

Table S1. Total content of metals in soils (in mg/kg).

No.	Zn		Cu		Pb		Cd		Ni	
	2008	2016	2008	2016	2008	2016	2008	2016	2008	2016
1	22.49	23.88	4.33	8.83	19.47	21.85	1.47	2.13	12.30	28.69
2	35.76	42.81	8.06	17.86	20.79	21.91	1.44	3.11	21.58	21.15
3	18.63	12.31	8.51	6.63	14.54	16.02	1.42	1.83	17.15	19.38
4	32.72	41.76	11.22	10.05	17.02	21.21	2.03	2.04	34.49	37.63
5	37.65	12.24	4.72	6.26	17.86	19.22	1.49	2.48	16.59	18.23
6	32.36	25.95	6.65	8.07	21.52	20.78	1.92	2.24	14.55	26.02
7	22.16	32.53	3.28	8.95	18.03	22.97	1.57	2.36	12.24	22.40
8	43.74	26.35	6.90	8.35	29.81	39.20	1.46	2.04	16.88	24.47
9	22.70	18.01	7.00	5.47	23.60	22.31	1.00	1.90	16.50	18.61
10	33.36	33.40	6.66	9.61	31.75	34.80	2.16	2.42	15.09	22.19
11	26.70	54.18	3.77	10.53	21.76	21.19	1.75	2.20	11.55	21.78
12	24.68	19.52	6.27	6.75	23.96	21.89	1.71	2.22	13.22	19.61
13	54.80	13.90	13.16	9.05	38.78	32.83	1.82	2.91	23.26	28.55
14	26.00	25.84	5.48	10.71	19.17	17.98	1.56	2.59	14.94	28.12
15	26.40	30.84	9.10	10.99	16.45	23.98	1.68	1.25	17.13	20.90
16	32.55	30.08	6.66	8.29	22.82	21.34	2.12	2.34	17.90	27.86
17	29.65	29.65	5.09	8.99	21.15	14.11	2.12	2.45	13.39	17.47
18	14.88	17.47	4.06	6.70	18.03	20.00	1.42	1.90	14.75	20.02
19	24.51	30.40	3.89	8.39	17.37	17.72	1.74	1.62	19.43	18.65
20	18.87	24.25	4.29	7.03	16.32	15.63	0.51	1.79	15.40	21.59
21	27.30	25.53	13.00	10.18	15.10	13.75	1.16	1.24	16.62	20.26

Table S2. Results of metal determination in CRM 7002 Light sandy soil (extract by cold 2 mol/L HNO₃).

Metal	Certificate value ± uncertainty [mg/kg]	Obtained value ± uncertainty for n = 5		Recovery [%]
		[mg/kg]		
Cd	0.21 ± 0.02	0.21 ± 0.04		100
Cu	19.8 ± 0.5	20.2 ± 0.2		102
Pb	30.6 ± 1.1	30.6 ± 0.2		100
Ni	16.0 ± 1.4	14.8 ± 0.2		93
Zn	34.2 ± 2.0	32.3 ± 0.7		94

Table S3. The Pearson's and Spearman's correlation matrix for raw dataset (2008 and 2016).

	Zn	Cu	Pb	Cd	Ni	pH	Zn	Cu	Pb	Cd	Ni	pH
	2008	2008	2008	2008	2008	2008	2016	2016	2016	2016	2016	2016
Zn 2008	1.00											
Cu 2008	0.80	1.00										
Pb 2008	0.69	0.72	1.00									
Cd 2008	0.64	0.62	0.53	1.00								
Ni 2008	0.53	0.38	0.39 ¹⁾	0.67	1.00							

pH 2008	0.46	0.59	0.28	0.67	0.41	1.00						
Zn 2016	0.25	0.21	0.28	0.23	0.24	0.01	1.00					
Cu 2016	0.08	0.17	0.19	0.28	0.27	0.29	0.82	1.00				
Pb 2016	0.07	0.11	0.13 ¹⁾	0.09	0.10 ¹⁾	-0.08	<i>0.45</i>	<i>0.54</i>	1.00			
Cd 2016	0.22	0.19	0.39	0.27	0.39	0.05	0.86	0.81	0.62	1.00		
Ni 2016	-0.25	-0.28	-0.23	-0.07	0.07	0.14	0.42	0.57	0.21	<i>0.49</i>	1.00	
pH 2016	0.18	0.38	0.25 ¹⁾	0.40	0.50¹⁾	0.39	<i>0.46</i>	0.56	-0.03 ¹⁾	<i>0.51</i>	0.32	1.00

¹⁾ Pearson's correlation; p < 0.01 bold; p < 0.05 italics.

Table S4. Factor loadings of variables (2008 and 2016).

	PC1	PC2	PC3	PC4
Zn 2008	-0.79	0.35	-0.23	-0.16
Cu 2008	-0.71	0.30	-0.29	-0.38
Pb 2008	-0.70	0.01	-0.44	0.00
Cd 2008	-0.91	0.13	0.17	0.17
Ni 2008	-0.79	-0.01	0.24	0.40
pH 2008	-0.81	0.21	0.33	0.16
Zn 2016	-0.16	-0.90	-0.16	-0.25
Cu 2016	-0.18	-0.81	-0.22	-0.09
Pb 2016	-0.01	-0.63	-0.48	0.63
Cd 2016	-0.26	-0.88	-0.04	-0.06
Ni 2016	0.09	-0.61	0.56	0.00
pH 2016	-0.58	-0.52	0.36	-0.22



Figure S1. Factor scores obtained from PCA for sampling sites.