

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

### 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><sup>[1]</sup> 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, <math>i_{max}</math> – 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, <math>  \log(\frac{i}{i_{max}})  </math> is subtracted from the sum instead of added. For this ecosystem service, variables were:</p> <ul style="list-style-type: none"> <li>-Soil organic matter [% dw]</li> <li>-Earthworm abundance [number*m<sup>-2</sup>]</li> <li>-Number of earthworm taxa [-]</li> <li>-Number of nematode taxa [-]</li> <li>-Number of micro-arthropods taxa [-]</li> <li>-Physiological diversity bacteria [biolog. CLPP: Hill's slope]</li> </ul>	-	 , 



Table 2: Regional Scale



Indicator	Unit	Indicator values from
<sup>[2]</sup> 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
<sup>[3]</sup> 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*	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

\* The ecosystem service discussed on this factsheet is not a focus of the cited paper