

Table S1. Classification accuracy (%) and Kappa coefficient (%) of the Lancang River basin in Weixi County in 2000, 2010, and 2014.

	2000	2010	2014
Overall accuracy (%)	87.33	89.33	89.33
Kappa coefficient (%)	84.84	87.24	87.27
Sample size	150	150	340

Table S2. Comparison of dynamic changes in landscape indices between RFFP and non-RFFP communities, Refer to Table 3 for the abbreviations for landscape metrics.

	RFFP		Non-RFFP		<i>t</i>	<i>P</i>
	Mean	Standard Deviation	Mean	Standard Deviation		
2000–2010						
NP	0.232	0.388	0.125	0.231	-0.600	0.562
MPS	-0.117	0.289	-0.082	0.167	0.260	0.800
LFI	0.232	0.388	0.125	0.231	-0.600	0.562
FRAC	-0.002	0.006	-0.009	0.006	-1.917	0.084
CONNECT	-0.035	0.143	-0.092	0.103	-0.806	0.439
SHDI	0.132	0.253	0.039	0.109	-0.771	0.475
2010–2014						
NP	0.042	0.134	-0.002	0.246	-0.367	0.721
MPS	-0.029	0.118	0.069	0.327	0.634	0.540
LFI	0.042	0.134	-0.002	0.246	-0.367	0.721
FRAC	0.003	0.005	0.005	0.013	0.241	0.814
CONNECT	0.139	0.189	0.131	0.207	-0.064	0.950
SHDI	0.025	0.087	-0.004	0.162	-0.364	0.723
2000–2014						
NP	0.298	0.508	0.120	0.339	-0.735	0.479
MPS	-0.136	0.317	-0.020	0.340	0.594	0.566
LFI	0.298	0.508	0.120	0.339	-0.735	0.479
FRAC	0.001	0.008	-0.004	0.011	-0.915	0.382
CONNECT	0.102	0.255	0.024	0.200	-0.594	0.565
SHDI	0.172	0.341	0.033	0.194	-0.908	0.385

Table S3. Comparison of dynamic changes in forest landscape indices between the RFFP and non-RFFP communities, Refer to Table 3 for the abbreviations for landscape metrics.

	RFFP		Non-RFFP		<i>t</i>	<i>P</i>
	Mean	Standard Deviation	Mean	Standard Deviation		
2000–2010						
NP	2.086	3.475	0.153	0.578	-1.471	0.172
MPS	1.150	2.399	0.415	1.298	-0.690	0.506
FN	0.647	1.619	0.298	0.923	-0.478	0.643
FRAC	-0.006	0.007	-0.004	0.038	0.127	0.901
CONNECT	0.194	1.518	0.266	0.744	0.111	0.914
2010–2014						
NP	-0.073	0.207	0.032	0.940	0.244	0.813
MPS	0.394	0.309	1.147	1.638	1.001	0.340
FN	-0.242	0.230	-0.118	0.864	0.310	0.763
FRAC	0.004	0.009	0.005	0.051	0.059	0.954
CONNECT	0.145	0.125	0.456	0.712	0.956	0.364
2000–2014						
NP	1.681	2.975	1.681	2.975	-1.601	0.141
MPS	1.527	2.539	2.290	5.331	0.294	0.775
FN	-0.111	1.100	-0.119	0.627	-0.464	0.653
FRAC	-0.002	0.010	0.000	0.032	0.154	0.880
CONNECT	0.308	1.607	0.801	0.694	0.732	0.481

Table S4. Comparison of dynamic changes in shrubland landscape indices between the RFFP and non-RFFP communities, Refer to Table 3 for the abbreviations for landscape metrics.

	RFFP		Non-RFFP		t	P
	Mean	Standard Deviation	Mean	Standard Deviation		
2000–2010						
NP	0.083	0.378	0.234	0.389	0.671	0.518
FN	0.391	1.072	0.568	2.072	0.174	0.866
LFI	0.016	0.554	0.391	0.913	0.812	0.436
FRAC	0.006	0.011	0.001	0.020	-0.553	0.592
CONNECT	0.030	0.251	-0.137	0.196	-1.302	0.222
2010–2014						
NP	0.314	0.406	-0.127	0.306	-2.161	0.056
MPS	0.035	0.445	-0.160	0.343	-0.860	0.410
FN	0.105	0.429	0.486	0.921	0.852	0.414
FRAC	-0.001	0.014	0.005	0.012	0.719	0.488
CONNECT	0.035	0.354	-0.031	0.506	-0.250	0.808
2000–2014						
NP	0.370	0.468	0.142	0.609	-0.700	0.500
MPS	0.308	0.774	0.404	2.210	0.092	0.929
FN	0.085	0.729	0.868	1.130	1.352	0.206
FRAC	0.006	0.013	0.005	0.022	-0.006	0.995
CONNECT	0.033	0.286	-0.159	0.508	-0.757	0.466

Table S5. Comparison of dynamic changes in agricultural land landscape indices between the RFFP and non-RFFP communities, Refer to Table 3 for the abbreviations for landscape metrics.

	RFFP		Non-RFFP		<i>t</i>	<i>P</i>
	Mean	Standard Deviation	Mean	Standard Deviation		
2000–2010						
NP	0.736	1.845	0.066	0.969	-0.824	0.429
MPS	-0.325	0.385	-0.515	1.213	1.479	0.170
FN	1.382	2.222	0.254	1.242	-1.131	0.284
FRAC	-0.024	0.035	-0.008	0.023	1.004	0.339
CONNECT	0.142	0.222	0.189	0.485	0.180	0.861
2010–2014						
NP	0.084	0.346	0.645	0.869	1.544	0.160
MPS	-0.047	0.405	-0.313	0.373	-1.176	0.267
FN	0.209	0.491	1.114	1.596	1.213	0.253
FRAC	0.002	0.005	0.002	0.018	-0.098	0.924
CONNECT	0.014	0.273	0.076	0.426	0.413	0.689
2000–2014						
NP	1.336	3.192	0.290	0.957	-0.831	0.425
MPS	-0.242	0.653	-0.274	0.296	-0.115	0.911
FN	2.653	4.648	0.771	1.251	-1.038	0.324
FRAC	-0.022	0.037	-0.006	0.018	0.981	0.350
CONNECT	0.091	0.176	0.313	0.968	0.444	0.667

Table S6. The variables adopted in the study and the corresponding methods.

Parameters	Method
Change in forest fragmentation in 2010–2014	Interpretation of remote sensing data and calculation of landscape indices
Change in shrubland fragmentation in 2010–2014	Interpretation of remote sensing data and calculation of landscape indices
Change in farmland fragmentation in 2010–2014	Interpretation of remote sensing data and calculation of landscape indices
Change in landscape fragmentation in 2010–2014	Interpretation of remote sensing data and calculation of landscape indices
Mean elevation	Remote sensing data
Household density	Interview and survey data and remote sensing data
RFFP implementation	Interview and survey data

Off-farm proportion	Interview and survey data
Nearness to township	Interview and survey data and remote sensing data
Solar water heater proportion	Interview and survey data
Walnut area	Interview and survey data
Cropland retirement proportion	Interview and survey data
Planted trees proportion	Interview and survey data
Mean patch area (MPS)	Interpretation of remote sensing data and calculation of landscape indices
Number of patches (NP)	Interpretation of remote sensing data and calculation of landscape indices
Fractal dimension index (FRAC)	Interpretation of remote sensing data and calculation of landscape indices
Connectance (CONNECT)	Interpretation of remote sensing data and calculation of landscape indices
Fragmentation index (class- or landscape-level) (FN/LFI)	Interpretation of remote sensing data and calculation of landscape indices
Shannon's diversity index (SHDI)	Interpretation of remote sensing data and calculation of landscape indices