

Call for action on recognizing the critical role of taxonomy to underpin transformative change within the post-2020 Global Biodiversity Framework

The participants in the Global Taxonomy Initiative (GTI) Forum, held from 2-4 December 2020, agree with the following statement, addressed to CBD Parties and relevant stakeholders involved in drafting and implementation of the post-2020 Global Biodiversity Framework.

Taxonomy is the fundamental scientific discipline underpinning biodiversity discovery and understanding. As such, attainment of the goals of the Global Biodiversity Framework depend on effective action both to maintain and strengthen long-established taxonomic expertise, and to support the many innovations enabling unprecedented discovery of the Earth's biodiversity as well as the sharing of data and information to support conservation and sustainable development.

Taxonomy must be recognized and fully integrated into all components of the Global Biodiversity Framework. This includes, but is not confined to:

- The 2030 action targets of the framework
- The implementation support mechanisms of the framework, especially capacity development, technical and scientific cooperation, and knowledge generation

Development of capacity in taxonomy is critical to the successful implementation of the Global Biodiversity Framework. This includes support for developing taxonomic infrastructure and capacity in all countries and regions, and for ensuring that such skills are passed to new generations, to underpin and enhance understanding of biodiversity in all places on Earth. Increased investment in education, training and career opportunities in taxonomy is urgently needed to prevent an overall decline in taxonomic research, and to promote continued expertise and taxonomic literacy among younger professionals and future generations engaged in conservation.

Innovative and emerging technologies provide unprecedented opportunities for generating and sharing knowledge about the biosphere, when combined with essential taxonomic knowledge, techniques and skills. Such opportunities include:

- Harnessing the immense knowledge base accumulated in natural history collections of all sizes and in all regions, through digitization and sharing of data on preserved specimens using common standards to enable universal discovery, access and use
- Generation and sharing of data arising from technological improvements in genetic sequencing of organisms in nature, for example through environmental metagenomics, enabling planetary-scale understanding of species, surveillance of their dynamics, and acceleration of species discovery
- Providing digital access to taxonomic literature and associated archives, both through digitization of historic materials, and rapid integration of newly-published taxonomic discoveries and treatments into the global knowledge base

- Engagement of citizens, indigenous peoples and local communities in observation and documentation of evidence on biodiversity occurrence in space and time, through bringing together volunteer networks, taxonomic expertise and user-friendly applications to register, share and access biodiversity data; thereby encouraging bio-literacy and public participation in conservation and sustainable use of biodiversity
- Enabling conservation of all branches of the Tree of Life as an essential component of addressing biodiversity loss, by recognizing the evolutionary framework underlying taxonomy, and incorporating phylogenetic and systematics information with spatial data on species distribution and occurrences
- Enabling improved management, assessment, and surveillance in order to prevent negative impacts on biodiversity and human well-being, including through improved biosecurity measures

The goals of the Global Biodiversity Framework will only be realized through active and effective collaborations and connections among all relevant taxonomic initiatives at all scales. Such ongoing collaboration must avoid duplication of effort, and enable integration of data and information within a shared knowledge network, based on inclusive participation and transparent governance, as well as effective and efficient use of available resources.

We commit to engaging fully with the Parties to the CBD to ensure that taxonomy is well reflected in the post-2020 Global Biodiversity Framework. In particular, we feel it is essential that taxonomy continues to feature as a strong component of the programmes for technical and scientific cooperation under the CBD, building on the GTI network of focal points and partners, pending the inclusive review process for review and renewal of these programmes, to be submitted for approval at COP15.

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