

2 August 2023

Re: draft Global Strategy for Plant Conservation



Dear CBD Secretariat

We appreciate the opportunity to review the Global Strategy for Plant Conservation as per CBD Notification SCBD/SSSF/JL/SK/AC/KM/91128. We are writing these recommendations as a group of globally recognized experts in conservation genetics, conservation biology, and plant conservation. We focus on areas relating to our expertise- the conservation of genetic diversity within and among populations, in situ and ex situ, to enable species' survival and resilience in a time of change. We were involved in advising on the Convention on Biological Diversity Kunming Montreal Global Biodiversity Framework and several of us participated in COP15 (summarized in [Hoban et al 2023](#)).

The comments below are numbered according to the Targets in “Annex 1 of the document Updated Global Strategy for Plant Conservation: Proposed complementary actions related to plant conservation to support the implementation of the KMGBF” specifically column 2 “Proposed draft actions for the post-2020 Global Strategy for Plant Conservation.” We note several high priority comments in bold.

- 1. Change “Identify and map all plant species...” to “Document the distribution and abundance of all plant species, ideally to the population level...” This is needed for clarity (what does “map all plant species” mean?) and to reflect the type of knowledge needed for spatial planning, which is the distribution and abundance in each location in as much detail as possible, ideally at the population level.
- 2. We approve of the language “genetically appropriate plant species” though “genetically appropriate sources (provenances, e.g. populations) of plant species” is more precise. This reflects the current plant conservation paradigm, “right plant in the right place,” emphasizing that the source of the plants (e.g. their genetic diversity) should be adapted to where they are used.
- **HIGH PRIORITY:** 3a. Regarding “Ensure that important areas for plant diversity are identified, recognised and represented...” We suggest changing “plant diversity” to “plant species and genetic diversity” since some geographic areas can be particularly important for distinct genetic diversity they hold, independently of the number of species present, as recognized in the concept of Key Biodiversity Areas and other initiatives and as emphasized in [IUCN resolution 093](#) (see also [Tobon et al 2022](#)).
- 4a. Add “and assessments are regularly updated.” This is because many plant assessments are years or decades out of date. Suggest also adding to the end of the sentence “including assessment of genetic diversity and resilience when possible.”
- **TOP PRIORITY:** 4d. Remove "socio-economically important". The Kunming-Montreal agreement does not limit this target to only such species. Indeed a major advance of this agreement over the 2010-2020 CBD plan was to conserve genetic diversity of all species ([Hoban et al 2021](#), [Hoban et al 2023](#)). *All iterations of the GBF, from its envisioning in 2019 until the final agreement, used the words “all species” or “species” and thus did not limit to particular categories of species. The finalized GBF Goal A and Target 4 emphasize that both wild and*

domesticated species should be targeted. All life on earth is important for ecosystem stability, nature's contributions to people, and adaptive capacity. Therefore *we strongly recommend removing "socio-economically important"*.

- **HIGH PRIORITY:** 4d. Change "managed and monitored" to "managed, monitored and when possible restored." The Kunming-Montreal agreement used the words "maintain" and "restore" in Target 4, and for alignment with the GBF, and to reflect the ambitious spirit of the GBF, the word "restore" should be added. While it is not possible to restore all lost genetic diversity, some genetic diversity can be restored by reconnecting populations separated by habitat fragmentation, augmenting numbers of individuals, and other means.
- **HIGH PRIORITY: 4d.** Move "in situ" to the beginning of the sentence e.g. change to "Undertake ex situ and in situ conservation programmes" and remove "in situ" from the later part of the sentence, *for consistency with the GBF Target 4 which mentions these two approaches together in a holistic sense.* If this document is to include indicators, suggest adding "Monitoring of genetic diversity among and within plant populations should include the several indicators for genetic diversity that were included in the KMGBF monitoring framework."
 - **In summary, 4d recommendation in full:** "Undertake ex situ and in situ conservation programmes for plant species and populations, ensuring that the genetic diversity within and among populations is effectively managed, monitored and restored, to prevent genetic erosion and safeguard their adaptive potential."
- 8. Change "climate sequestration" to "climate mitigation." "Climate sequestration" is not a technique (maybe it is meant to be "carbon sequestration"?). Also, as noted under number 2, "genetically appropriate sources (provenances, e.g. populations) of plant species" may be better.

Please do not hesitate to contact us with questions or for collaboration.

Signed,

[GBIKE \(Genetic Biodiversity Knowledge for Ecosystems\)](#), CBD Observer

and other members of the [The Coalition for Conservation Genetics](#),

composed of leading members of the IUCN [Conservation Genetics Specialist Group](#), GEO BON [Genetic Composition Working Group](#), Society for Conservation Biology [Conservation Genetics Working Group](#), [GBIKE \(Genetic Biodiversity Knowledge for Ecosystems\)](#), and other leading conservation geneticists worldwide

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