capacity on the organizational level and in the enabling environment to **build support for all GBIF-related**

activities.

Public stakeholders

This group includes educators; students; wildlife enthusiasts; environmentally engaged individuals; and the non-scientific software developer community.

While these groups may not represent a primary audience at the global level, they may be key stakeholders involved in national or organizational GBIF activities. Developing capacity within these groups as contributors to the enabling environment can build wider support for open access to data.

4. Towards applying the GBIF Capacity Enhancement Framework

With this framework, GBIF outlines an inclusive approach to capacity enhancement for all GBIF Participants across all regions irrespective of whether they are countries or international organizations. The GBIF community can use its values and guiding principles, definitions of capacity types and dimensions, cycle for capacity enhancement actions and examples of tools, techniques and audiences to plan, implement and evaluate capacity enhancement actions. Reaching a shared understanding of these concepts and speaking a common language for them will make it easier to align efforts and measure progress, both across the GBIF network and with other partners. This holistic approach also ensures that GBIF's capacity enhancement work fully benefits from the current understanding across the areas of capacity development and access to research infrastructures.

The GBIF Secretariat will apply this framework in its continuing effort to provide useful guidance and material to Participants, as in the Capacity Enhancement Support Programme. The framework will also help underpin strategic planning for GBIF for 2017-2021.

Stakeholders are encouraged to use this framework when designing capacity enhancement activities, both within their own context and when defining collaborations with external partners.

Potential partners are encouraged to evaluate how the approach described in this framework could align with their priorities and principles, when considering potential capacity enhancement collaboration with the GBIF network.

The GBIF Secretariat staff are available to provide further information on this framework, how to put it into practice and potential avenues for collaboration.

For more information, contact the GBIF Secretariat at nodes@gbif.org or by phone at +45 3532 1470.