Expert opinion

To be considered at COP 15 and the UN Summit of the Future 2023

September 2022

We, the experts representing contributing organizations from 4 continents of the side-event "The key for a successful UN's Post-2020 Global Biodiversity Framework - standards for measuring biodiversity with molecular tools" organized by the Science Summit at the UN general Assembly 77 in New York propose the following key messages to be considered in the preparation of the COP 15 and UN Summit of the Future, 2023 meetings.

The observed global loss of biodiversity has serious implications for human wellbeing and can amplify several of the negative aspects of climate change and impact adversely on achieving several of the SDG's. **We need international standards to enable the use of novel molecular techniques to extend and improve current biodiversity and genetic monitoring in all types of habitats.** Standards are needed because data from biological monitoring is the primary source of information to quantify biodiversity loss, as well as to evaluate the effectiveness of biodiversity management actions such as ecological restorations. The current motivation to standardize biodiversity methods stems mainly from policy demands of mandatory national legislation. This approach is ineffective in producing internationally agreed upon standards quickly. Continuing as usual will lead to long delays in the reporting of genetic diversity, reduce the intercomparability of country-wise reports and delay urgently needed management action to secure biodiversity. **Standardization of both backend (data standards), but especially frontend molecular method minimun requirements (sampling, laboratory procedures) is paramount to avoid error propagation and ensure global comparability of results.**

Key messages:

The necessity of creating minimum requirement standards

First, we need to internationally agree on minimum requirements for frontend methods to collect, handle and store samples for molecular analysis. This is a matter of high urgency, as many countries are already developing their national approaches. Due to the sensitivity of molecular methods, a lack of common frontend standards will result in a plethora of different national approaches, varying results and incompatible data. Only international molecular method standards will enable global assessments of biodiversity or genetic diversity and stimulate markets and industry to produce products to do so. ***We recommend to decide on the inclusion of method standards into the CBD policy frameworks and its work programme.***

The need to create standards inclusively

Second, to be effective, standards need to be developed inclusively, taking into consideration the requirements of the methods themselves as well as the need and possibilities of developing countries. Currently participation from developing countries in standardization is minimal. ***We recommend that developing countries are actively involved in the standardization work and that the international standardization bodies CEN and ISO formally conduct the standardization process.***

The need for dedicated funding

Third, in both developed and developing countries there is no separate funding available to facilitate the production of standards. ***We recommend that dedicated funding is available to encourage participation in inclusive method standardization especially by developing countries.***

On behalf of the expert group,

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