



CLARIFYING THE SPECTRUM OF BIODIVERSITY INDICATOR APPLICATIONS FOR BUSINESS

Project concept 6 March 2018

Preamble

Many business leaders are beginning to recognize the importance of understanding and measuring their impacts and dependencies on biodiversity. The motivations for this are diverse, and range from external drivers (e.g., businesses needing to adhere to environmental regulation and policies, financial lending requirements, certification schemes or standards to gain market opportunities) or internal drivers (e.g., business can be internally motivated to improve operational efficiencies that have an environmental co-benefit, they may wish to gain a reputational or competitive advantage, or simply want to be an environmentally responsible business; World Resources Institute, 2012).

Businesses are beginning to seek biodiversity indicators to inform their decision-making. Nature is complex, and serious challenges exist to develop indicators that can cut through this complexity and display clear and simple measures of biodiversity through space and time that are relevant to business needs. Added to this complexity, businesses are often seeking indicators that can effectively measure and evaluate biodiversity from site- to corporate- level.

Current approaches to developing biodiversity indicators for businesses typically start with questions around what data or tools are available already. Indicators should serve a purpose and therefore more fundamental questions should be asked around specific biodiversity objectives, scale and audience. These questions relate to a broader picture of corporate biodiversity accountability, which promotes a more fundamental understanding of the business context for developing and using biodiversity indicators.

Corporate biodiversity accountability is the process by which businesses account for their impacts and dependencies on biodiversity, and report this to the stakeholders whom they are accountable to (Jones, 2014). Being accountable for environmental impacts is a vital part of organisational stewardship and legitimacy. Corporate accountability applications applied to biodiversity allow businesses to demonstrate the outcomes of their environmentally responsible actions and be accountable for these outcomes both internally, such as reporting to operations managers, and externally, including reporting to investors, regulatory bodies, stakeholders on local issues or national or global contributions to the CBD Aichi biodiversity targets and the Sustainable Development Goals (14 and 15 in particular).

Definitions

An environmental indicator is a parameter, or a value derived from parameters, that points to, provides information about and/or describes the state of the environment, and has a significance extending beyond that directly associated with any given parametric value. The term may encompass indicators of environmental pressures, conditions and responses. (OECD).

An indicator can be defined as, “a measure based on verifiable data that conveys information about more than itself”. This means that indicators are purpose-dependent - the interpretation or meaning given to the data depends on the purpose or issue of concern. Describing this need in the form of a ‘key question’ helps to guide indicator selection and communication. (Biodiversity Indicators Partnership, 2011).

Biodiversity indicators can be used to measure key components of biodiversity that are relevant to the business. Biodiversity indicators can represent:

- the **pressures** on biodiversity e.g., the processes that businesses contribute to that threaten biodiversity
- the **state** of biodiversity e.g., the species or ecosystems that are vulnerable to business operations, or
- a business **response** to manage biodiversity impacts e.g., the activities that businesses undertake to mitigate biodiversity impacts.

Indicators are critical components of monitoring, evaluation and reporting systems, as it is indicators that help measure whether progress is being made towards achieving given objectives, such as a company's climate commitments. Since indicators are purpose-dependent (see box on definitions) their development or selection should start with identifying the decision context and setting management objectives and targets for what a company would like to achieve prior to any attempt to develop indicators.

Whilst some businesses are seeking the creation of a single biodiversity indicator to measure their impacts on nature from site-level to global scales (e.g., what 'tonnes of carbon dioxide equivalent' is for climate change), the reality is that biodiversity measurements made at different scales cannot necessarily be made using the same indicator, due to the complexity and variety of natural systems. In addition, the specific measuring and reporting objectives will influence the type and complexity of indicators used. This can relate to the objective, scale and audience, such as:

Objective & scale: e.g., site-level assessment of the effectiveness of mitigation measures on biodiversity, landscape-level or commodity-level assessment of biodiversity dependencies and impacts, through to a corporate-level holistic overview of how a company is doing with regards to its commitments to biodiversity.

Audience: e.g. site level operations managers, investors, regulatory bodies, stakeholders, and the general public.

Aim and Objectives

This project seeks to define the variety of applications where biodiversity indicators are currently used by businesses, and may be adopted in the future. Biodiversity indicators will not be developed in this project. Rather, this project seeks to define the spectrum of applications where businesses use biodiversity indicators. This will be used as the foundation for a recommended process to guide companies and conservation organisations in the development of the fit-for purpose biodiversity indicators.

The aim of this project is to ***clarify the spectrum of biodiversity indicator applications for business, and recommend a process to guide development/selection of robust and relevant biodiversity indicators for business.***

The project will therefore provide guidance for businesses as well as conservation practitioners who work with the private sector to identify or develop robust and relevant biodiversity indicators for different corporate biodiversity accountability purposes through the following objectives:

- i) To identify the spectrum of biodiversity indicator applications for business; that is the various business needs for measuring, monitoring and reporting on biodiversity which would require the use of biodiversity indicators.
- ii) To match each application with known robust and relevant approaches based on private and public sector examples, and best-practice principles of indicator development from conservation science.

- iii) To identify knowledge gaps for certain applications where methodologies to develop indicators currently do not exist.
- iv) To outline a decision-support framework that presents the above in a useful format to guide companies and conservation organisations in the selection of the most appropriate approach based on the specific need. Collect principles for developing biodiversity indicators.

Proposed process

Building on scoping work carried out in 2017, the below process is proposed for phase 1:

1. Development of a draft corporate biodiversity accountability framework, including crowdsourcing and validation from selected representatives from different sectors and scale of operations (Jan – April 2018)
2. Workshop with selected representatives from different sectors and governments (May 2018) to finalise the corporate biodiversity framework and identify gaps in indicators
3. Report development and peer-review (June 2018)
4. Outreach including potentially at the CBD SBSTTA and/or COP, and eventual journal paper (July – Dec 2018)

Phase 2 will be determined based on the gap and needs analysis, and will be tailored to complement on-going work on specific accountability purposes of other conservation organisations.

Outputs

A report that will outline a decision-support framework to support businesses in identifying or developing robust and relevant biodiversity indicators for different corporate biodiversity accountability purposes.

The report will also be used as the basis for a peer-review paper for a business journal.

Finally, where gaps have been identified, proposal(s) for developing robust and relevant biodiversity indicators tailored to address the different indicator applications.

Outcome

Enhanced opportunities for biodiversity indicator integration into business decision-making, supporting improved corporate biodiversity accountability

Partners

The Initiative will be coordinated by IUCN through the Business and Biodiversity Programme, building on previous work on identifying indicator and reporting systems with corporate partners.

The IUCN Species Survival Commission and its work through the Species Monitoring Specialist Group (www.speciesmonitoring.org) will also be involved in order to build on their initiative to develop, test and roll out standards and tools for biodiversity monitoring across different stakeholders and sectors.

The Interdisciplinary Centre for Conservation Science at the University of Oxford, through Dr Prue Addison, will be a key partner bringing conservation science expertise in the development of environmental monitoring, evaluation and reporting systems, and in indicator development to support environmental management. To this end, an MOU between the organisations was signed in December 2017.

There will also be the opportunity to bring in findings from similar initiatives being undertaken by IUCN Members who are undertaking similar exercises with their respective corporate partners.

Budget

The budget for this first scoping phase is covered under funding from Enel as part of a partnership with IUCN measuring and managing biodiversity impacts of energy infrastructure. Dr Prue Addison's contribution to the project is supported by the Natural Environment Research Council (NERC) Knowledge Exchange Fellowship scheme (grant number: NE/N005457/1).

Additional funding will be sought depending on the outcomes of the workshop from interested leading corporate partners and governments.

Literature cited

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- World Resources Institute, 2012. The Corporate Ecosystem Services Review: Guidelines for Identifying Business Risks and Opportunities Arising from Ecosystem Change Version 2.0.

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