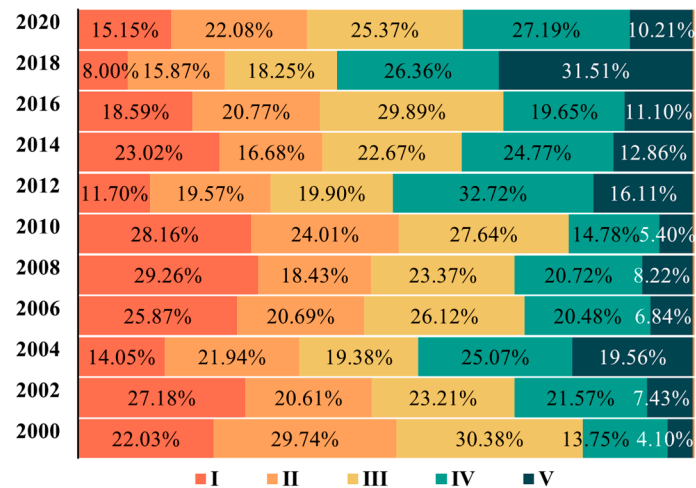


## Supplementary materials

**Table S1.** Statistics of area with different desertification levels (Unit: km<sup>2</sup>).

Year	I	II	III	IV	V
2000	44518.60	60079.87	61388.17	27780.69	8281.21
2002	54913.17	41624.93	46882.30	43570.06	15009.12
2004	28395.93	44344.86	39155.07	50662.23	39526.06
2006	52274.54	41818.87	52779.12	41393.89	13815.85
2008	59122.14	37249.81	47228.01	41872.54	16601.81
2010	56903.04	48520.86	55841.82	29872.40	10912.78
2012	23646.50	39546.74	40208.59	66107.02	32556.73
2014	46517.35	33693.17	45799.00	50041.33	25982.24
2016	37556.55	41970.32	60398.53	39705.67	22428.92
2018	16171.64	32064.99	36882.89	53273.86	63671.42
2020	30606.31	44620.17	51260.36	54934.55	20633.46



**Figure S1.** Proportion of DGL at different desertification levels.