



Ecosystem Service	Cultivated terrestrial plants for materials
CICES class name	Fibres and other materials from cultivated plants, fungi, algae and bacteria for direct use or processing (excluding genetic materials)
CICES Section	Provisioning (Biotic)
CICES Class code	1.1.1.2

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
^[14] Yield	Not provided	
^[19] Biotic production	kg * m ⁻² * yr ⁻¹	
^[19] Net primary production (NPP)	kg dm * m ⁻² * yr ⁻¹	

Table 2: Regional Scale

Indicator	Unit	Indicator values from
^[6] Yield	kg * ha ⁻¹ * yr ⁻¹	
^[17] Annual biomass yield	t dm * ha ⁻¹ * yr ⁻¹	 ,  , 
^[3] Biomass for industrial use/processing	t * ha ⁻¹ * yr ⁻¹	
^[12] Provisioning of material: Modelled biomass yield	t dm * ha ⁻¹ * yr ⁻¹ t dm * ha ⁻¹	 ,  , 



[16] Timber production in the region	m ³	
[8] Crop production: assigned value depends 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] Production of biochemicals and medicine: assigned value depends 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	
[15] Cultivated medicinal plants: expert based index for ES provision by land cover class [1-5] multiplied by area of land cover class [km ²]	Index 1-5 * km ²	, ,
[15] Cultivated medicinal plants' value: expert based index for ES provision by land cover class [1-5] multiplied by area of land cover class [km ²] and literature-based monetary value of ES	\$ * ha ⁻¹ * yr ⁻¹	, ,
[17] Biomass stock in the landscape (crops and trees) at any one time	t dm * ha ⁻¹	, ,
[2] Annual growth rates of woody species representative for the land use type	t db * ha ⁻¹	
[9] Yield potential	very low 1 to very high 5	
[7] Share of arable land use within each NUTS2 region	%	
[18] Percentage of the products of a land use class that is used for construction purposes (e.g., roofs, pillars)	%	
[1] Area of agricultural ecosystems under sustainable management	Not provided	
[1] Organic farming	Not provided	
[15] Agricultural inputs (e.g. materials, compost): expert based index for ES provision by land cover class [1-5] multiplied by area of land cover class [km ²]	Index 1-5 * km ²	, ,
[15] Agricultural inputs' (Support for local production base e.g. materials for floating agricultural bed, compost and irrigation) value: expert based index for ES provision by land cover class [1-5] multiplied by area of land cover class [km ²] and literature-based monetary value of ES	\$ * ha ⁻¹ * yr ⁻¹	, ,
[18] Rating of current service provision per land use class by expert-stakeholders	0-10	



[18] Rating of increases/decreases of service provision in scenarios, relative to the status quo	%	
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Table 3: National Scale

Indicator	Unit	Indicator values from
[5] Total biomass production on agricultural land	t dm	
[13] Yields of fibre crops	t * ha ⁻¹ t dm * ha ⁻¹ MJ * ha ⁻¹	
[13] Yields of crops used for medicinal and cosmetic purposes	t * ha ⁻¹ t dm * ha ⁻¹ MJ * ha ⁻¹	
[13] Fibre crop area	ha	
[13] Area of crops used for medicinal and cosmetic purposes	ha	
[1] Area of agricultural ecosystems under sustainable management	Not provided	
[1] Organic farming	Not provided	
[4] Summed gross margin of production (area of crop multiplied by the gross margin per unit area)	\$	
[11] Historical analysis: materials used in (farmhouse) buildings in a region: carrier material (e.g., straw, bendable wood), insulation (e.g., e.g., moss), stable wood, timber, weatherproof wood, weather protection roofing (e.g., straw, reed), flowers, ropes (e.g., hemp), special wood used for handcrafts/ornamentation	Not provided	
[11] Historical analysis: materials used for agricultural purposes in a region: mulching, peat, plaggen, river sediments, hedges	Not provided	

Table 4: Multinational Scale

Indicator	Unit	Indicator values from
[1] Area of agricultural ecosystems under sustainable management	Not provided	



[1] Organic farming	Not provided	
[7] Biomass: Energy output from agricultural biomass	MJ * ha ⁻¹	
[10] Crops: 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	
[10] Biochemicals & medicines: 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	

Table 5: Global Scale

Indicator	Unit	Indicator values from
[1] Area of agricultural ecosystems under sustainable management	Not provided	
[1] Organic farming	Not provided	



References

No.	Citation
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* The ecosystem service discussed on this factsheet is not a focus of the cited paper



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