

Developing UK indicators for the Strategic Plan for Biodiversity 2011-2020 (Defra contract 1301).

Supporting information for the survey on business and biodiversity indicators and datasets

This project considers options for the development of a UK indicator for the integration of biodiversity considerations into business activities. Business operations impact biodiversity by creating pressures on land and natural resources, resulting in habitat loss, unsustainable consumption, and pollution. Businesses are responding with a range of different mitigation measures to reduce these impacts on biodiversity and adopt more sustainable practices.

The UK government is committed to meeting national, regional and international biodiversity targets, including the [Aichi Biodiversity Targets](#) set out in the Convention on Biological Diversity's Strategic Plan for Biodiversity 2011-2020. Targets under Strategic Goal B aim to reduce the direct pressures on biodiversity and promote sustainable use by 2020; the integration of biodiversity considerations into business practice is imperative to achieving this.

In this project we are investigating datasets that can be used to develop indicators to track the integration of biodiversity considerations in business activity within the UK. The range of businesses should span those with major land holdings, including forestry, farming and extractive industries, and other businesses with significant biodiversity impacts in their on-site operations or through their supply chains, including manufacturing, distribution, retail, finance and service sectors. These datasets can relate to economic operations that occur within the UK, as well as corporate level commitments and processes adopted by UK businesses that influence activities beyond the UK border. Examples are provided in **Table 1**. A [review and synthesis of data](#) used in the UK National Ecosystem Assessment¹ identified a number of potential data sets that may be relevant. These potential datasets include those that track the state of biodiversity impacted by operations, the pressure that business operations pose, and the response of businesses to those pressures.

Table 1. Potential datasets that may be used for the development of the UK business and biodiversity indicator

Potential dataset	Indicator type
Sustainable use of UK marine fin-fish stocks	Pressure/state
Deposition of fixed nitrogen in the UK	Pressure
Fertiliser application rates in the UK	Pressure
GHG emissions for the UK	Pressure

¹ UK NEA (UK National Ecosystem Assessment) (2011b). The UK National Ecosystem Assessment: technical report. UNEP-WCMC, Cambridge. [Online]. Available at: <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>.

MSC certified fisheries in the UK	Pressure/response
Certified organic/sustainably produced agricultural produce in the UK	Pressure/response
Certified sustainable forestry produce in the UK	Pressure/response
Number of UK businesses reporting on biodiversity impacts (GRI data)	Response
Number of UK Equator Principles Financial Institutions	Response

The information that you provide in this survey will be used in an expert workshop, which will:

1. Review and rank all datasets identified against the criteria for quality testing indicator options.
2. Consider the pros and cons of different types of indicators and rank them against the criteria for quality testing data and indicator options.
3. Identify a maximum of three possible options for developing a business and biodiversity indicator at both the UK and country-level (i.e. England, Scotland, Northern Ireland, and Wales).

Criteria that will be used for quality testing data and indicator options can be viewed in Annex 1.

Annex 1. Criteria for quality testing indicator options for the Strategic Plan for Biodiversity 2011-2020. These criteria build upon those in the Defra specification for WC1031 (Developing UK indicators for the Strategic Plan for Biodiversity 2011-2020) with reference to the Convention on Biological Diversity (CBD)², Streamlining European Biodiversity Indicators (SEBI)³, Biodiversity Indicator Partnership (BIP)⁴ criteria.

	Criteria	Levels	Options		
			A	B	C
Data issues	1. Transparency and auditability	1. Data unavailable to public			
		2. Limited summary data available			
		3. Full raw/primary data set and metadata available			
	2. Verification	1. Unverified data			
		2. Limited verification checks in place			
		3. Detailed verification in place and documented			
	3. Frequency of updates	1. Sporadic			
2. Every 3-5 years					
3. Annual or biennial					
4. Security	1. Future data collection discontinued				
	2. Future data collection uncertain				
	3. Future data collection secure				
5. Spatial coverage	1. Partial UK coverage				
	2. UK coverage, some bias				
	3. Full UK coverage, including adjacent marine areas, if and where appropriate				
6. Temporal coverage	1. Insufficient data for assessment (<5 years)				
	2. Sufficient data to assess progress (5-10 years)				
	3. Long (10+ years) and short-term trends can be assessed				
7. Capacity for disaggregation	1. Cannot be disaggregated				
	2. Can be disaggregated but data quality and assessment issues arise				
	3. Can be disaggregated to Country level and assessed				
Methodology	8. Transparency and soundness	1. Methodology not available			
		2. Methodology available but not peer reviewed			
		3. Methodology published and peer reviewed			
9. Precision	1. Unknown precision or precision quantifiable but unable to statistically assess trends				
	2. Uncertainty quantifiable and signal-to-noise ratio allows for statistical assessment of trends				
	3. Uncertainty quantifiable and signal-to-noise ratio allows for year-on-year statistical assessments				
Indicator characteristics	10. Policy relevance: progress towards Biodiversity 2020 targets (CBD, EU, UK, country)	1. No clear relationship with 2020 targets			
		2. Relates indirectly to progress towards 2020 targets			
		3. Relates directly to progress towards 2020 targets			
	11. Biodiversity relevant	1. Indicator is a proxy for biodiversity change			
		2. Indicator directly addresses biodiversity and relates indirectly to state, pressures, benefits and/or responses			
		3. Indicator directly addresses biodiversity and relates directly to state, pressures, benefits and/or responses			
12. Cause-effect relationship	1. Unknown relationship between indicator and issue of concern				
	2. Accepted theory of relationship between indicator and issue of concern				
	3. Quantifiable relationship between indicator and issue of concern				

² UNEP/CBD/SBSTTA/9/10 (2003). Monitoring and indicators: designing national-level monitoring programmes and indicators. UN Environment Programme. <http://www.cbd.int/doc/meetings/sbstta/sbstta-09/official/sbstta-09-10-en.pdf>

³ EEA (2007). Halting the loss of biodiversity by 2010: proposal for a first set of indicators to monitor progress in Europe. EEA Technical report No 11/2007. http://www.eea.europa.eu/publications/technical_report_2007_11

⁴ 2010 Biodiversity Indicators Partnership (2010). Guidance for national biodiversity indicator development and use. UNEP World Conservation Monitoring Centre. <http://www.bipnational.net/>

13. Sensitive to change	1. Indicator does not detect changes in systems within timeframes and spatial scales that are relevant to decision-making			
	2. Indicator detects changes in systems only within timeframes or only on spatial scales that are relevant to decision-making			
	3. Indicator detects changes in systems within timeframes and spatial scales that are relevant to decision-making			
14. Human-induced vs. natural changes	1. Indicator cannot discriminate between human-induced and natural changes			
	2. Indicator potentially discriminates between human-induced and natural changes			
	3. Indicator clearly discriminates between human-induced and natural changes			
15. Communication	1. Indicator is complex, difficult to communicate and not accepted by all major stakeholders			
	2. Indicator is complex and difficult to communicate but accepted by all major stakeholders			
	3. Indicator is simple, easy to communicate and accepted by all major stakeholders			
Sub-score: Data issues				
Sub-score: Methodology				
Sub-score: Indicator characteristics				