

CBD



Distr. GENERAL

UNEP/CBD/ID/AHTEG/2015/1/INF/15 10 September 2015

Convention on Biological Diversity

ENGLISH ONLY

AD HOC TECHNICAL EXPERT GROUP MEETING ON INDICATORS FOR THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020 Geneva, Switzerland, 14-17 September 2015

THE AGROBIODIVERSITY INDEX: A PROPOSAL

Note by the Executive Secretary

1. The Executive Secretary is circulating herewith, for the information of participants in the meeting of the Ad Hoc Technical Expert Group on Indicators for the Strategic Plan for Biodiversity 2011-2020, a document on a proposed Agrobiodiversity Index.

2. The document has been prepared by Bioversity International. It is presented in the form and language in which it was received by the Secretariat.

The Agrobiodiversity index: a proposal

What is the need?

It is widely hypothesized that agricultural biodiversity (ABD) is declining at an unprecedented rate in the face of global changes, but there is no consistent long-term monitoring to test this hypothesis. One reason for this lack is the complicated nature of measuring across different scales and levels (genetic, species, locations, and points in time). But even if that challenge is surmounted, monitoring the existence of crop biodiversity is not enough. We need to know also if it is entering the market place, whether farmers have access to diverse planting materials and what is ending up on people's plates.

The ABD index proposes to monitor biodiversity in these four different connected systems: food systems, production systems, seed systems and conservation systems.

Doing so will allow us to better understand the relationship between the different systems and better identify points to intervene to maximize the capacity to maintain food and nutrition security, human health, ecosystem services and resilience of our production systems.

There is no lack of indicators and metrics proposed to monitor crop biodiversity directly and indirectly. Indeed hundreds of indicators have been proposed, each with pros and cons. What is needed is to identify a set, sufficient to provide insights into food, production, seed and conservation systems, which are robust, relevant and cost effective.

Who is it for?

- The Index should help countries to monitor and implement National Biodiversity Strategies and Action Plans (NBSAPs). NBSAPs are the mechanism by which countries meet Aichi Targets. CBD commitments are expressed through the Aichi Targets. Indicators for the Aichi Targets have been initiated and used in the Global Biodiversity Outlook 4 report, in which progress against each Target was reported. The Index will specifically allow countries and CBD to monitor progress towards Targets 7 and 13. These agriculture-related Aichi Targets are considered central to tackling the broader biodiversity challenge and are technically highly complex requiring specialized expertise.
- The recently agreed Sustainable Development Goals include several goals closely associated with the status of agricultural biodiversity. Goal 15 specifically states "halt biodiversity loss". Goal 2 aims to "end hunger, achieve food security and improved nutrition and promote sustainable agriculture", all of which requires effective access to agrobiodiversity. In a similar way, Goals 3 (healthy lives), 12 (sustainable consumption and production patterns) and 13 (combat climate change) all depend on biodiversity. The fact that the Aichi Targets and the SDGs are well aligned means that working on the monitoring of biodiversity indicators can synergistically contribute to both international processes.
- A highly disaggregated view of the status of agricultural biodiversity will help FAO, the Global Crop Diversity Trust, and related international bodies assess risks, prioritize collection efforts and select appropriate approaches to conservation.
- The approach we are proposing combines high-level data with local-level crowdsourced data, thereby also making the monitoring useful for farmers, whether for their own needs (e.g. sources of desired seed) or as a basis for a call for collective action
- More broadly the index should be useful to policymakers and those with an interest in shaping policy across the different spectra: food and nutrition; seeds; agricultural production, environment and conservation. The index will be built around the problems that we need to solve.

What form might it take?

The Index would likely take the form of a set of four sub-indexes: one for each system (food systems, production systems, seed systems and conservation systems), with key metrics identified for each system at different levels:

- genetic diversity for one or two country-relevant major crops (possibly in close collaboration with CGIAR Research Programs (CRPs) working on major staple crops)
- species diversity for the system
- for production systems and food systems: functional diversity

How to develop it?

- Select countries for case study piloting ((three or four selected countries in Africa, Asia, Latin America, and Europe/North America)
- Agree the questions that the index will be designed to answer
- Develop partnership reflecting expertise and authorizing environment:
 - Technical expertise in content: ecology, environmental studies, animal/plant/tree genetic resources,
 - Tentative users: CBD, country partners, particularly those reporting on biodiversity status to CBD, farmers associations
 - o Technical expertise in processes: citizen science, big data, index development
 - Shared interest in monitoring ABD: GBIF, Treaty, GCDT, FAO
 - Funding partners interested in understanding and influencing the status and trends in agricultural biodiversity
- A (semi-)structured review of existing methods, databases and monitoring systems on how ABD is being measured in food, farming and seed systems
- Assess methods existing in related fields, e.g. ecology, environmental studies, governance
- Identify a couple of key metrics that allow description and tracking of ABD trends in each of these different systems with respect to the questions asked
- Formulation of hypotheses of trends, at global, national, subnational level
- Development of a country profile card on ABD trends in food, farming, seed and conservation systems
- Sustainability/financing plan: how to continue to monitor in case study countries? How to promote take-up in other countries?

Proposed next steps:

Overall this would need to be an iterative process leading Bioversity to develop an initial approach, then sharing more widely internally and with key partners, revising and sharing again.

A key event is the meeting of the Ad Hoc Technical Expert Group on Indicators for the Strategic Plan on Biodiversity 20111 2020 in Geneva, 14 to 17 September, 2015. This expert group will discuss potential indicators to monitor the CBD strategic plan as a whole. The agricultural dimension is but one of many to be addressed.

Based on the output of the above Expert Group a small team within Bioversity would develop an initial position paper in close consultation with CBD technical staff.

The draft position paper would be shared with stakeholders for comment. After incorporating the feedback the paper would be used by CBD and Bioversity to support the fundraising to pay for a full design workshop.

The co-development workshop would bring together partners, technical experts, case study country experts and potential donors with expertise and interest in monitoring agricultural biodiversity to jointly develop the full technical and financial proposal.

The proposal would be presented/launched at the Mexico 2016 COP.

Bioversity International's role:

Bioversity International, a CGIAR research centre, has been working on agricultural biodiversity management for over 40 years. It has a strong track record in this highly specialized field. Its status as an intergovernmental organization gives it the high degree of independence required to lead such a global effort. Bioversity International has a tradition of co-developing programmes in partnership with multiple Southern and Northern actors. Furthermore Bioversity International has spearheaded the use of citizen science in the field of agrobiodiversity management, an approach that could revolutionize the way biodiversity can be monitored.
