



WORKSHOP FOR THE CBD INITIATIVE ON  
BIODIVERSITY IMPACT INDICATORS FOR  
COMMODITY PRODUCTION  
Helsinki, Finland, 13 November 2015

## **REPORT OF THE EXPERT WORKSHOP FOR THE CBD INITIATIVE ON BIODIVERSITY IMPACT INDICATORS FOR COMMODITY PRODUCTION**

### **INTRODUCTION**

1. The Initiative for Biodiversity Impact Indicators for Commodity Production was launched in October 2014 during the twelfth meeting of the Conference of Parties to the Convention on Biological Diversity. The purpose of the initiative is to compile the major cross-cutting impacts on biodiversity caused by agricultural commodity production and to develop a set of impact indicators. Agriculture accounts for 70 percent of the projected loss of terrestrial biodiversity<sup>1</sup>. Addressing trends in agriculture and food systems is therefore crucial in determining whether the Strategic Plan for Biodiversity 2011–2020 will succeed.
2. The Secretariat of the Convention on Biological Diversity (CBD Secretariat) is supporting efforts to more deeply engage the business community with the Convention. The business engagement decision adopted at COP12 (XII/10) in Pyeongchang, Republic of Korea, significantly strengthens the call for more effective business engagement. The decision included a call for the Secretariat to undertake a number of activities, including, to pursue ‘cooperation and synergies with other forums regarding issues that are relevant for biodiversity and business engagement with respect to, inter alia, commodity indicators’ (XII/10/3e). This Initiative is an important aspect of this work.
3. The majority of potential adverse impacts on biodiversity from agricultural commodities can be attributed to a relatively small number of impact categories (i.e. biodiversity loss, incl. deforestation, soil health, water uptake and effluent, input use efficiency, toxicity, etc.). These key impacts cut across most agricultural commodities and represent 70 percent or more of total impacts on biodiversity.
4. The aim of the CBD initiative is to identify these key impacts and to translate this into a set of generic biodiversity impact indicators for agriculture. Such a core set of indicators would provide a new approach by focusing on impacts *across* the hundreds of commodity types, and by providing information that could be used by decision makers, the private sector and others to improve performance – of not only the best actors but also the worst. Decision makers in national and local governments can use the indicator set to assess the status of biodiversity around these indicators in a given area and implement corresponding better and effective practices. The work is intended to address sustainability in commodity production as a whole – by assessing and addressing the status of biodiversity in a given area against the cross-cutting indicator set. It is therefore intended to fill the gap of the commodity by commodity type approach used so far.

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<sup>1</sup> Secretariat of the Convention on Biological Diversity (2014) Global Biodiversity Outlook 4. Montréal

5. The first phase of the work program of the initiative included identification of common impacts, of gaps in existing approaches, and determination of the best approaches for measurement. This has been carried out by an external consultant. For each major agricultural commodity, the main threats to biodiversity from its cultivation and processing, and the indicators for monitoring the impacts of certification have been summarized in the report in the form of generic lists of indicators for major impact categories.

6. The generic list of indicators identified was subject of the workshop discussion in order to verify the results and recommendations. The objective of the workshop was to:

- (a) review the generic list with regard to comprehensiveness and gaps;
- (b) assess effectiveness of indicators;
- (c) identify criteria to refine the list of generic indicators;
- (d) apply criteria and refine the generic list of indicators to produce a core set of indicators;
- (e) discuss next steps of the initiative.

7. The objective of the workshop was thus to produce a list of core indicators for biodiversity impacts from agricultural commodity production. This core set will represent the most important (in terms of impact) and cross-cutting impacts on biodiversity. The indicator set will be used to gather feedback from a wider set of potential users (governments, standard bodies, commodity roundtables, etc.) in terms of usability and applicability.

#### **ITEM 1. FIRST HALF OF THE WORKSHOP**

8. The workshop was opened at 9:00 on 13 November 2015.

9. Ms. Kristina Neumann, CBD Secretariat, welcomed participants, summarized the background of the initiative as well as the objective of this workshop as described above.

10. Ms. Amy Fraenkel, Principal Officer for Mainstreaming, Partnerships and Outreach at the CBD Secretariat, explained that the CBD initiative relates to the overall topic of the Business and Biodiversity Forum 2015 which took place in Helsinki on the two days preceding this workshop. The discussions during the Business Forum circled around the issue of how biodiversity can be mainstreamed into the bottom of the business community, i.e. how laggard companies and poor performers can be made aware of the importance of biodiversity. The CBD initiative is hoping to be able to address exactly these groups and raise performance through informing policies and governmental strategies. She further explained that this initiative is based on work on commodities that Jason Clay of WWF-US has been working on for some time - the idea being that focusing on a small number of issues related to environmental impacts from commodity production - that represent 60 to 80 percent of impacts - is much more effective in achieving change than attempting to address all possible impact simultaneously and thus risk being less effective. She further explained that the work of the CBD initiative will feed into the thirteenth meeting of the Conference of Parties to the Convention on Biological Diversity (COP13) which will focus on mainstreaming biodiversity into the agricultural sector among others. According to Ms. Fraenkel, this work will thus be very important for COP13.

11. Jonathan Loh, consultant for the CBD Secretariat, then presented the research study on biodiversity impact indicators he had compiled for the initiative. He explained that recent scientific literature and reports by standard-setting organizations were reviewed for information relating to impact monitoring and indicators. For each major agricultural commodity, the main threats to biodiversity from its cultivation and processing, and the indicators for monitoring the impacts of crop certification were summarized. The listed indicators appeared in one or more of the reports and literature reviewed and they are generic or could apply to many crops or commodities.

12. The thematic areas (i.e. major impact categories) for which generic lists of indicators were identified and compiled in the report are:

- (a) Ecosystems/Habitats and Species/Wildlife indicators
- (b) Water Use indicators
- (c) Water Quality indicators
- (d) Agrochemicals indicators
- (e) Soil indicators
- (f) Waste and Pollution (other than agrochemicals) indicators

13. Mr. Loh outlined that each generic indicator list per thematic area was further categorized as being a measure of state, pressure, or response. He explained that there are more response indicators listed than pressure or state indicators. Many of the response indicators are not necessarily indicators per se, but simply actions or interventions (or inactions or non-interventions) required to meet certification standards. The indicator in such cases would be whether or not the action or intervention has been implemented or completed.

14. Mr. Loh went on to explain that state indicators primarily should aim to measure the status of biodiversity in and around the farm. Because ecosystems extend beyond farm boundaries, what is really needed are indicators at a landscape scale that can monitor the impact on biodiversity both within a farm and within the wider landscape. He also noted that the first and most obvious pressure or footprint indicator to mention is the expansion of cultivated land into natural habitat. This is a critical indicator that can be measured at the level of both the farm and the wider landscape.

15. Mr. Loh finally noted that – according to his research findings - it is possible to further reduce the generic list of indicators to a core and cross-cutting set of no more than a dozen indicators which could be broadly applicable to any agricultural commodity anywhere in the world. The report recommends that the core set should focus only or mainly on state and pressure indicators which, because they require greater monitoring and change relatively slowly compared with response indicators, need not be measured every year or on every farm. This is in line with the sampled and focused research approach of impact monitoring that is used by many of the standards organizations. Response indicators are necessary for standards organizations to monitor compliance and progress, but they are not useful for monitoring their impact on biodiversity.

16. The participants then discussed demand side and potential utilization of this work. Some participants speculated if the output would be something to be used by commodity producers directly. CBD Secretariat representatives pointed out that the initiative is mainly addressing governments and other initiatives and entities working on agricultural commodity standards. The cross-cutting indicator set could potentially be used by these groups to look at agricultural commodity production from a horizontal point of view and to consider and integrate biodiversity criteria in their respective areas of work. It was pointed out that particularly with regard to policies that address biodiversity loss and ecosystem degradation on a landscape level this could be a very useful tool to assess what impacts need to be addressed when formulating policies that are targeted at changing performance of commodity producers towards less impact on biodiversity. A cross-cutting set of indicators may help governments and local authorities in evaluating the status of biodiversity in a specific area, i.e. landscape, and in addressing those impacts in a more targeted approach. The cross-cutting set of impact indicators represents the most pressing and major impacts on biodiversity from agricultural commodity production. Based on this set, governments will be able to assess which practices need to be implemented to address the major impacts on biodiversity in order to raise performance in agricultural commodity production. One example would be the implementation of targeted policies that require commodity producers to apply established standards or conduct of business around the identified major impacts.

17. It was further pointed out by the CBD Secretariat that the main objective of this initiative is mainstreaming biodiversity into agricultural commodity production by informing other entities of the key

impacts on biodiversity, of how to improve the state of biodiversity in a specific area as well as of how to raise performance in agricultural commodity production at the bottom. In this regard, it would make sense to focus on those actors that are able to help in mainstreaming activities, such as governments, local authorities, and global or regional initiatives working on commodity standards. Ultimately, the initiative will produce a set of impact indicators that will help governments and other entities to assess the state of biodiversity in a specific area and help them to raise performance of poor performers in agricultural commodity production through targeted policies and other instruments that are based on those key impacts identified.

18. Participants also pointed out that it would make sense to look at a landscape level, rather than the farm level with regard to impacts – or a combination of both where the core set of key impact indicators would refer to the farm level and include some broader landscape indicators. It was pointed out that the challenge lies in finding indicators that cut across commodities and regions such that it will be possible to compare like with like in terms of impact.

19. Following the discussion, Ms. Livia Bizikova from the International Institute for Sustainable Development (iisd) presented options and considerations for determining filters for indicator selection. The presentation was meant to help participants identify criteria to cut the lists of generic indicators per thematic area to a core cross-cutting set. Ms. Bizikova noted that in selecting indicators from the long list of generic indicators, it is important to set up criteria for selection (a filter system). Selection criteria should observe the following:

- (a) They need to be directly relevant to the focus issue/question.
- (b) They need to see the indicators as a set/system (and not just a list).
- (c) They need to limit the number of indicator/consider indicator tiers.
- (d) Some form of stakeholders' inputs/reviews is critical.

She further explained that the process of developing criteria (a filter system) usually includes the following steps:

- (a) Define key questions/issues/framework.
- (b) Translate questions into categories to access indicators.
- (c) Select long list of indicators and then assess these with predefined filter criteria.
- (d) Select the core set of indicators based on filter criteria.

20. The participants then discussed this with regard to the work of the CBD initiative and came up with the following filter system for indicator selection:

Criteria	Key features of the indicator system (listed as questions)
Relevance I.	Can the indicator provide information about the status of biodiversity by safeguarding ecosystems, species and genetic diversity at the landscape level?
Relevance II.	Does the indicator help us understand the impacts of agriculture on biodiversity? Does the indicator measure an aspect of biodiversity in a way that it can be linked to agricultural practices?
Utility	Is the indicator being collected by some key agencies/in the review/by the standards?
Level	Is the indicator applicable to the farm level as well?
Geographical universality	Is the indicator applicable to North and South?
Commodity universality	Is the indicator applicable to key commodities (selected in the paper)?
Actionable/farmer friendly	Can the indicator encourage actions to improve biodiversity conservation? Does the activity indicated by the indicator provide economic value?
Viability	Is the activity indicated by the indicator economically viable?

## ITEM 2. SECOND HALF OF THE WORKSHOP

21. Dr. Salman Hussain, Coordinator of UNEP's initiative The Economics of Ecosystems and Biodiversity (TEEB), then presented on the TEEBAgFood study that is currently being compiled by UNEP. He explained that the TEEBAgFood work builds upon the previous work of TEEB and will take a closer look at the "eco-agri-food systems" complex. He noted that the economic environment in which farmers and agricultural policy-makers operate today is distorted by significant externalities, both negative and positive. Most of the largest impacts on the health of humans, ecosystems, agricultural lands, waters, and seas arising from various different types of agricultural and food systems, are economically invisible and do not get the attention they deserve from decision-makers. There is therefore a need to evaluate all significant externalities of eco-agri-food systems, to better inform decision-makers in governments, businesses, and farms. Furthermore, there is a need to evaluate the eco-agri-food systems complex as a whole, and not as a set of silos. Mr. Hussain said that TEEB work links to the CBD initiative. The CBD initiative could inform on how policies can better address biodiversity aspects in certification schemes as well as in agricultural commodity production itself.

22. The participants then undertook an exercise to select indicators from the generic long lists of indicators that were presented in the consultant report. Participants were asked to identify cross-cutting impacts in each generic indicator list based on the criteria for selection (filter system) agreed on in the first half of the workshop. The selected indicators would then represent the core set of cross-cutting and key impacts on biodiversity from agricultural commodity production.

23. The group exercise revealed good common ground on which impact indicators should be in the core set. Generally, it was agreed that the indicator set should represent a baseline and should be able to track change over time in a specific area (landscape, or farm, or a combination). However, due to a lack of time, it was agreed that participants would send their proposals by email to the CBD Secretariat which will then compile results into a preliminary set of cross-cutting biodiversity impact indicators for commodity production.

24. In the final discussion the participants further suggested that in the way forward it would be useful to include governments in the process in order to gather feedback and input, given that governments are part of the stakeholder group to use the set of impact indicators in assessing the status of biodiversity in a specific area and in implementing measures to reduce impacts.

25. Finally, it was noted that an additional option of using the indicator set would be through financial institutions that could potentially use the indicators as a benchmark in determining the biodiversity related impacts of investment and lending decisions and their portfolios.

26. The workshop was closed at 16:00 on 13 November 2015.

*The workshop was organized with the financial assistance of the European Union.*

*Annex I*

**LIST OF PARTICIPANT**

	<b>Name</b>	<b>Organisation</b>	<b>Email</b>
1	Kristina Neumann	Secretariat of the Convention on Biological Diversity	kristina.neumann@cbd.int
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16	Reg Melanson	Canadian Business and Biodiversity Council	melansonr@ns.sympatico.ca
17	Carolin Bossmeyer	Biodiversity in Good Company Initiative e.V.	carolin.bossmeyer@business-and-biodiversity.de
18	Sally Ollech	Biodiversity in Good Company Initiative e.V.	sally.ollech@business-and-biodiversity.de

## Annex II

### AGENDA

**Date:** 13 November 2015

**Time:** 9.00 - 15.30

**Venue:** Ministry of the Environment, Aleksanterinkatu 7, Helsinki, Finland - room Lohi

(8.30 – 9.00)	Coffee and Tea	
(9.00 – 9.10)	Introduction and objective	<i>Kristina Neumann, SCBD All</i>
(9.10 – 9.30)	Presentation of report (methodology, results)	<i>Jonathan Loh, SCBD consultant</i>
(9.30 – 10.00)	Feedback/review of indicator list with regard to the questions: a. Are selected existing indicators effective? b. Are selected indicators comprehensive? c. Where are gaps in the long list of indicators?	<i>All</i>
	Identification of suitable filtering system to reduce the long list of indicators to a core set:	
(10.00 – 10.10)	a. Options and considerations for determining filters for indicator selection	<i>Livia Bizikova, iisd, Director of Knowledge for Integrated Decisions Program</i>
(10.10 – 11.00)	b. Group discussion and agreement on criteria to be used to extract the core set of indicators from the long list.	<i>All</i>
(11.00 – 12.30)	Work in break-out groups: Each group is assigned with one or two tables of the set of 'generalized indicators by thematic area' (table 7 – 13 in the report). Groups are asked to prioritize and list indicators based on the criteria agreed on earlier. The top two indicators will be part of the core set of indicators.	<i>All</i>
(12.30 – 13.15)	Lunch	
(13.15 – 13.30)	Introducing the 'TEEB for Agriculture & Food' (TEEBAgFood) study	<i>Dr Salman Hussain Coordinator, The Economics of Ecosystems and Biodiversity (TEEB)</i>
(13.30 – 14.30)	Reporting back of groups and compilation of core indicator set from all groups.	<i>All</i>
(14.30 – 15.15)	Discussion of next steps of the initiative. What should a guidance document look like? Who are potential users/target stakeholders? What is the best way for dissemination?	<i>All</i>
(15.15 – 15.30)	Summary and conclusion	<i>Kristina Neumann, SCBD</i>