

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

## Sample Indicators

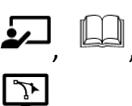
Indicator values from			
Experiment or direct measurement		Survey	
Expert assessment		Statistical- or census data	
Model or GIS		Literature values	
Stakeholder participation		Not provided	

Table 1: Field Scale

Indicator	Unit	Indicator values from
[14] Yield	Not provided	
[19] Biotic production	kg * m <sup>-2</sup> * yr <sup>-1</sup>	
[19] Net primary production (NPP)	kg dm * m <sup>-2</sup> * yr <sup>-1</sup>	

Table 2: Regional Scale

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

[16] Timber production in the region	m <sup>3</sup>	
[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 <sup>2</sup> ]	Index 1-5 * km <sup>-2</sup>	
[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 <sup>2</sup> ] and literature-based monetary value of ES	\$ * ha <sup>-1</sup> * yr <sup>-1</sup>	
[17] Biomass stock in the landscape (crops and trees) at any one time	t dm * ha <sup>-1</sup>	
[2] Annual growth rates of woody species representative for the land use type	t db * ha <sup>-1</sup>	
[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 <sup>2</sup> ]	Index 1-5 * km <sup>-2</sup>	
[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 <sup>2</sup> ] and literature-based monetary value of ES	\$ * ha <sup>-1</sup> * yr <sup>-1</sup>	
[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	$t \cdot ha^{-1}$ $t \cdot dm \cdot ha^{-1}$ $MJ \cdot ha^{-1}$	
[13] Yields of crops used for medicinal and cosmetic purposes	$t \cdot ha^{-1}$ $t \cdot dm \cdot ha^{-1}$ $MJ \cdot ha^{-1}$	
[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 <sup>-1</sup>	💻
[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

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