Ecosystem Service	Pollination
CICES class name	Pollination (or 'gamete' dispersal in a marine context)
CICES Section	Regulation & Maintenance (Biotic)
CICES Class code	2.2.2.1

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
[1] Pollen transported by pollinators	kg * yr^{-1}	
[11] Abundance and diversity of pollinators	Not provided	,
[15] Abundance of bumblebees	Not provided	
[15] Plant Simpson diversity as an indicator for bumblebee abundance.	Not provided	
[11] Number of seeds per fruit	#	,
[11] Share of fruit set pollinated	%	,

Table 2: Farm Scale

Indicator	Unit	Indicator values from
[8] Share of cropland area less than 100m from a non-cropland edge other than water or impervious surfaces. Values were scaled to [0-1]	%	

[8] Share of farmers that consider open landscapes a valued landscape feature. Values were scaled to [0-1]	%	
[12] Vegetation diversity: four-level index based on the number of plant species	Index [poor-fair-good-excellent]	
[19] Richness of pollinators: Total number of Sphingidae collected	#	

Table 3: Regional Scale

Indicator	**Unit**	**Indicator values from**
[2] Area of potential nesting sites for wild bees	m^2	
[2] Distance between potential nesting sites for wild bees and nearest arable land cell (GIS 10x10 m cells)	m	
[2] Number of visitations from wild bees to arable fields, calculated as the sum of visitation probabilities based on proximity between potential nesting sites and arable fields	-	
[3] Relative pollination potential: continuous index, based on the availability of floral resources, bee flight ranges and the availability of nesting sites	-	
[5] Share of land cover suitable as pollinator habitat in the direct vicinity of cropland	%	
[8] Share of cropland area less than 100m from a non-cropland edge other than water or impervious surfaces. Values were scaled to [0-1]	%	
[13] Share of area reachable by cavity and ground-nesting pollinator species, assuming 100 and 350 m flight and foraging distances, calculated using the equations by (Lonsdorf et al., 2009)	%	
[8] Share of farmers that consider open landscapes a valued landscape feature. Values were scaled to [0-1]	%	
[6] Pollination contribution by ecosystems (index): For each cropland, a) the crop pollination dependency ratio was calculated based on the specific crop type, b) the pollinator visitation probability was calculated as a regression between distance to natural habitat and visitation rate. The sum of a) and b) was then assigned to the closest natural ecosystem.	-	
[7] Pollination: Values are assigned based on 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	

[10] Habitat scores: number of bee species and medicinal plant species found in a specific land use class divided by benchmark value (number of species in land use class with the highest absolute number of species)	%	
[16] Number of bird & bee pollinators per hectare	$\# * ha^{-1}$	
[16] Yield of pollinated crops	$t * ha^{-1}$	
[17] Abundance of pollinators	Not provided	
[17] Richness of pollinators	Not provided	
[17] Diversity of pollinators	Not provided	
[17] Effects of pollinators	Not provided	
[18] Area pollination indicators (Lonsdorf et al., 2009), calculated for different assumptions regarding the distances that pollinators can cover (100 m, 350 m, 500 m): - Area providing flowering [ha] - Area suitable for nesting of wild bees and bumblebees - Share of flowering sites reachable from nesting sites	 [ha] [ha] [%]	

Table 4: National Scale

Indicator	Unit	Indicator values from
[4] Resilience of pollination service: number of pollinator morphospecies in the (primarily) pollinator taxa: Lepidoptera, Cerambycidae, Buprestidae and Aculeata. Two or more specimens are considered the same morphospecies if an entomologically trained person (but non-specialist for the respective species groups) can not see external morphological differences. To save costs, only seven weeks where maximum catches are expected were sampled, only the four weeks with the highest catches were identified.	#	
[5] Share of land cover suitable as pollinator habitat in the direct vicinity of cropland	%	
[14] Pollination potential	Not specified	
[14] Pollinators distribution	Not specified	
[14] Pollinators species richness	Not specified	
[14] Number of beehives	Not specified	

[14] Areal coverage of vegetation features supporting pollination (hedgerows, flower strips, High Nature Value Farmland etc.)	Not specified	

Table 5: Multinational Scale

Indicator	Unit	Indicator values from
[3] Relative pollination potential: continuous index, based on the availability of floral resources, bee flight ranges and the availability of nesting sites	[-]	
[9] Pollination: 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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