

## Supplementary Material

### List of Appendix A

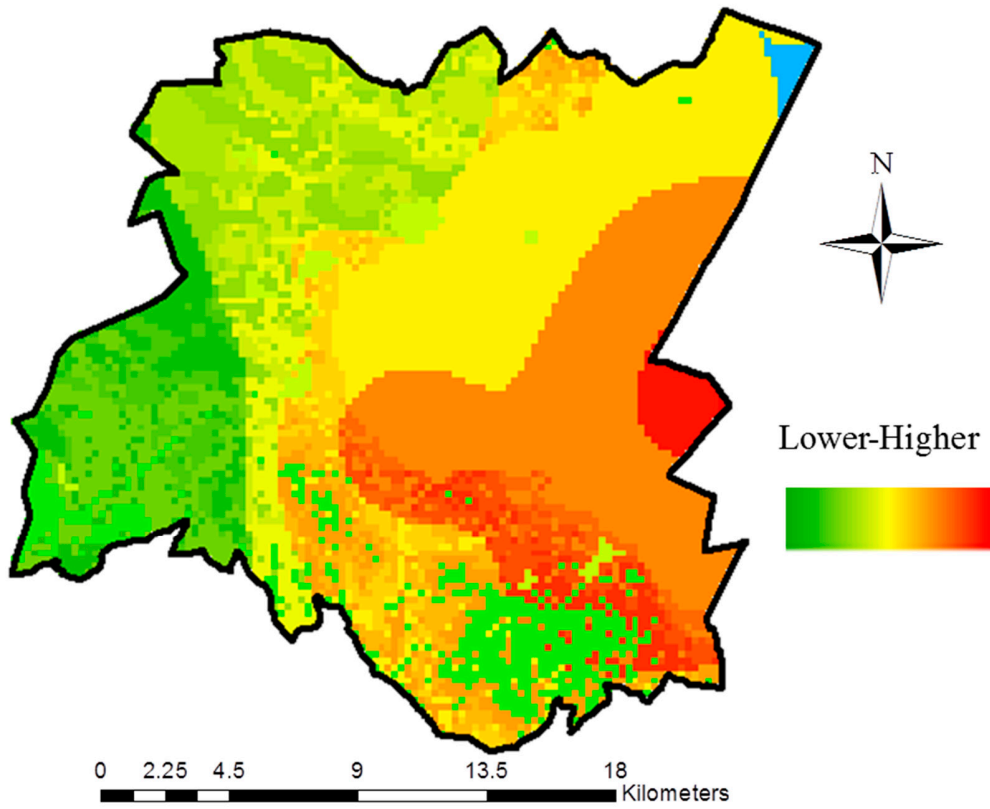
**Fig. A1** .Map of Ground water vulnerability (V), according to DRASTIC

**Fig. A2.** a) Map of distances to closest communication link. b) Map of accessibility index

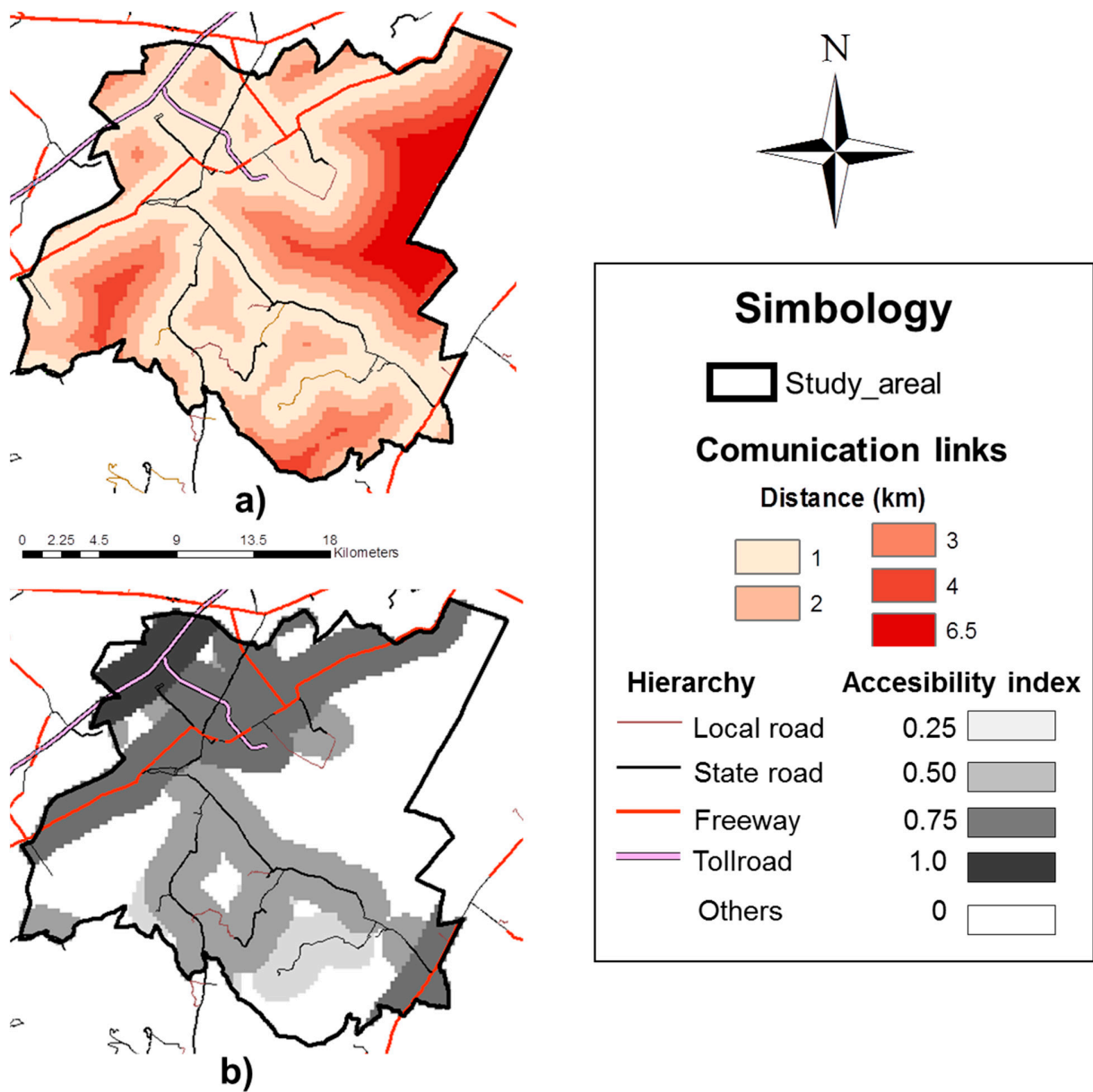
**Table A1.** Input data for F O3

**Table A2.** Aptitude factors per land-use type

**Table A3.** Input data per surface units (Ha) for F O2



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Table A1.  
Input data for F O3

	crop	harvested land rainfed (%)	harvested land irrigated (%)	kilocalories per 100gr
1	amaranth	97.3	-	371
2	barley	97	-	352
3	corn	87	100	365
4	wheat	99	-	340
5	plum	56	-	91
6	peach	66	-	39
7	apple	93	-	52
8	pear	96	-	57
9	hawthorn	99	-	87
10	peas	100	-	352
11	pumpkin&squash seeds	95	-	574
12	beans mature seeds	88	99	341
13	broadbeans mature seed	97	100	341
14	broccoli	100	100	34
15	broadbeans	100	100	81
16	nopales	100	-	16
17	meat from corn crop /b	99	98.5	203
18	zucchini	-	100	17
19	cabbage	-	100	24
20	tomato	-	100	18
21	green tomato	-	100	23
22	carrot	-	100	41
23	meat from grass /b	99	-	203

/b crop yield previously transformed into dry matter yield and then divided by the necessary tons for producing 1 ton of meet (local average)

**Table A1.** Input data for F O3

Table A2. Aptitude factors per land use type		
	grassland	rainfed/irrigated land
very high	1.00	1.00
high	0.87	0.88
media	0.70	0.76
low	0.50	0.55

according to yieldings recorded for the period 2004-2014

**Table A2.** Aptitude factors per land-use type

Table A3.  
Input data per surface unit (Ha) for F O2

land use	WF (m3/Ha)	Polluting potential (P)	ton CO2 eq /Ha
forest	3424.80	10	0.00
grassland	5756.77	15	8.72
rain fed	3424.76	50	2.99
irrigated	6423.35	50	2.99
industrial (automotive)	258.00	50	42.81
urban	4392.67	50	197.08
land use change (LUC)			252.20

**Table A3.** Input data per surface units (Ha) for F O2