Synthesis and critical assessment of management tools to mainstream biodiversity in decision-making in the private sector

Main messages

Context

- In the past two years, there has been a pronounced surge in the demand from businesses for tools (methods, criteria, and standards) that enable them to account for their impacts on and the value of biodiversity and the goods and services derived from nature into business decisions. This is driven by multiple factors such as regulations, market forces, reputational risk, operational efficiency, and ability to access finance.
- This demand originates from sectors directly dependent on natural resources (such as agricultural
 companies) but also from industries and the service sector (such as insurance companies and the
 car industry).
- Businesses are faced with a fast-evolving set of tools and processes to assess and manage their
 interactions with biodiversity. Understanding the strengths and limitations of each, and how they
 might respond to a business's needs, is not straightforward for companies who are not specialists
 in the area.

Characterising the landscape of tools

- The tools reviewed perform a range of functions including assessing potential or actual negative effects on biodiversity of business activities, assessing potential or actual effects on biodiversity of restoration activities, assessing compliance with sustainability standards that include biodiversity aspects, identifying business dependencies on biodiversity, and providing guidance to manage all of the aforementioned aspects. The tools are mostly applied at product, site and/or supply chain level and only to a limited extent at corporate level.
- Biodiversity pressures were directly measured by those tools which assess the effect of restoration
 to compensate pressures (such as STAR, Defra Biodiversity Metric and LIFE) and by tools for
 certification which are directly linked to a specific natural resource use and exploitation, such as
 the case of trees (RSPO and RA). Other tools indirectly capture pressures through the assessment
 of activities, measures, or interventions which may affect pressures, such as farm area available
 as appropriate habitats (LEAF, RSPO, RA and UEBT).
- Most of the tools draw upon global biodiversity or conservation databases (such as IBAT, BIM, STAR) and rely on geospatial extrapolation of data to assess potential effects on biodiversity if a site was developed. The tools that attempt to use local information, such as many of the sustainability standards, only assess application of practices that are believed would contribute to biodiversity loss or gain.
- Although all tools are aimed at supporting business decision-making, the frameworks used to develop and evaluate actions to mitigate biodiversity risks/impacts associated with business activities vary greatly. The approaches used to support action range from only assessing the biodiversity impacts of mitigation/conservation plans (such as STAR) to providing platforms or dashboards that fully integrate biodiversity state and pressure measurement with responses and multiple other considerations (such as LIFE), and frameworks that comprehensively cover the whole mitigation hierarchy (such as SBTN's AR³T framework and its adapted version by the Textile Exchange's Biodiversity Benchmark).

Limitations of tools

- Dependence on biodiversity is often assessed indirectly in the activities that may also be considered as constituting an impact pathway. Distinguishing these is often difficult and the same activity may be relevant to both pathways.
- Many tools struggle with irreversible biodiversity loss (which has implications for the extent to
 which a land area is amenable to restoration). In some specific cases (e.g. an individual indicator
 score for a specific tool) zero and very low biodiversity presence results in similar or equivalent
 scores despite having potentially different ecological values.
- Many tools have a significant range in data type requirements to generate meaningful results and require significant information across a range of activities to generate a meaningful score.

Alignment with global policy frameworks

- Most of the tools are in alignment (either primarily or indirectly) with the 2030 Action targets which aim to include biodiversity values in policy, to support the assessment of business impacts and dependencies on biodiversity, and to advocate for responsible consumption (targets 14, 15, and 16). Approximately half of the tools are in alignment (primarily or indirectly) with the targets that advocate for reducing incentives harmful for biodiversity, and for increasing the financial support for biodiversity conservation (target 18 and 19). Mainly unclear, no alignment or indirect alignment was found for the targets which advocate local knowledge integration and support local participation (target 20 and 21), and the target 17 which support the reduction of potential adverse impacts of biotechnology on biodiversity.
- There is a growing need to develop a common view amongst key stakeholders on the measurement, monitoring and disclosure of corporate biodiversity impact and dependencies to help integrate more credible and comprehensive indicators of corporate contribution to global biodiversity goals into corporate reporting and global policy frameworks.

The way forward

- Although the focus of these tools is on assessing and/or measuring biodiversity pressures and/or impacts, any business decisions will also rely on other ecological and socio-economic considerations. Thus, supporting and requiring business to internalise externalities and integrate their impact and dependencies on biodiversity in decision-making requires a scale-up of efforts for the development and operationalisation of frameworks to harmonise methods and standards within an integrated business management approach, rather than isolated or ad-hoc approach to tool use.
- While the focus so far has been on the development of tools for individual business use, we are now witnessing emerging initiatives for the collective application of tools to mainstream biodiversity considerations to advance conservation as a territorial or sectoral endeavour, such as LIFE Territorial Management and the Textile Exchange Biodiversity Benchmark.
- We also mapped out the use of two tools and bird/mammalian biodiversity in two countries: LIFE
 Key in Brazil and LEAF Marque Standard in the UK (Figure 2). In both cases, the locations where
 tool use is concentrated overlap with certain biodiversity hotspots. The concentration of tool use
 in these regions aligns well with strategic priorities for reducing the global biodiversity threats. On
 the other hand, given the prominence of agricultural production and natural resource

- encroachment in other biodiversity hotspots in these counties, there exist major areas of opportunity for more proactive adoption of standard-compliant production and business activity.
- From 2005 to 2017, a tropical forest area more than double the size of London was cleared to produce commodities imported by the UK (Figures 3 and 4). A better understanding of the environmental impacts of imported products is crucial to mainstream biodiversity considerations more consistently into the UK's trade agreements and operations. The tools reviewed can be, among other instruments, particularly relevant in this endeavour since many operate globally and connect developing countries to developed countries through value chains.

Figure 1. Alignment of tools with the 2030 Action Targets of the Post-2020 Global Biodiversity Framework.

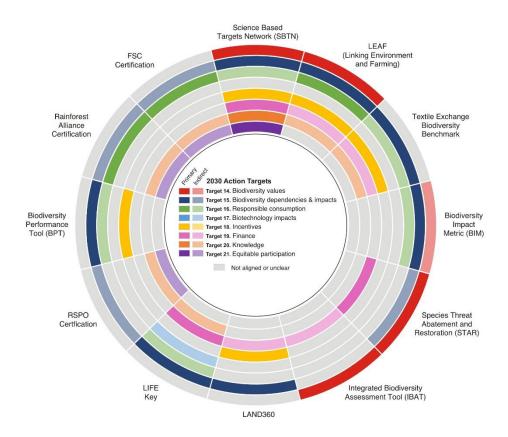


Figure 2. Locations of tool use and bird/mammalian biodiversity for LEAF Marque Standard in UK (panel a) and LIFE Key in Brazil (panel b)

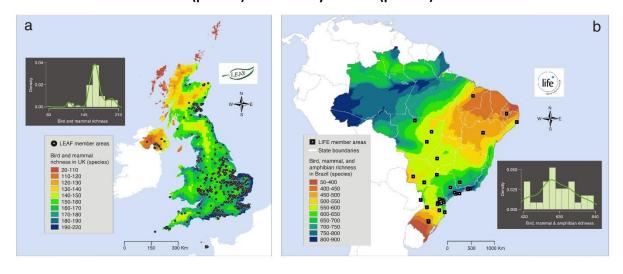


Figure 3. Total deforestation embodied in trade from producing regions to OECD countries.

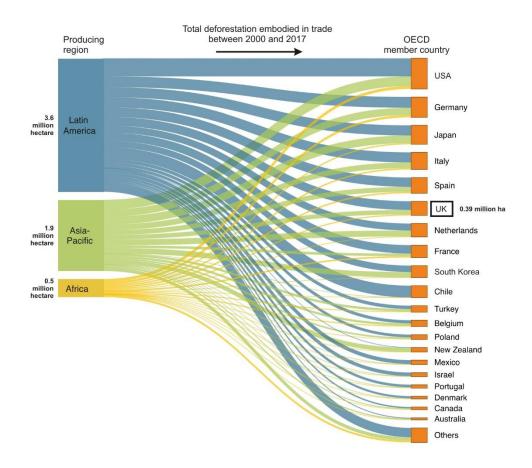


Figure 4. Total tropical deforestation embodied in commodities imported by OECD countries.

