

Appendix 1.

Full Results of Pattern Association: Linear Vector Fitting and Non-Linear Surface Fitting

A1.1: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and each recovery indicator. 9 months and 1.5 years are combined for each variable. Linear associations are represented by a correlation coefficient (r) and R square (R^2) for each axis, with bold indicating $R^2 > .050$. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R^2) and cross-validated R square (XR^2). Results with $R^2 > .050$ in bold.

Recovery Indicator Variables 9 months (n=400): 34 variables 1.5 years (n=397): 34 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		XR^2 (P1&P2)	R^2 (P1&P2)
	r (P1&P2)	R^2 (P1&P2)	r (P1&P2)	R^2 (P1&P2)		
1. Household having issues trying to rebuild	-.133	.018	.368	.136	.183	.200
2. Household able to return to primary house	.063	.004	.380	.144	.145	.160
3. Household has access to cell phone	.010	.000	.038	.001	.020	.041
4. Household has access to internet	.175	.030	.127	.016	.062	.079
5. Household has access to electricity	.059	.004	.087	.007	.031	.049
6. No earthquake and connected hazard impacts to <i>bari</i> (non-irrigated fields)	.673	.453	-.048	.002	.485	.493
7. Some earthquake and connected hazard impacts to <i>bari</i> (non-irrigated fields)	-.088	.008	.220	.049	.062	.081
8. High earthquake and connected hazard impacts to <i>bari</i> non-irrigated fields)	-.613	.376	-.113	.013	.413	.425
9. No earthquake and connected hazard impacts to <i>khet</i> irrigated fields)	-.037	.001	.058	.003	.061	.086
10. Some earthquake and connected hazard impacts to <i>khet</i> (irrigated fields)	.000	.000	.043	.002	.003	.021
11. High earthquake and connected hazard impacts to <i>khet</i> (irrigated fields)	.041	.002	-.090	.008	.045	.069
12. Earthquakes and connected hazards killed standing crops	-.551	.303	-.099	.010	.338	.351
13. Earthquakes and connected hazards affected seed storage	-.288	.083	-.274	.075	.152	.169
14. No earthquake and connected hazard impacts to livestock health, behavior, or productivity (primary impact)	.433	.188	-.557	.311	.563	.571
15. No earthquake and connected hazard impacts to livestock health, behavior, or productivity (secondary impact)	.282	.080	-.323	.104	.204	.235
16. Earthquake and connected hazard impacts to livestock health (primary impact)	-.330	.109	.495	.245	.404	.417
17. Earthquake and connected hazard impacts to livestock behavior (primary impact)	-.201	.040	.161	.026	.112	.138
18. Earthquake and connected hazard impacts to livestock behavior (secondary impact)	-.185	.034	-.140	.288	.186	.219
19. Earthquake and connected hazard impacts to livestock productivity (primary impact)	-.090	.008	-.079	.093	.013	.039
20. Earthquake and connected hazard impacts to livestock productivity (secondary impact)	-.209	.044	-.137	.157	.063	.098
21. Total household lost/recovered bovine (yak, cow, hybrid) - log	-.393	.155	-.351	.123	.325	.343
22. Total household lost/recovered sheep, goats, and pigs - log	-.486	.237	-.364	.132	.412	.430

23.Total household lost/recovered chickens - log	-.275	.076	-.527	.278	.401	.416
24.No earthquake and connected hazard impacts on household ability to keep livestock	.685	.469	-.214	.046	.585	.592
25.Some earthquake and connected hazard impacts on household ability to keep livestock	.063	.004	.161	.026	.091	.110
26.High earthquake and connected hazard impacts on household ability to keep livestock	-.724	.524	.103	.011	.623	.630
27.No earthquake and connected hazard impacts on household ability to sell livestock products	.505	.255	.075	.006	.326	.347
28.Some earthquake and connected hazard impacts on household ability to sell livestock products	-.148	.022	.062	.004	.033	.065
29.High earthquake and connected hazard impacts on household ability to sell livestock products	-.495	.245	-.134	.018	.334	.357
30.No earthquake and connected hazard impacts on household ability to go for outside work	.244	.060	-.026	.001	.064	.091
31.Some earthquake and connected hazard impacts on household ability to go for outside work	-.146	.021	.028	.001	.012	.022
32.High earthquake and connected hazard impacts on household ability to go for outside work	-.188	.035	.009	.000	.042	.075
33.No earthquake and connected hazard impacts on household ability to work with tourists	.083	.007	.003	.000	.011	.029
34.High earthquake and connected hazard impacts on household ability to work with tourists	-.075	.006	.026	.001	.021	.043

A1.2: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and demographic variables (35 total). Linear associations are represented by a correlation coefficient (r) and R square (R²) for each axis, with bold indicating R²>.050. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R²) and cross-validated R square (xR²). Results with R²>.05

Demographic Variables 9 months (n=400): 34 variables 1.5 years (n=397): 2 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		Axis 1 & 2	Axis 1 & 2
	r	R ²	r	R ²	XR ²	R ²
1. Aaru Chanaute (VDC 1)	.400	.160	.037	.001	.182	.195
2. Kashigaun (VDC 2)	-.120	.014	.228	.052	.073	.090
3. Gatlang (VDC 3)	-.009	.000	.087	.008	.015	.026
4. Haku (VDC 4)	-.267	.071	-.351	.123	.211	.225
5. Internal Displacement Camp (9 months)	-.242	.059	-.418	.174	.288	.302
6. Internal Displacement Camp (1.5 years)	-.245	.060	-.413	.171	.296	.309
7. Accessibility	.096	.009	.193	.037	.072	.087
8. Male head of household	-.030	.001	.104	.011	.009	.032
9. Female head of household	.030	.001	-.104	.011	.009	.032
10. Age of head of household - log	.053	.003	.079	.006	.010	.030
11. Single Family	-.016	.000	-.077	.006	.003	.017
12. Joint Family	.016	.000	.077	.006	.003	.017
13. Own home (9 months)	.029	.001	.042	.002	.003	.000
14. Own home (1.5 years)	.171	.029	.421	.177	.236	.250
15. Household size	-.072	.005	.137	.019	.021	.032
16. Literate	.144	.021	.065	.004	.018	.037
17. Education: none	-.116	.013	-.053	.003	.012	.025
18. Education: informal (read and write)	.007	.000	.039	.002	-.003	.000
19. Education: class 4 or less	.020	.000	-.015	.000	-.003	.000
20. Education: class 5 to 10	.100	.010	.012	.000	.010	.024
21. Education: intermediate	.045	.002	.062	.004	-.001	.005
22. Education: bachelor's degree	.066	.004	-.005	.000	-.001	.004
23. Hindu	.296	.088	.072	.005	.100	.116
24. Buddhist	-.279	.078	-.098	.010	.072	.088
25. Christian	.023	.001	.053	.003	.002	.012
26. Other Religion	.076	.006	-.021	.000	.001	.007
27. Brahmin/Chhetri	.190	.036	.108	.012	.056	.073

28. Gurung	-.094	.009	.120	.014	.025	.044
29. Ghale	-.021	.000	.114	.013	.005	.019
30. Newar	.234	.055	.009	.000	.063	.079
31. Tamang	-.229	.052	-.211	.044	.111	.127
32. Other ethnic group	.181	.033	-.006	.000	.023	.032
33. Household took loan from family after earthquake	-.170	.029	.003	.000	.024	.036
34. Household took loan from friends after earthquake	-.077	.006	.121	.015	.014	.032
35. Household took loan from bank after earthquake	.061	.004	.004	.000	.003	.012
36. Household took microcredit loan after earthquake	.163	.027	.084	.007	.030	.047

A1.3: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and hazard exposure variables (12 total). Linear associations are represented by a correlation coefficient (r) and R square (R²) for each axis, with bold indicating R²>.050. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R²) and cross-validated R square (xR²). Results with R²>.050 in bold.

Hazard Exposure Variables 9 months (n=400): 10 variables 1.5 years (n=397): 12 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		Axis 1 & 2	Axis 1 & 2
	r	R ²	r	R ²	xR ²	R ²
1. Distance to nearest slope failure (meters) (9 months) - log	-.087	.008	.005	.000	.013	.030
2. Landslides threaten community (9 months)	-.186	.035	.036	.001	.040	.057
3. Landslides threaten community (1.5 years)	-.211	.044	-.053	.003	.056	.072
4. Other hazards threaten community (9 months)	.063	.004	.109	.012	.006	.016
5. Other hazards threaten community (1.5 years)	.120	.014	.026	.001	.019	.034
6. Earthquakes affect access to grazing areas (none) (9 months)	.533	.284	-.016	.000	.321	.332
7. Earthquakes affect access to grazing areas (some) (9 months)	-.049	.002	.046	.002	.016	.035
8. Earthquakes affect access to grazing areas (very much) (9 months)	-.497	.247	-.015	.000	.273	.287
9. Earthquakes continue to affect access to grazing areas (none) (1.5 years)	.406	.165	-.260	.067	.276	.289
10. Earthquakes continue to affect access to grazing areas (some) (1.5 years)	-.109	.012	.154	.024	.030	.050
11. Earthquakes continue to affect access to grazing areas (very much) (1.5 years)	-.328	.108	.145	.021	.155	.171
12. Earthquakes hinder access to agricultural fields (9 months)	-.220	.048	-.207	.043	.086	.104
13. Earthquakes hinder access to agricultural fields (1.5 years)	-.197	.039	.019	.000	.033	.046
14. Earthquakes impact ability to collect forest products (none) (9 months)	.278	.077	-.038	.001	.078	.097
15. Earthquakes impact ability to collect forest products (some) (9 months)	-.101	.010	.151	.023	.020	.041
16. Earthquakes impact ability to collect forest products (very much) (9 months)	-.249	.062	-.089	.008	.079	.100
17. Earthquakes impact ability to collect forest products (none) (1.5 years)	.250	.063	-.221	.049	.128	.143
18. Earthquakes impact ability to collect forest products (some) (1.5 years)	-.149	.022	.130	.017	.034	.054
19. Earthquakes impact ability to collect forest products (very much) (1.5 years)	-.150	.023	.134	.018	.040	.051
20. Earthquakes impact ability to collect firewood (none) (1.5 years)	.321	.103	-.147	.022	.129	.144
21. Earthquakes impact ability to collect firewood (some) (1.5 years)	-.010	.000	.081	.007	.000	.013
22. Earthquakes impact ability to collect firewood (very much) (1.5 years)	-.289	.084	.072	.005	.097	.114

A1.4: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and institutional participation variables (12 total). Linear associations are represented by a correlation coefficient (r) and R square (R²) for each axis, with bold indicating R²>.050. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R²) and cross-validated R square (xR²). Results with R²>.050 in bold.

Institutional Participation Variables 9 months (n=400): 10 variables 1.5 years (n=397): 12 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		Axis 1 & 2	Axis 1 & 2
	r	R ²	r	R ²	XR ²	R ²
1. Household members serve in government (9 months)	.100	.010	.072	.005	.017	.032
2. Household members serve in government (1.5 years)	.123	.015	.069	.005	.015	.030
3. Household members serve in local government (1.5 years)	.101	.010	.063	.004	.008	.023
4. Household members serve in district government (1.5 years)	.056	.003	-.015	.000	-.002	.003
5. Household members serve in central government (1.5 years)	.039	.002	.077	.006	-.001	.005
6. Household members serve on committees (non-government) (9 months)	.040	.002	.182	.033	.019	.038
7. Household members serve on committees (non-government) (1.5 years)	.040	.002	.149	.022	.012	.032
8. Household members participate in mother's group (9 months)	.036	.001	.006	.000	-.002	.006
9. Household members participate in mother's group (1.5 years)	.018	.000	.079	.006	-.001	.004
10. Household members participate in women's group (9 months)	.076	.006	.034	.001	.000	.006
11. Household members participate in women's group (1.5 years)	.060	.004	-.107	.011	.012	.031
12. Household members participate in credit and savings group (9 months)	.100	.010	.051	.003	.013	.032
13. Household members participate in credit and savings group (1.5 years)	.170	.029	-.058	.003	.025	.042
14. Household members participate in farmer's group (9 months)	.078	.006	.040	.002	.011	.032
15. Household members participate in farmer's group (1.5 years)	-.020	.000	.078	.006	.005	.025
16. Household members works with NGOs, INGOs, or international orgs (9 months)	.049	.002	.076	.006	.000	.009
17. Household members works with NGOs, INGOs, or international orgs (1.5 years)	.042	.002	-.033	.001	-.001	.007
18. Household members participate in community forest user group (9 months)	-.007	.000	-.030	.001	-.003	.000
19. Household members participate in community forest user group (1.5 years)	.085	.007	.054	.003	.013	.034
20. Household members on disaster or hazard preparedness committees (before earthquakes-9 months)	.028	.001	.047	.002	.000	.013
21. Household members on disaster or hazard preparedness committees (9 months)	.030	.001	.051	.003	-.002	.002
22. Household members on disaster or hazard preparedness committees (1.5 years)	.018	.000	.068	.005	.000	.016

A1.5: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and livelihood diversity (assets and practices) variables (14 total). Linear associations are represented by a correlation coefficient (r) and R square (R²) for each axis, with bold indicating R²>.050. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R²) and cross-validated R square (xR²). Results with R²>.050 in bold.

Livelihood Diversity Variables (Assets and Practices) 9 months (n=400): 13 variables 1.5 years (n=397): 14 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		Axis 1 & 2	Axis 1 & 2
	r	R ²	r	R ²	XR ²	R ²
1. Household owns livestock (9 months)	-.378	.143	.017	.000	.183	.192
2. Household owns livestock (1.5 years)	-.112	.013	.345	.119	.173	.185
3. Household sells livestock products (9 months)	-.376	.141	-.083	.007	.164	.181
4. Household sells livestock products (1.5 years)	-.127	.016	.156	.024	.039	.054
5. Household total bovine (yak, cow, hybrid) (9 months) - log	-.469	.220	.039	.001	.240	.253
6. Household total bovine (yak, cow, hybrid) (1.5 years) - log	-.238	.056	.267	.071	.155	.171
7. Household total sheep, goat, pig (9 months) - log	-.458	.210	-.074	.005	.232	.249
8. Household total sheep, goat, pig (1.5 years) - log	-.214	.046	.184	.034	.089	.111
9. Household total chickens (9 months)- log	-.289	.084	-.219	.048	.164	.180
10. Household total chickens (1.5 years)- log	.037	.001	.189	.036	.033	.048
11. Household owns agricultural fields (9 months)	-.311	.097	.030	.001	.118	.128
12. Household owns agricultural fields (1.5 years)	-.133	.018	.081	.007	.037	.070
13. Household has non-irrigated fields (bari) (9 months)	-.353	.125	.037	.001	.140	.151
14. Household has non-irrigated fields (bari) (1.5 years)	-.206	.042	.080	.006	.060	.076
15. Number of ropani of non-irrigated fields (bari) (9 months) - log	-.291	.085	-.147	.022	.126	.141
16. Number of ropani of non-irrigated fields (bari) (1.5 years) - log	-.271	.074	-.050	.002	.082	.099
17. Household has irrigated fields (khet) (9 months)	.094	.009	-.008	.000	.038	.058
18. Household has irrigated fields (khet) (1.5 years)	.211	.044	.059	.003	.075	.093
19. Number of ropani of irrigated fields (khet) (9 months) - log	.057	.003	-.061	.004	.042	.058
20. Number of ropani of irrigated fields (khet) (1.5 years) - log	.236	.056	.062	.004	.082	.101
21. Household sells agricultural products (9 months)	-.221	.049	-.125	.016	.061	.079
22. Household sells agricultural products (1.5 years)	-.042	.002	.133	.018	.016	.034
23. Household collects forest products (9 months)	-.286	.082	.083	.007	.092	.108
24. Household collects forest products (1.5 years)	-.198	.039	.319	.102	.174	.188
25. Household hunts for food and other uses (1.5 years)	-.141	.020	.066	.004	.014	.029
26. Household participates in work exchange for agriculture (9 months)	-.254	.065	-.039	.002	.067	.083
27. Household participates in work exchange for agriculture (1.5 years)	-.074	.005	.229	.053	.078	.094

A1.6: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and livelihood diversity (portfolio) variables (59 total). Linear associations are represented by a correlation coefficient (r) and R square (R²) for each axis, with bold indicating R²>.050. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R²) and cross-validated R square (xR²). Results with R²>.050 in bold.

Livelihood Diversity Variables (Portfolio) 9 months (n=400): 59 variables 1.5 years (n=397): 57 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		Axis 1 & 2	Axis 1 & 2
	r	R ²	r	R ²	XR ²	R ²
1. Household primary livelihood agriculture (none) (9 months)	.276	.076	-.062	.004	.082	.096
2. Household primary livelihood agriculture (none) (1.5 years)	.030	.001	-.291	.085	.115	.130
3. Household primary livelihood agriculture (9 months)	-.114	.013	.105	.011	.020	.031
4. Household primary livelihood agriculture (1.5 years)	-.060	.004	.193	.037	.063	.080
5. Household secondary livelihood agriculture (9 months)	-.096	.013	.105	.011	.003	.012
6. Household secondary livelihood agriculture (1.5 years)	.027	.001	.055	.003	-.002	.002
7. Household tertiary livelihood agriculture (9 months)	-.014	.000	-.054	.003	.003	.001
8. Household tertiary livelihood agriculture (1.5 years)	.053	.003	-.002	.000	-.002	.001
9. Household primary livelihood horticulture (none) (9 months)	.001	.000	-.061	.004	-.002	.005
10. Household primary livelihood horticulture (none) (1.5 years)	.006	.000	-.060	.004	-.003	.000
11. Household primary livelihood horticulture (9 months)	.014	.000	.035	.001	.003	.000
12. Household secondary livelihood horticulture (9 months)	-.015	.000	.051	.003	-.003	.000
13. Household secondary livelihood horticulture (1.5 years)	-.020	.000	.056	.003	-.003	.000
14. Household tertiary livelihood horticulture (1.5 years)	.047	.002	.023	.001	-.002	.002
15. Household primary livelihood herding (none) (9 months)	.394	.155	-.076	.006	.181	.192
16. Household primary livelihood herding (none) (1.5 years)	.130	.017	-.326	.106	.156	.169
17. Household primary livelihood herding (9 months)	-.134	.018	.054	.003	.018	.042
18. Household primary livelihood herding (1.5 years)	-.116	.013	.074	.006	.042	.063
19. Household secondary livelihood herding (9 months)	-.204	.042	.100	.010	.053	.072
20. Household secondary livelihood herding (1.5 years)	-.082	.007	.184	.034	.063	.081
21. Household tertiary livelihood herding (9 months)	-.109	.012	-.081	.007	.008	.017
22. Household tertiary livelihood herding (1.5 years)	.002	.000	.124	.015	.008	.025
23. Household primary livelihood traditional crafts (none) (9 months)	-.046	.002	.006	.000	-.002	.002
24. Household primary livelihood traditional crafts (none) (1.5 years)	-.063	.004	.007	.000	-.001	.003
25. Household primary livelihood traditional crafts (9 months)	.066	.004	-.010	.000	-.001	.003
26. Household primary livelihood traditional crafts (1.5 years)	.069	.005	-.001	.000	-.001	.006
27. Household secondary livelihood traditional crafts (9 months)	-.001	.000	-.008	.000	-.001	.008
28. Household secondary livelihood traditional crafts (1.5 years)	.020	.000	-.009	.000	-.002	.006
29. Household tertiary livelihood traditional crafts (9 months)	.007	.000	.005	.000	-.003	.000
30. Household primary livelihood agricultural wage labor (none) (9 months)	-.017	.000	.045	.002	.003	.021

31. Household primary livelihood agricultural wage labor (none) (1.5 years)	.110	.012	-.043	.002	.009	.028
32. Household primary livelihood agricultural wage labor (1.5 years)	-.093	.009	-.093	.009	.020	.042
33. Household secondary livelihood agricultural wage labor (9 months)	.031	.001	-.074	.006	.005	.020
34. Household secondary livelihood agricultural wage labor (1.5 years)	.030	.001	-.024	.001	-.003	.000
35. Household tertiary livelihood agricultural wage labor (9 months)	-.015	.000	.027	.001	-.003	.000
36. Household tertiary livelihood agricultural wage labor 1.5 years)	-.083	.007	.114	.013	.018	.037
37. Household primary livelihood local wage labor (none) (9 months)	.001	.000	.087	.008	.001	.012
38. Household primary livelihood local wage labor (none) (1.5 years)	.114	.013	.022	.000	.005	.013
39. Household primary livelihood local wage labor (9 months)	-.015	.000	-.142	.020	.016	.032
40. Household primary livelihood local wage labor (1.5 years)	-.045	.002	-.106	.011	.014	.031
41. Household secondary livelihood local wage labor (9 months)	.059	.004	.016	.000	-.001	.004
42. Household secondary livelihood local wage labor (1.5 years)	-.052	.003	-.005	.000	-.002	.001
43. Household tertiary livelihood local wage labor (9 months)	-.016	.000	.031	.001	-.003	.000
44. Household tertiary livelihood local wage labor (1.5 years)	-.088	.008	.083	.007	.007	.029
45. Household primary livelihood non-local wage labor (none) (9 months)	.096	.009	-.022	.001	.004	.017
46. Household primary livelihood non-local wage labor (none) (1.5 years)	-.006	.000	.096	.009	.014	.035
47. Household primary livelihood non-local wage labor (9 months)	-.051	.003	.009	.000	.000	.015
48. Household primary livelihood non-local wage labor (1.5 years)	.008	.000	-.122	.015	.020	.041
49. Household secondary livelihood non-local wage labor (9 months)	-.005	.000	-.025	.001	-.003	.000
50. Household secondary livelihood non-local wage labor (1.5 years)	-.005	.000	-.025	.001	-.002	.011
51. Household tertiary livelihood non-local wage labor (9 months)	.001	.000	.046	.002	.007	.020
52. Household tertiary livelihood non-local wage labor (1.5 years)	.001	.000	.046	.002	.000	.021
53. Household primary livelihood hotel/lodge business (none) (9 months)	-.080	.006	-.018	.000	.001	.008
54. Household primary livelihood hotel/lodge business (none) (1.5 years)	-.117	.014	-.045	.002	.007	.016
55. Household primary livelihood hotel/lodge business (9 months)	.087	.008	.021	.000	.002	.009
56. Household primary livelihood hotel/lodge business (1.5 years)	.092	.009	.047	.002	.005	.013
57. Household secondary livelihood hotel/lodge business (9 months)	-.005	.000	-.004	.000	-.003	.000
58. Household tertiary livelihood hotel/lodge business (1.5 years)	.089	.008	.001	.000	-.001	.006
59. Household primary livelihood business (none) (9 months)	-.141	.020	-.064	.004	.029	.045
60. Household primary livelihood business (none) (1.5 years)	-.121	.015	-.040	.002	.011	.021
61. Household primary livelihood business (9 months)	.197	.039	-.013	.000	.042	.053
62. Household primary livelihood business (1.5 years)	.149	.022	-.055	.003	.020	.031
63. Household secondary livelihood business (9 months)	.081	.007	.001	.000	.000	.006
64. Household secondary livelihood business (1.5 years)	.065	.004	-.041	.002	.000	.036
65. Household tertiary livelihood business (9 months)	-.042	.002	.110	.012	.023	.045
66. Household tertiary livelihood business (1.5 years)	-.015	.000	.144	.021	.007	.018
67. Household primary livelihood service (government) (none) (9 months)	-.091	.008	.000	.000	.001	.016
68. Household primary livelihood service (government) (none) (1.5 years)	-.155	.024	-.087	.008	.021	.032
69. Household primary livelihood service (government) (9 months)	.042	.002	-.013	.000	-.003	.000

70. Household primary livelihood service (government) (1.5 years)	.118	.014	.044	.002	.011	.024
71. Household secondary livelihood service (government) (9 months)	.048	.002	-.015	.000	-.003	.000
72. Household secondary livelihood service (government) (1.5 years)	.099	.010	.007	.000	.010	.019
73. Household tertiary livelihood service (government) (9 months)	.072	.005	.029	.001	.000	.006
74. Household tertiary livelihood service (government) (1.5 years)	.059	.003	.080	.006	.002	.018
75. Household primary livelihood service (private) (none) (9 months)	-.063	.004	-.041	.002	-.001	.003
76. Household primary livelihood service (private) (none) (1.5 years)	-.037	.001	.054	.003	-.000	.007
77. Household primary livelihood service (private) (9 months)	.121	.015	-.069	.005	.013	.023
78. Household primary livelihood service (private) (1.5 years)	.069	.005	-.079	.006	.002	.010
79. Household secondary livelihood service (private) (9 months)	.080	.006	-.016	.000	.001	.008
80. Household secondary livelihood service (private) (1.5 years)	.000	.000	-.071	.005	-.002	.004
81. Household tertiary livelihood service (private) (9 months)	-.066	.004	.116	.013	.004	.014
82. Household tertiary livelihood service (private) (1.5 years)	-.027	.001	.064	.004	.010	.023
83. Household primary livelihood foreign employment (none) (9 months)	.020	.000	-.041	.002	-.003	.000
84. Household primary livelihood foreign employment (9 months)	.044	.002	-.013	.000	-.003	.000
85. Household primary livelihood foreign employment (1.5 years)	.105	.011	-.084	.007	.014	.027
86. Household secondary livelihood foreign employment (9 months)	.060	.004	-.009	.000	-.002	.003
87. Household tertiary livelihood foreign employment (9 months)	-.105	.011	.075	.006	.008	.016
88. Household tends livestock (9 months)	-.376	.141	.017	.000	.178	.188
89. Household tends livestock (1.5 years)	-.095	.009	.336	.113	.166	.178
90. Household work exchange (parma) tends livestock (9 months)	-.100	.010	-.057	.003	.006	.029
91. Household work exchange (parma) tends livestock (1.5 years)	-.050	.003	.034	.001	.004	.027
92. Household hires outside labor to tend livestock (9 months)	.056	.003	.046	.002	.000	.010
93. Household hires outside labor to tend livestock (1.5 years)	-.042	.002	-.006	.000	-.002	.003
94. Household members go outside the area for work (9 months)	-.095	.009	.058	.003	.006	.019
95. Household members go outside the area for work (1.5 years)	.012	.000	.040	.002	-.001	.007
96. Household tends to agricultural fields (9 months)	-.311	.097	.030	.001	.118	.128
97. Household tends to agricultural fields (1.5 years)	-.011	.000	.346	.119	.149	.163
98. Household work exchange (parma) tends agricultural fields (9 months)	-.227	.052	-.044	.002	.054	.071
99. Household work exchange (parma) tends agricultural fields (1.5 years)	-.064	.004	.212	.045	.091	.107
100. Household hires outside labor to tend agricultural fields (9 months)	.083	.007	.040	.002	.003	.018
101. Household hires outside labor to tend agricultural fields (1.5 years)	.003	.000	.132	.017	.014	.032
102. Household does not hire agricultural labor (1.5 years)	.022	.000	-.268	.072	.100	.115
103. Household does not own shop or workshop (9 months)	-.128	.016	-.072	.005	.018	.034
104. Household does not own shop or workshop (1.5 years)	-.150	.023	-.045	.002	.020	.035
105. Household owns shop or workshop (9 months)	.091	.008	-.005	.000	.003	.011
106. Household owns shop or workshop (1.5 years)	.070	.005	-.106	.011	.007	.020
107. Household rents shop or workshop (9 months)	.107	.011	.075	.006	.011	.028
108. Household rents shop or workshop (1.5 years)	.130	.017	.095	.009	.024	.037

109. Household does not own a tourist lodge or homestay (9 months)	-.061	.004	-.027	.001	-.001	.009
110. Household does not own a tourist lodge or homestay (1.5 years)	-.080	.006	-.042	.002	.001	.009
111. Household rents a tourist lodge or homestay (9 months)	.061	.004	.027	.001	-.001	.009
112. Household rents a tourist lodge or homestay (1.5 years)	.080	.006	.042	.002	.002	.020
113. Household does not own a tea shop (9 months)	.008	.000	-.037	.001	-.001	.023
114. Household does not own a tea shop (1.5 years)	.031	.001	-.038	.001	-.001	.005
115. Household rents a tea shop (9 months)	-.008	.000	.037	.001	-.001	.023
116. Household rents a tea shop (1.5 years)	-.031	.001	.038	.001	-.001	.005

A1.7: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and connectivity (origin of recovery help, flow of outside ideas, disaster preparedness) variables (16 total). Linear associations are represented by a correlation coefficient (r) and R square (R²) for each axis, with bold indicating R²>.050. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R²) and cross-validated R square (xR²). Results with R²>.050 in bold.

Connectivity Variables 9 months (n=400): 16 variables 1.5 years (n=397): 16 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		Axis 1 & 2	Axis 1 & 2
	r	R ²	r	R ²	XR ²	R ²
Origin of Recovery Help						
1. Help from family and friends (9 months)	-.037	.001	.164	.027	.016	.034
2. Help from family and friends (1.5 years)	.024	.001	.135	.018	.015	.032
3. Help from the government (9 months)	-.028	.001	-.081	.007	.004	.022
4. Help from the government (1.5 years)	-.122	.015	.184	.034	.052	.069
5. Help from community organizations (9 months)	.069	.005	.042	.002	.000	.007
6. Help from community organizations (1.5 years)	.110	.012	.047	.002	.006	.012
7. Help from non-governmental organizations (NGOs) (9 months)	.043	.002	.021	.000	.009	.028
8. Help from non-governmental organizations (NGOs) (1.5 years)	-.091	.008	-.082	.007	.026	.047
9. Help from international non-governmental organizations (INGOs) (9 months)	.106	.011	-.148	.022	.035	.047
10. Help from international non-governmental organizations (INGOs) (1.5 years)	-.038	.001	.055	.003	.016	.035
11. Help from international agencies (9 months)	-.014	.000	.059	.004	.002	.022
12. Help from international agencies (1.5 years)	.034	.001	.039	.002	-.003	.000
13. Help from family abroad (9 months)	.077	.006	-.028	.001	.001	.009
14. Help from family abroad (1.5 years)	.079	.006	.003	.000	.003	.009
15. Help from international friends (9 months)	-.007	.000	-.060	.004	.003	.018
16. Help from international friends (1.5 years)	-.125	.016	-.048	.002	.007	.046
Flows of Outside Ideas						
17. Community using news ideas from other communities in recovery (9 months)	.043	.002	.012	.000	-.002	.002
18. Community using news ideas from other communities in recovery (1.5 years)	-.016	.000	.042	.002	-.002	.006
19. Community using new ideas from government in recovery (9 months)	.068	.005	.078	.006	.008	.025
20. Community using new ideas from government in recovery (1.5 years)	-.051	.003	.217	.047	.035	.047
21. Community using new ideas from NGOs/INGOs in recovery (9 months)	.097	.010	.049	.002	.008	.022
22. Community using new ideas from NGOs/INGOs in recovery (1.5 years)	.030	.001	.169	.029	.023	.040
23. Community using new ideas from local NGOs in recovery (9 months)	.104	.011	.041	.002	.009	.022
24. Community using new ideas from tourists/international friends in recovery (1.5 years)	-.084	.007	.101	.010	.025	.104
25. Community using new ideas from other sources in recovery (9 months)	.046	.002	-.051	.003	.001	.008
26. Community using new ideas from other sources in recovery (1.5 years)	-.033	.001	-.078	.006	.001	.011

Disaster Preparedness

27. Before earthquakes household participated in disaster preparedness activities (9 months)	.008	.000	.093	.009	.004	.022
28. Before earthquakes children participated in disaster preparedness at school (1.5 years)	.018	.000	.051	.003	-.003	.000
29. Household member talked informally with others about disaster preparedness (9 months)	.075	.006	.080	.006	.010	.030
30. Household member talked informally with others about disaster preparedness (1.5 years)	-.094	.009	.138	.019	.020	.040
31. Household members were talked to about disaster preparedness (9 months)	.058	.003	.058	.003	.001	.009
32. Household members were talked to about disaster preparedness (1.5 years)	-.113	.013	.155	.024	.027	.039

A1.8: Linear and non-linear associations between NMDS dimensions of recovery (Recovery or Axis 1, Displacement or Axis 2) and social memory (experience with previous hazards, local knowledge) variables (27 total). Linear associations are represented by a correlation coefficient (r) and R square (R²) for each axis, with bold indicating R²>.050. Non-linear associations combine Axis 1 and Axis 2 and include both R square (R²) and cross-validated R square (xR²). Results with R²>.050 in bold.

Social Memory Variables 9 months (n=400): 27 variables 1.5 years (n=397): 18 variables Questions are Yes/No unless otherwise noted	Linear		Linear		Non-Linear	Non-Linear
	Axis 1		Axis 2		Axis 1 & 2	Axis 1 & 2
	r	R ²	r	R ²	XR ²	R ²
1. Personal experience with earthquakes prior to 2015 earthquakes (9 months)	-.116	.013	.083	.007	.015	.028
2. Personal experience with landslides prior to 2015 earthquakes (9 months)	-.157	.024	.122	.015	.041	.052
3. Previous experience with natural hazards helped lessen earthquake impacts (none) (9 months)	-.087	.008	-.024	.001	.009	.020
4. Previous personal experience with natural hazards helped lessen earthquake impacts (some) (9 months)	.087	.008	.024	.001	.009	.020
5. Previous personal experience with natural hazards helped lessen earthquake impacts (none) (1.5 years)	-.035	.001	-.026	.001	.001	.018
6. Previous personal experience with natural hazards helped lessen earthquake impacts (some) (1.5 years)	.037	.001	.024	.001	.003	.021
7. Previous personal experience with natural hazards helped lessen earthquake impacts (very much) (1.5 years)	.004	.000	.011	.000	-.003	.000
8. Community experience with earthquakes prior to 2015 earthquakes (9 months)	-.090	.008	.039	.002	.003	.016
9. Community experience with landslides prior to 2015 earthquakes (9 months)	-.124	.015	.140	.020	.031	.043
10. Community experience with glacial lake outburst floods prior to 2015 earthquakes (9 months)	.010	.000	.001	.000	-.001	.008
11. Community experience with avalanches prior to the 2015 earthquakes (9 months)	.022	.000	.041	.002	-.002	.016
12. Community experience with other natural hazards prior to the 2015 earthquakes (9 months)	.127	.016	.007	.000	.015	.030
13. Previous community experience with natural hazards help in recovery (9 months)	.087	.008	.045	.002	.011	.025
14. Previous community experience with natural hazards help in recovery (none) (1.5 years)	.057	.003	.014	.000	-.002	.025
15. Previous community experience with natural hazards help in recovery (some) (1.5 years)	-.088	.008	-.017	.000	.001	.036
16. Previous community experience with natural hazards help in (very much) (1.5 years)	.026	.001	.001	.000	-.003	.000
17. Community using traditional architecture in recovery (none) (9 months)	.141	.020	-.272	.074	.102	.117
18. Community using traditional architecture in recovery (some) (9 months)	-.084	.007	.165	.027	.025	.044
19. Community using traditional architecture in recovery (very much) (9 months)	-.097	.009	.187	.035	.055	.071
20. Community using traditional architecture in recovery (none) (1.5 years)	.019	.000	-.148	.022	.020	.032
21. Community using traditional architecture in recovery (some) (1.5 years)	.053	.003	.076	.006	.012	.028
22. Community using traditional architecture in recovery (very much) (1.5 years)	-.100	.010	.139	.019	.027	.045
23. Traditional architecture helped to lessen earthquake impacts (none) (9 months)	-.015	.000	-.014	.000	-.003	.000
24. Traditional architecture helped to lessen earthquake impacts (some) (9 months)	.053	.003	.008	.000	-.002	.004

25. Traditional architecture helped to lessen earthquake impacts (very much) (9 months)	-.062	.004	.013	.000	-.002	.002
26. Community using knowledge about farming in recovery (none) (9 months)	.079	.006	-.198	.039	.075	.091
27. Community using knowledge about farming in recovery (some) (9 months)	.020	.000	.000	.000	-.003	.000
28. Community using knowledge about farming in recovery (very much) (9 months)	-.086	.007	.198	.039	.070	.086
29. Community using knowledge about farming in recovery (none) (1.5 years)	.012	.000	-.129	.017	.009	.028
30. Community using knowledge about farming in recovery (some) (1.5 years)	-.055	.003	.040	.002	.000	.010
31. Community using knowledge about farming in recovery (very much) (1.5 years)	.040	.002	.130	.017	.016	.037
32. Community using grazing or pasture management practices in recovery (none) (9 months)	-.014	.000	-.035	.001	-.003	.000
33. Community using grazing or pasture management practices in recovery (some) (9 months)	.014	.000	.035	.001	-.003	.000
34. Community using grazing or pasture management practices in recovery (none) (1.5 years)	.121	.015	-.140	.020	.039	.057
35. Community using grazing or pasture management practices in recovery (some) (1.5 years)	-.090	.008	.109	.012	.017	.029
36. Community using grazing or pasture management practices in recovery (very much) (1.5 years)	-.078	.006	.081	.007	.010	.030
37. Forest management practices helped to lessen earthquake impacts (none) (9 months)	.004	.000	-.075	.006	-.001	.019
38. Forest management practices helped to lessen earthquake impacts (some) (9 months)	-.039	.002	.049	.002	-.001	.021
39. Forest management practices helped to lessen earthquake impacts (very much) (9 months)	.057	.003	.062	.004	.002	.014
40. Community using forest management practices in recovery (none) (9 months)	.109	.012	-.128	.016	.029	.047
41. Community using forest management practices in recovery (some) (9 months)	-.056	.003	.093	.009	.003	.011
42. Community using forest management practices in recovery (very much) (9 months)	-.093	.009	.082	.007	.017	.036
43. Community using forest management practices in recovery (none) (1.5 years)	.025	.001	-.164	.027	.023	.041
44. Community using forest management practices in recovery (some) (1.5 years)	-.031	.001	.138	.019	.016	.034
45. Community using forest management practices in recovery (very much) (1.5 years)	.004	.000	.077	.006	-.002	.003