

Supplementary Material

Table S1: Indicators selected for cluster analysis (adapted from [1]).

Indicator	Pillar of sustainability
Road Distance to Nearest Motorway or Major Road	economy, society
Road Distance to Nearest Commercial Airport	economy, society
Average Annual Net Migration Balance	society
Old Age Dependency Ratio	society
Older People Living in Single-person Households	society
General Fertility Rate	society
Employment Rate of Older People	economy
Female Employment Rate	economy
Change in Female Employment Rate	economy
Tertiary Sector Employment	economy
Commuter Balance	economy
Road Distance to Nearest Hospital	economy, society
Tourist Beds per Resident	economy
Change in Number of Farms	economy
Change in Used Agricultural Area	economy, environment
Patch Density of Agricultural Areas	economy, environment
Non-grassland Areas in Agricultural Use	environment
Artificial Areas	environment
Land-cover Diversity of Agricultural, Near-natural and Natural Areas	environment
Effective Mesh Size of Agricultural, Near-natural and Natural Areas	environment

Table S2: LULC types aggregated from CLC classes [2] (adapted from [3]).

LULC type	CLC classes
Settlement area	111, 112, 121, 122, 123, 124, 131, 132, 133, 141, 142
Crop cultivation	211, 212, 213, 241
Permanent culture	221, 222, 223
Fertilised grassland	231, 242, 243, 244
Unfertilised grassland	321
Forest	311, 312, 313, 324
Abandoned land	322, 323, 331, 332, 333, 334, 335
Wetlands	411, 412
Rivers	511
Lakes	512

Table S3: ES values (ES supply weighted with socio-cultural preferences) for different LULC types (adapted from [3]).

ES	Settlement area	Crop cultivation	Permanent culture	Fertilised grassland	Unfertilised grassland	Forest	Abandoned land	Wetlands	Rivers	Lakes	Socio-cultural preference
Pasture and fodder production (P1)	0.00 ^a	0.86 ^h	0.85 ^h	4.04 ^h	2.23 ^h	0.77 ^h	1.06 ^h	0.77 ^a	0.00 ^a	0.00 ^a	4.15 ^h
Agricultural food production (P2)	0.00 ^a	2.06 ^h	2.86 ^h	0.00 ^h	0.00 ^h	0.00 ^h	0.00 ^h	0.00 ^a	0.00 ^a	0.00 ^a	4.29 ^h
Timber production (P3)	0.00 ^a	0.00 ^h	2.18 ^h	0.02 ^h	0.67 ^h	4.53 ^h	1.66 ^h	1.66 ^a	1.66 ^a	0.00 ^a	4.18 ^h
Gathering mushrooms and wild berries (P4)	0.00 ^a	0.10 ^h	0.17 ^h	0.45 ^h	0.97 ^h	4.18 ^h	1.77 ^h	1.77 ^a	0.00 ^a	0.00 ^a	4.19 ^h
Provision of clean drinking water (P5)	0.29 ^b	1.19 ^h	1.81 ^h	2.39 ^h	3.91 ^h	4.09 ^h	4.43 ^h	3.95 ^b	4.03 ^b	4.03 ^b	4.52 ^h
Protection from hazards (R1a), slope <30°	0.00 ^a	0.30 ^a	0.69 ^a	0.73 ^a	0.79 ^a	0.94 ^a	0.54 ^a	0.54 ⁱ	2.50 ⁱ	3.00 ⁱ	1.00 ^h
Protection from hazards (R1b), slope >30°	0.00 ^a	1.27 ^h	2.93 ^h	3.13 ^h	3.38 ^h	4.00 ^h	2.30 ^h	1.90 ⁱ	2.50 ⁱ	3.00 ⁱ	4.27 ^h
Prevention of water scarcity (R2)	3.03 ^c	2.40 ^h	2.46 ^h	4.09 ^h	4.34 ^h	3.72 ^h	4.34 ^h	1.56 ^c	3.90 ^c	3.90 ^c	4.45 ^h
Provision of habitats (R3)	2.63 ^d	1.77 ^h	1.97 ^h	2.20 ^h	3.71 ^h	3.67 ^h	3.38 ^h	3.39 ^d	2.25 ^d	0.25 ^d	4.61 ^h
Maintaining biodiversity (R4)	2.34 ^d	1.95 ^h	1.72 ^h	2.13 ^h	3.41 ^h	3.03 ^h	2.72 ^h	3.01 ^d	2.00 ^d	0.22 ^d	4.26 ^h
Providing habitats for pollinating insects (R5)	2.37 ^d	1.40 ^h	1.40 ^h	2.47 ^h	3.64 ^h	2.99 ^h	3.21 ^h	3.06 ^d	2.03	0.23 ^d	4.20 ^h
Pest control (R6)	2.47 ^d	1.88 ^h	2.72 ^h	2.78 ^h	3.12 ^h	3.21 ^h	2.62 ^h	3.19 ^d	2.11 ^d	0.24 ^d	3.72 ^h
Disease control (R7)	2.64 ^d	2.42 ^h	2.77 ^h	3.11 ^h	3.24 ^h	3.26 ^h	2.92 ^h	3.41 ^d	2.26 ^d	0.25 ^d	4.01 ^h
Maintenance or increase of soil fertility (R8)	0.00 ^a	1.98 ^h	2.29 ^h	2.77 ^h	2.37 ^h	2.48 ^h	2.57 ^h	1.98 ⁱ	2.47 ⁱ	3.46 ⁱ	3.64 ^h
Positive effect on the climate (R9)	1.30 ^e	1.29 ^h	2.37 ^h	2.11 ^h	2.28 ^h	4.11 ^h	2.69 ^h	5.00 ^e	1.08 ^e	1.08 ^e	4.38 ^h
Opportunities for leisure activities (C1)	2.64 ^f	2.83 ^h	2.41 ^h	3.58 ^h	4.55 ^h	3.60 ^h	3.56 ^h	2.43 ^f	3.49 ^f	3.79 ^f	4.59 ^h
Attractive housing and living space (C2)	1.76 ^a	2.30 ^h	1.35 ^h	2.56 ^h	2.61 ^h	1.91 ^h	2.16 ^h	1.67 ^a	2.14 ^a	2.27 ^a	3.04 ^h
Experience of animals & plants (C3)	0.79 ^f	1.65 ^h	1.54 ^h	2.15 ^h	3.21 ^h	3.26 ^h	3.16 ^h	2.47 ^f	3.72 ^f	3.68 ^f	4.46 ^h
Aesthetic inspiration (C4)	2.56 ^f	3.06 ^h	2.45 ^h	3.30 ^h	3.82 ^h	3.63 ^h	3.55 ^h	2.99 ^f	4.31 ^f	4.66 ^f	4.35 ^h
Cultural heritage (C5)	3.86 ^f	2.82 ^h	2.83 ^h	3.16 ^h	3.59 ^h	3.24 ^h	3.75 ^h	1.59 ^f	2.43 ^f	2.34 ^f	4.25 ^h
Provisioning ES	0.06 ^g	0.84 ^g	1.57 ^g	1.38 ^g	1.56 ^g	2.71 ^g	1.78 ^g	1.63 ^g	1.14 ^g	0.81 ^g	
Regulating ES	1.87 ^g	1.71 ^g	2.04 ^g	2.49 ^g	2.99 ^g	3.05 ^g	2.78 ^g	2.79 ^g	2.29 ^g	1.40 ^g	
Cultural ES	2.32 ^g	2.53 ^g	2.12 ^g	2.95 ^g	3.56 ^g	3.13 ^g	3.24 ^g	2.23 ^g	3.22 ^g	3.35 ^g	

Sources: ^a own assessment; ^b inverse of Nitrogen export [4]; ^c inverse of quick flow [4]; ^d calculated via plant diversity [5]; ^e Carbon sequestration of open grassland, [4]; ^f derived after [6]; ^g own calculation (mean of all ES within ES category); ^h [7]; ⁱ derived from Table 3.1 in [8].

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