

## Appendix 2| ES supply and drivers

To explore ES associations and analyse their potential drivers, we perform a PCA and RDA of ES and ES and drivers, respectively. In appendix 2, we present the PCA and RDA results. For the PCA, we present the eigenvalues and variance explained of the eigenvalues above 1 following Kaiser–Guttman criterion to select significant PCA axes (Legendre and Legendre, 2012), ES loadings (Table A 2.1) and the mapping of scores for the significant PCA axes in the EDM (Figure A 2.1). For the RDA, we present the variance explained by the significant constrained axes, and ES and drivers' scores (Table A 2.2, A 2.3).

### PCA

PCA results yielded three principal components (PCs) with eigenvalues larger than 1 (PC1: 1.97 PC2: 1.39, PC3: 1.05), with the two first explaining for 47% of the variance (PC1: 24.66, PC2: 20.20, PC3: 12.03).

Table A 2.1 – PCA loadings for ecosystem services (ES) for the three first PCs.

ES	PC1	PC2	PC3
Carbon sequestration	0.41	-0.42	0.05
Erosion prevention	0.43	-0.30	-0.37
Pollination	0.33	0.36	-0.17
Nature tourism	0.24	0.30	0.15
Farmland birds	0.10	0.48	-0.69
Food crops	0.48	-0.02	0.29
Wine	0.50	0.21	0.22
Cattle	0.06	-0.49	-0.44

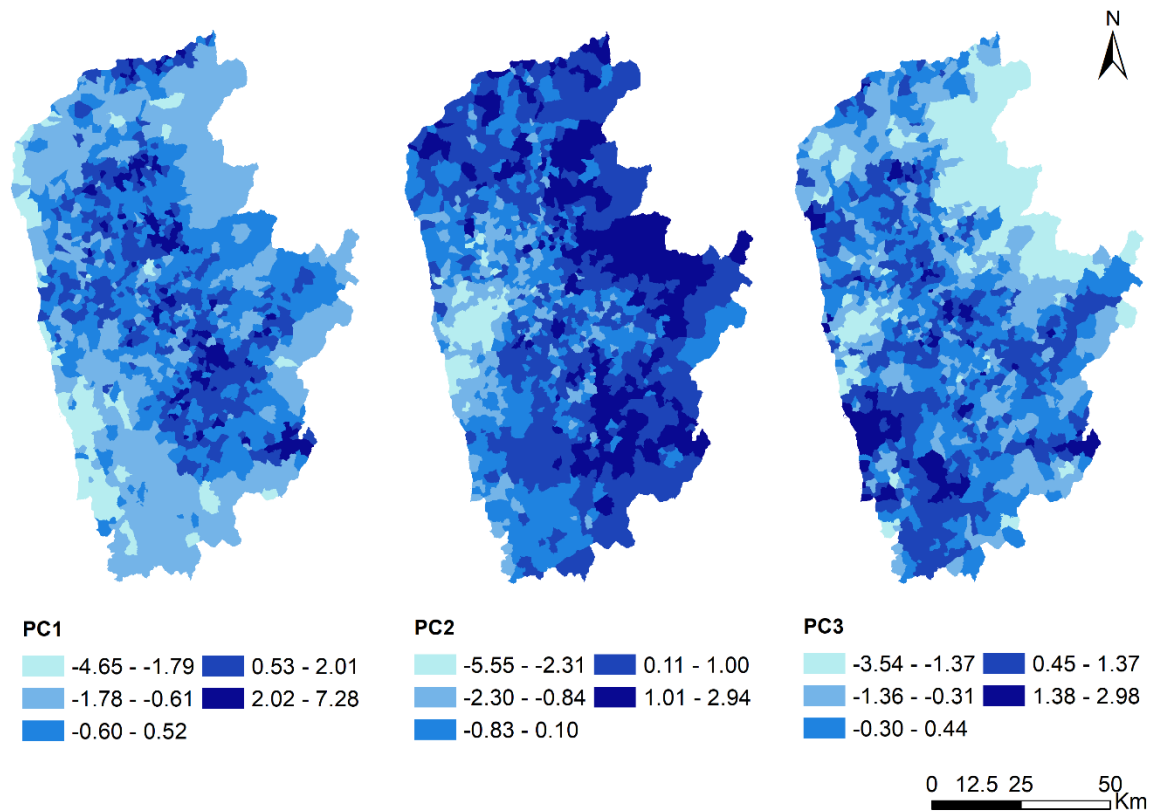


Figure A 2.1 - PC scores per parish for the three first PCs.

## RDA

RDA model resulted in a proportion of 0.20 of constrained partitioning of variance (significant full model,  $p = 0.001$ ), where the first five constrained axes are significant ( $p = 0.01$ ).

Table A 2.2 - Redundancy analyses scores for ES (response variables) and for ES drivers (explanatory variables) for the first five RDAs.

ES	RDA1	RDA2	RDA3	RDA4	RDA5
Carbon sequestration	1.25	-0.03	0.13	0.15	0.20
Erosion prevention	1.04	-0.48	0.04	0.03	-0.28
Pollination	0.76	0.54	0.15	-0.25	0.26
Nature tourism	0.32	0.26	-0.58	-0.29	-0.11
Farmland birds	0.24	0.59	1.06	-0.10	-0.14
Food crops	2.36	0.29	-0.15	0.30	-0.02
Wine	1.87	0.38	-0.12	-0.26	-0.05
Cattle	0.77	-1.91	0.24	-0.16	0.07

<b>Drivers</b>	<b>RDA1</b>	<b>RDA2</b>	<b>RDA3</b>	<b>RDA4</b>	<b>RDA5</b>
Land use diversity	0.39	0.44	0.05	-0.76	0.19
Landscape edge density	0.50	0.06	-0.70	-0.43	-0.25
Number of farmers	0.93	0.15	0.11	0.26	0.08
Farm size	-0.13	-0.05	0.56	-0.12	-0.80
Specialization Index	-0.09	-0.21	0.45	-0.26	-0.52
Production value	0.39	-0.89	0.16	-0.12	0.09

## LITERATURE CITED

Legendre, P. & L. Legendre 2012. *Numerical ecology*, Elsevier Scientific.