Ecosystem Service	**Local regulation of air temperature and humidity**
CICES class name	Regulation of temperature and humidity, including ventilation and transpiration
CICES Section	Regulation & Maintenance (Biotic)
CICES Class code	2.2.6.2

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**
[7] Indicator value calculated as: $I = \frac{\sum \lvert \log(\frac{i}{i_{max}}) \rvert}{n}$ With: 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, $\lvert \log(\frac{i}{i_{max}}) \rvert$ is subtracted from the sum instead of added. For this ecosystem service, variables were: -Soil organic matter [% dw] -Bacterial biomass [mg C /g dw] -pH in KCl -Physiological diversity of bacteria [biolog. CLPP: Hill's slope]	-	,

Table 2: Farm Scale

Indicator	Unit	Indicator values from
[4] Canopy shading: four-level index based on the degree of canopy shading	poor-fair-good-excellent	

Table 3: Regional Scale

Indicator	Unit	Indicator values from
[1] Cool air production	$m^3 * ha^{-1} * h^{-1}$	
[1] Leaf area index	-	
[1] Albedo	%	
[6] Evapotranspiration (local climate regulation). Values were normalized [0-1] using benchmark values where available and observed values otherwise.	mm	
[2] Local climate regulation: values for ecosystem service supply based on the land cover class. The matrix defined by Burkhard et al., 2012 (DOI:10.1016/j.ecolind.2011.06.019) was adapted and used in this study.	Index 0-5	
[8] Local climate regulation: expert based index for ecosystem service supply by land cover class [1-5], multiplied by the area of the land cover class [km^2]	Index 1-5 * km^{-2}	, ,
[8] Local climate regulation value: expert based index for ecosystem service supply by land cover class [1-5], multiplied by the area of the land cover class [km^2] and a literature-based monetary value of the ecosystem service	$ * ha^{-1} * yr^{-1}	, ,
[9] Expert-/stakeholder rating of how much of this ecosystem service can be supplied by a landscape (represented by a land use map)	6-point Lickert-scale (none - highest capacity)	
[9] Expert-/stakeholder rating based on pairwise comparisons of landscapes (represented by land use maps) in an Analytical Hierarchical Process (AHP). Experts select the landscape with higher capacity for supplied this ecosystem service and rate the difference between the two landscapes	1 (equal capacity) - 9 (absolute preference of one land-scape)	

Table 4: National Scale

Indicator	Unit	Indicator values from
[5] Amount of biomass	Not specified	

Table 5: Multinational Scale

Indicator	Unit	Indicator values from
[3] Local climate regulation: values for Corine land cover classes, based on values published by Burkhard et al. (2009; DOI: 10.3097/LO.200915) and modified for the context of riparian zones	Index 0-5	
[3] Air quality regulation: values for Corine land cover classes, based on values published by Burkhard et al. (2009; DOI: 10.3097/LO.200915) and modified for the context of riparian zones	Index 0-5	

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