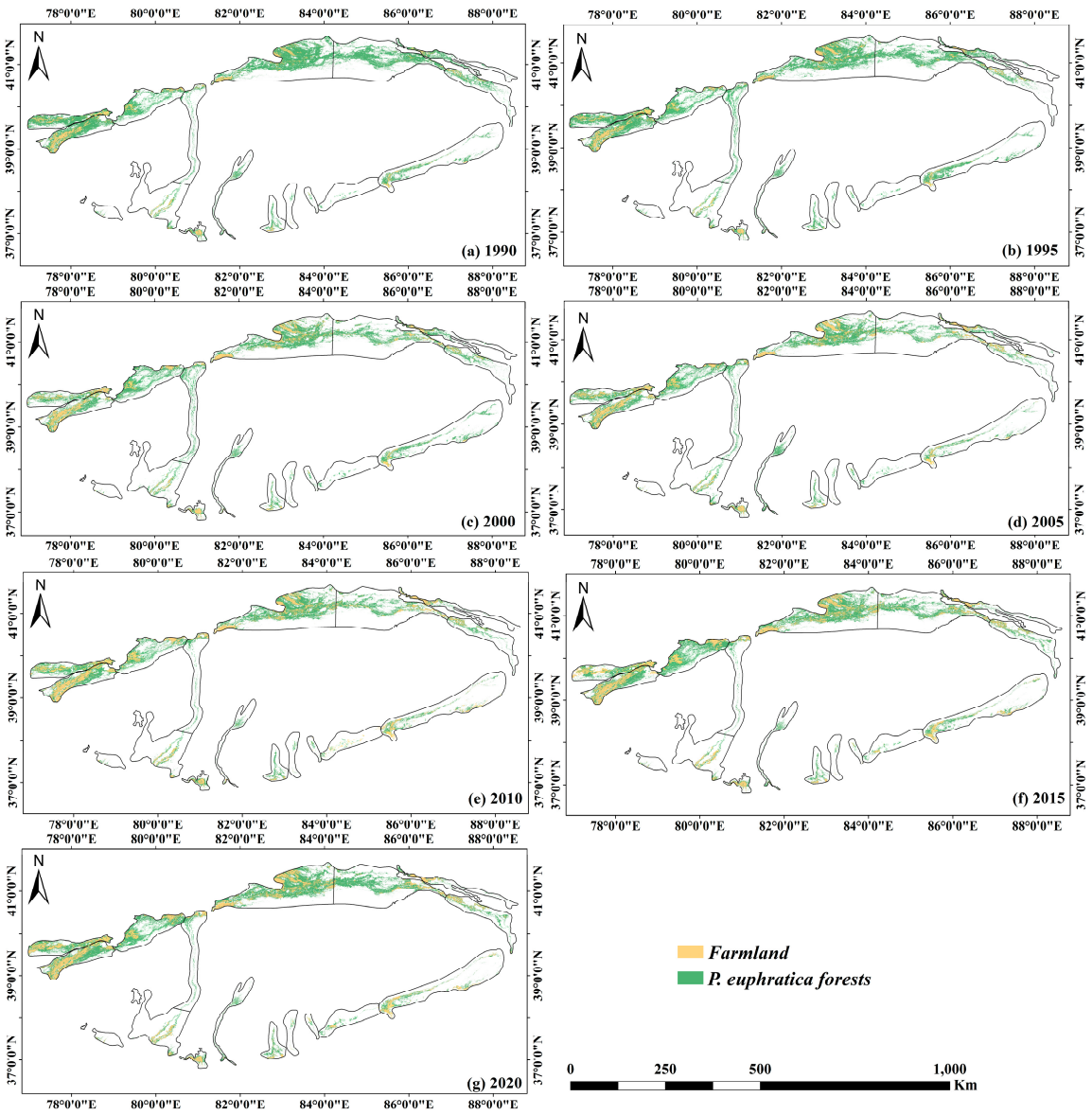


Figure S1. Spatial distribution of farmland and *P. euphratica* forest in TB from 1990 to 2020.

Table S1. Accuracy verification of random forest classification (70% training data set, 30% test data set)

Year	Type	Sample size	Overall accuracy	Kappa coefficient	F-score	Error rate
1990	Farmland	545	0.91	0.88	0.94	0.06
	P. euphratica forest	1237			0.89	0.11
	Shrubland	540			0.87	0.13
1995	Farmland	588	0.92	0.89	0.94	0.06
	P. euphratica forest	1240			0.90	0.10
	Shrubland	561			0.84	0.16
2000	Farmland	694	0.91	0.88	0.95	0.05
	P. euphratica forest	1210			0.90	0.10
	Shrubland	608			0.86	0.14
2005	Farmland	735	0.91	0.88	0.97	0.03
	P. euphratica forest	1222			0.89	0.11
	Shrubland	605			0.84	0.16
2010	Farmland	686	0.91	0.88	0.91	0.09
	P. euphratica forest	1141			0.90	0.10
	Shrubland	564			0.85	0.15
2015	Farmland	536	0.91	0.88	0.93	0.07
	P. euphratica forest	1246			0.91	0.09
	Shrubland	569			0.87	0.13
2020	Farmland	531	0.92	0.89	0.94	0.16
	P. euphratica forest	1246			0.91	0.09
	Shrubland	570			0.87	0.13

Table S2. Classification results and validation point confusion matrix in 2020

Sample name	Sample size	Kappa coefficient	Error sample
UAV sample point	162	1	0
high resolution image sample point	4169	0.94	250
Field survey point	1255	0.96	50