

**Table S1. Local scale (La) - patches**

id	land use category	area_ha	perimeter_m	apparatus
1	hazelnut	0.109	221.3	productive
2	apple	0.384	280.5	productive
3	horticultural	0.407	292.3	productive
4	apple	0.275	217.6	productive
5	cropfield in rotation	0.048	113.6	productive
6	private green areas	0.037	89.7	protective
7	agricultural buildings	0.048	93.9	productive
8	agricultural buildings	0.073	112.1	productive
9	private green areas	0.023	62.4	protective
10	private green areas	0.052	93.8	protective
11	small woody area	0.05	104.8	connection
12	cropfield in rotation	0.157	163.5	productive
13	apple	0.601	344.2	productive
14	hazelnut	0.199	232.1	productive
15	private green areas	0.359	649.5	protective
16	agricultural buildings	0.019	56.3	productive
17	agricultural buildings	0.12	223.8	productive
18	rice field	0.532	311.5	productive
19	rice field	0.555	311.2	productive
20	cropfield in rotation	0.141	152.0	productive
21	cropfield in rotation	0.235	204.1	productive
22	walnut (young)	0.574	398.2	productive
23	walnut (young)	0.597	364.8	productive
24	walnut (mature)	0.568	324.5	productive
25	apple	0.347	308.3	productive
26	cropfield in rotation	0.507	342.6	productive
27	cropfield in rotation	0.34	309.2	productive
28	rice field	0.955	415.6	productive
29	walnut (mature)	0.391	361.7	productive
30	small woody area	0.052	95.6	connection
31	small woody area	0.026	65.3	connection
32	cropfield in rotation	0.19	197.1	productive
33	cropfield in rotation	0.234	212.4	productive
34	cropfield in rotation	0.215	206.4	productive
35	cropfield in rotation	0.256	230.6	productive
36	cropfield in rotation	0.557	391.5	productive
37	wood	0.216	321.3	stabilization
38	Uncultivated	0.185	361.4	resilient
39	Uncultivated	0.229	302.5	resilient
40	Uncultivated	0.187	260.9	resilient
41	Uncultivated with spontaneous re-colonization	0.466	361.9	resilient
42	Uncultivated with spontaneous re-colonization	1.142	433.3	resilient
43	Uncultivated with spontaneous re-colonization	0.424	309.9	resilient
44	Uncultivated with spontaneous re-colonization	0.967	452.6	resilient
45	Uncultivated with spontaneous re-colonization	0.625	376.7	resilient
46	Uncultivated with spontaneous re-colonization	0.859	468.4	resilient
47	Uncultivated with spontaneous re-colonization	0.144	262.9	resilient
48	Uncultivated with spontaneous re-colonization	0.42	326.2	resilient
49	Uncultivated with spontaneous re-colonization	0.69	541.8	resilient
50	Uncultivated with spontaneous re-colonization	0.705	452.5	resilient
51	wood	2.829	759.8	stabilization
52	wood	1.36	497.9	stabilization
53	wood	2.246	692.4	stabilization
54	wood	25.594	3683.1	stabilization
55	wood	0.187	244.1	stabilization
56	wood	0.441	277.7	stabilization
57	wood	13.162	2695.1	stabilization
58	wood	6.901	1837.7	stabilization
59	wood	3.478	842.3	stabilization
60	wood	0.365	253.5	stabilization
61	wood	0.65	672.2	stabilization
62	wood	7.389	2523.1	stabilization
63	wood	0.2	198.1	stabilization
64	wood	0.249	216.3	stabilization
65	agricultural buildings	0.583	348.9	productive
66	grass strip	0.092	184.7	resilient
67	grass strip	0.11	268.0	resilient
68	grass strip	0.21	350.8	resilient
69	grass strip	0.315	459.4	resilient
70	grass strip	0.088	141.5	resilient
71	industrial	0.844	429.7	subsidiary
72	industrial	0.612	336.0	subsidiary
73	industrial	0.861	425.4	subsidiary
74	industrial	0.378	353.6	subsidiary
75	small woody area	0.191	177.3	connection

76	small woody area	0.33	232.9	connection
77	small woody area	0.364	402.9	connection
78	small woody area	0.206	209.9	connection
79	small woody area	0.149	165.3	connection
80	small woody area	0.457	339.7	connection
81	small woody area	0.14	228.2	connection
82	small woody area	0.382	296.1	connection
83	small woody area	0.395	357.8	connection
84	small woody area	0.323	255.7	connection
85	small woody area	0.043	118.4	connection
86	small woody area	0.356	400.7	connection
87	small woody area	0.041	106.6	connection
88	permanent grassland	0.272	213.8	productive
89	permanent grassland	1.211	500.6	productive
90	residential buildings	0.113	134.9	residential
91	residential buildings	0.212	349.1	residential
92	residential buildings	0.046	126.5	residential
93	residential buildings	0.033	82.6	residential
94	residential buildings	0.046	88.4	residential
95	residential buildings	0.011	43.4	residential
96	residential buildings	0.007	36.4	residential
97	residential buildings	0.01	40.7	residential
98	residential buildings	0.025	63.0	residential
99	residential buildings	0.23	215.7	residential
100	rice field	0.905	522.9	productive
101	rice field	1.155	519.6	productive
102	rice field	0.458	364.9	productive
103	rice field	0.993	424.6	productive
104	rice field	0.782	417.6	productive
105	rice field	0.89	435.9	productive
106	rice field	0.825	427.5	productive
107	rice field	0.851	432.1	productive
108	rice field	0.788	423.4	productive
109	rice field	0.418	355.6	productive
110	rice field	0.653	378.2	productive
111	rice field	1.223	465.6	productive
112	rice field	0.727	415.3	productive
113	rice field	0.863	386.7	productive
114	rice field	0.464	321.5	productive
115	rice field	1.677	579.5	productive
116	rice field	0.547	305.8	productive
117	rice field	0.429	262.0	productive
118	rice field	1.281	477.1	productive
119	rice field	0.706	336.2	productive
120	rice field	0.653	321.9	productive
121	rice field	0.935	387.1	productive
122	rice field	0.722	340.2	productive
123	rice field	0.977	396.5	productive
124	rice field	1.034	412.3	productive
125	rice field	0.341	249.0	productive
126	rice field	0.504	350.8	productive
127	rice field	0.638	348.2	productive
128	rice field	1.357	466.6	productive
129	rice field	2.933	700.5	productive
130	rice field	0.453	312.3	productive
131	rice field	0.406	288.0	productive
132	rice field	0.602	315.9	productive
133	rice field	0.718	358.3	productive
134	rice field	0.317	311.9	productive
135	rice field	1.082	433.6	productive
136	rice field	0.491	347.5	productive
137	rice field	0.704	346.3	productive
138	rice field	1.259	476.3	productive
139	rice field	0.365	297.3	productive
140	rice field	0.293	254.4	productive
141	rice field	0.246	219.2	productive
142	rice field	0.813	369.7	productive
143	rice field	1.828	649.3	productive
144	rice field	0.519	294.9	productive
145	rice field	0.696	343.4	productive
146	rice field	0.585	384.8	productive
147	rice field	1.255	511.8	productive
148	rice field	0.956	448.0	productive
149	rice field	0.374	247.9	productive
150	rice field	0.509	322.6	productive
151	rice field	0.747	430.7	productive
152	rice field	0.821	364.4	productive
153	rice field	0.7	343.1	productive

154	rice field	0.312	223.8	productive
155	rice field	0.516	305.8	productive
156	rice field	0.733	401.7	productive
157	rice field	0.937	436.7	productive
158	rice field	0.538	303.8	productive
159	rice field	1.049	424.0	productive
160	rice field	1.294	465.9	productive
161	rice field	1.187	464.6	productive
162	rice field	1.103	440.1	productive
163	rice field	5.058	1225.6	productive
164	rice field	1.819	536.0	productive
165	rice field	1.134	445.8	productive
166	rice field	0.816	432.5	productive
167	rice field	0.443	267.0	productive
168	rice field	3.975	875.7	productive
169	rice field	0.626	402.2	productive
170	rice field	0.71	375.3	productive
171	rice field	0.962	409.5	productive
172	rice field	0.491	309.7	productive
173	rice field	0.628	352.3	productive
174	rice field	1.482	498.6	productive
175	rice field	0.725	454.2	productive
176	rice field	0.351	237.3	productive
177	rice field	0.451	269.9	productive
178	rice field	0.809	452.2	productive
179	rice field	0.382	269.4	productive
180	rice field	0.604	343.7	productive
181	rice field	0.528	338.2	productive
182	rice field	0.454	290.2	productive
183	rice field	0.604	341.9	productive
184	rice field	0.626	321.4	productive
185	rice field	0.536	295.4	productive
186	rice field	0.509	288.4	productive
187	rice field	0.27	209.6	productive
188	rice field	0.472	289.2	productive
189	rice field	0.747	414.7	productive
190	rice field	0.868	441.2	productive
191	rice field	0.829	478.7	productive
192	rice field	0.974	500.4	productive
193	rice field	0.761	452.6	productive
194	rice field	0.492	414.8	productive
195	rice field	0.339	235.5	productive
196	rice field	0.532	320.1	productive
197	rice field	0.859	452.2	productive
198	rice field	1.096	478.0	productive
199	rice field	0.37	255.7	productive
200	rice field	0.448	282.1	productive
201	rice field	0.407	408.4	productive
202	rice field	0.457	410.9	productive
203	rice field	0.537	417.4	productive
204	rice field	0.416	406.0	productive
205	rice field	0.554	346.6	productive
206	rice field	2.341	665.8	productive
207	rice field	0.374	264.4	productive
208	rice field	1.317	603.7	productive
209	rice field	0.996	460.0	productive
210	rice field	1.195	477.8	productive
211	rice field	0.738	423.1	productive
212	rice field	0.621	356.3	productive
213	rice field	1.517	595.7	productive
214	rice field	1.438	506.5	productive
215	rice field	0.436	278.0	productive
216	rice field	2.685	704.1	productive
217	rice field	0.827	401.2	productive
218	rice field	0.53	297.5	productive
219	rice field	0.696	348.8	productive
220	rice field	0.446	320.0	productive
221	rice field	1.78	534.0	productive
222	rice field	1.576	503.1	productive
223	rice field	2.013	613.0	productive
224	rice field	0.802	368.2	productive
225	rice field	2.613	650.8	productive
226	rice field	1.006	463.0	productive
227	rice field	2.038	837.2	productive
228	rice field	0.574	318.8	productive
229	rice field	0.21	196.7	productive
230	rice field	0.889	594.0	productive
231	rice field	3.091	735.7	productive

232	rice field	0.902	614.3	productive
233	rice field	0.438	302.4	productive
234	rice field	1.908	591.5	productive
235	rice field	1.974	595.0	productive
236	rice field	1.994	584.9	productive
237	rice field	1.026	416.4	productive
238	rice field	0.6	415.6	productive
239	rice field	1.632	520.9	productive
240	rice field	1.36	528.1	productive
241	rice field	1.807	615.2	productive
242	rice field	1.241	450.0	productive
243	rice field	0.539	339.2	productive
244	rice field	0.594	358.0	productive
245	rice field	0.378	286.3	productive
246	rice field	1.897	617.9	productive
247	rice field	0.707	398.9	productive
248	rice field	1.565	643.2	productive
249	rice field	0.886	596.4	productive
250	rice field	1.09	632.8	productive
251	rice field	2.261	801.0	productive
252	rice field	0.868	382.6	productive
253	crop field	0.346	274.0	productive
254	crop field	0.208	191.5	productive
255	crop field	0.91	469.5	productive
256	crop field	0.068	112.2	productive
257	crop field	1.049	445.9	productive
258	crop field	1.127	452.3	productive
259	crop field	1.035	442.4	productive
260	crop field	0.706	345.1	productive
261	crop field	0.727	386.5	productive
262	crop field	0.908	450.7	productive
263	crop field	0.718	358.4	productive
264	crop field	0.87	387.5	productive
265	crop field	0.541	367.2	productive
266	crop field	0.024	99.5	productive
267	crop field	0.271	222.1	productive
268	crop field	0.193	177.5	productive
269	crop field	2.122	588.5	productive
270	crop field	0.511	338.9	productive
271	crop field	0.691	379.3	productive
272	crop field	0.414	314.2	productive
273	crop field	0.751	382.7	productive
274	crop field	0.377	318.1	productive
275	crop field	0.88	460.8	productive
276	crop field	0.697	388.3	productive
277	crop field	0.732	406.9	productive
278	crop field	0.563	364.7	productive
279	crop field	0.427	386.7	productive
280	crop field	0.567	445.1	productive
281	crop field	0.757	358.4	productive
282	crop field	0.456	321.5	productive
283	crop field	0.715	390.3	productive
284	crop field	0.854	489.7	productive
285	crop field	1.578	645.2	productive
286	crop field	0.716	392.7	productive
287	crop field	2.184	599.1	productive
288	crop field	0.841	404.6	productive
289	crop field	0.285	312.0	productive
290	crop field	0.789	420.3	productive
291	crop field	0.792	437.7	productive
292	crop field	0.732	436.7	productive
293	crop field	0.614	398.6	productive
294	crop field	0.595	396.0	productive
295	crop field	0.611	397.8	productive
296	crop field	0.798	348.7	productive
297	crop field	0.532	299.1	productive
298	crop field	3.103	806.3	productive
299	crop field	0.314	301.2	productive
300	crop field	0.276	225.2	productive
301	crop field	0.236	263.7	productive
302	crop field	0.626	334.3	productive
303	crop field	1.052	472.3	productive
304	crop field	0.764	368.0	productive
305	crop field	0.666	333.4	productive
306	crop field	0.192	258.7	productive
307	crop field	1.606	590.7	productive
308	crop field	0.763	481.7	productive
309	crop field	0.35	287.9	productive

310	crop field	0.472	325.2	productive
311	crop field	0.191	245.7	productive
312	crop field	0.817	464.8	productive
313	crop field	0.364	243.4	productive
314	crop field	0.454	425.2	productive
315	crop field	0.516	430.7	productive
316	crop field	1.335	529.8	productive
317	crop field	0.797	375.6	productive
318	crop field	0.36	302.7	productive
319	crop field	1.079	418.4	productive
320	crop field	0.592	321.1	productive
321	crop field	0.605	373.4	productive
322	crop field	0.667	354.0	productive
323	crop field	0.632	337.0	productive
324	crop field	0.204	246.9	productive
325	crop field	1.152	493.9	productive
326	crop field	0.577	377.1	productive
327	crop field	0.556	381.8	productive
328	crop field	0.926	457.6	productive
329	crop field	3.132	726.8	productive
330	crop field	2.281	681.9	productive
331	crop field	1.047	447.9	productive
332	crop field	0.538	327.3	productive
333	crop field	0.331	308.1	productive
334	crop field	0.319	313.9	productive
335	crop field	0.599	371.9	productive
336	crop field	0.702	356.1	productive
337	crop field	0.737	391.3	productive
338	crop field	0.24	254.6	productive
339	crop field	0.659	395.3	productive
340	crop field	1.759	535.9	productive
341	crop field	1.004	502.7	productive
342	crop field	0.689	461.5	productive
343	crop field	0.193	195.0	productive
344	crop field	0.572	347.0	productive
345	cropfield in rotation	0.892	489.3	productive
346	private green areas	2.301	746.2	protective
347	private green areas	1.601	664.9	protective
348	private green areas	1.048	504.8	protective
349	private green areas	0.509	435.1	protective
350	private green areas	1.134	829.1	protective
351	private green areas	0.425	293.0	protective
352	private green areas	0.935	388.2	protective
353	private green areas	0.273	277.2	protective
354	private green areas	0.522	362.9	protective
355	private green areas	0.305	333.4	protective
356	private green areas	0.399	316.1	protective
357	private green areas	1.317	744.4	protective
358	private green areas	1.844	966.1	protective
359	private green areas	1.742	904.3	protective
360	private green areas	0.021	60.6	protective
361	private green areas	2.144	1016.3	protective
362	private green areas	0.03	69.6	protective
363	private green areas	0.944	517.7	protective