

Ecosystem Service	Option or bequest value of nature
CICES class name	Characteristics or features of living systems that have an option or bequest value
CICES Section	Cultural (Biotic)
CICES Class code	3.2.2.2

Brief Description

- The things in nature that we want future generations to enjoy or use
- The biophysical characteristics or qualities of species or ecosystems (settings/landscapes/cultural spaces) which people seek to preserve for future generations

Sample Indicators

Indicator values from			
Experiment or direct measurement		Survey	
Expert assessment		Statistical- or census data	
Model or GIS		Literature values	
Stakeholder participation		Not provided	

Table 1: Field Scale

Indicator	Unit	Indicator values from
<p>^[1] Adaptability/ flexibility of soils as an option for land use change. Indicator value calculated as:</p> $I = \frac{\sum \log (\frac{i}{i_{max}}) }{n}$ <p>With: I – Indicator value, i – variable i measured, i_{max} – maximum ecologic potential of variable i in benchmark reference, n – number of variables. Where performance is considered better than in the benchmark and deviation, therefore, has a positive effect, $\log (\frac{i}{i_{max}})$ is subtracted from the sum instead of added. For this ecosystem service, variables were:</p> <ul style="list-style-type: none"> -Soil organic matter [% dw] -Earthworm abundance [number*m⁻²] -Number of earthworm taxa [-] 	-	 , 

-Number of nematode taxa [-] -Number of micro-arthropods taxa [-] -Physiological diversity bacteria [biolog. CLPP: Hill's slope]		
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Table 2: Regional Scale

Indicator	Unit	Indicator values from
[2] Intrinsic value of biodiversity: values for land cover classes. The matrix by Burkhard et al., 2012 (DOI: 10.1016/j.ecolind.2011.06.019) was dataset and used in this study.	Index 0 - 5	

Table 3: National Scale

Indicator	Unit	Indicator values from
[3] Cropland or grassland in protected agricultural areas (e.g., Natura2000, Biosphere reserves, IUCN category V areas, World Heritage UNESCO sites related to agricultural landscape, landscape conservation areas)	#	

References

No.	Citation
1	Rutgers M, van Wijnen HJ, Schouten AJ, Mulder C, Kuiten AMP, Brussaard L, Breure AM (2012) A method to assess ecosystem services developed from soil attributes with stakeholders and data of four arable farms. <i>Science of the Total Environment</i> 415: 39-48. DOI: 10.1016/j.scitotenv.2011.04.041
2 ²⁴ *	Zhang ZM, Gao JF, Fan XY, Lan Y, Zhao MS (2017) Response of ecosystem services to socioeconomic development in the Yangtze River Basin, China. <i>Ecological Indicators</i> 72: 481-493. DOI: 10.1016/j.ecolind.2016.08.035
3	Maes J, Liqueste C, Teller A, Erhard M, Paracchini ML, Barredo JI, Grizzetti B, Cardoso A, Somma F, Petersen JE, Meiner A, Gelabert ER, Zal N, Kristensen P, Bastrup-Birk A, Biala K, Piroddi C, Egoh B, Degeorges P, Fiorina C, Santos-Martín F, Naruševičius V, Verboven J, Pereira HM, Bengtsson J, Gocheva K, Marta-Pedroso C, Snäll T, Estreguil C, San-Miguel-Ayanz J, Pérez-Soba M, Grêt-Regamey A, Lillebø AI, Malak DA, Condé S, Moen J, Czúcz B, Drakou EG, Zulian G, Lavalle C (2016) An indicator framework for assessing ecosystem services in support of the EU Biodiversity Strategy to 2020. <i>Ecosystem Services</i> 17: 14-23. DOI: 10.1016/j.ecoser.2015.10.023

^{24*} The impact area discussed on this factsheet is not a focus of the cited paper