Supplementary Material

Table S1. Characteristics of counties in the study where the Grassland Ecological Compensation Program has been implemented*.

ID	Province	County	Dominant potential natural vegetation	Dominant climatic zone	Percentage of grassland
1	Gansu	Yugur Autonomous County of Sunan	Grassland	Highland Climate Zone	66.30%
2	Gansu	Zhang County	Meadow	Southern Middle temperate	53.39%
3	Gansu	Diebu County	Coniferous forests	Highland Climate Zone	36.28%
4	Gansu	Hezuo City	Thicket	Highland Climate Zone	82.56%
5	Gansu	Zhuoni County	Coniferous forests	Highland Climate Zone	55.36%
6	Gansu	Huan County	Grassland	Southern Middle temperate	83.45%
7	Gansu	Lintan County	Cultivated Plants	Highland Climate Zone	48.83%
8	Gansu	Xiahe County	Thicket	Highland Climate Zone	84.25%
9	Gansu	Yongchang County	Cultivated Plants	Middle temperate zone	59.02%
10	Gansu	Minqin County	Desert	Middle temperate zone	5.69%
11	Gansu	Tianzhu Zangzu Autonomous County	Grassland	Highland Climate Zone	71.48%
12	Inner Mongolia	Arun Banner	Swamp	Middle temperate zone	5.23%
13	Inner Mongolia	Genhe City	Coniferous forests	Northern Middle temperate	1.79%
14	Inner Mongolia	Daur Autonomous Banner of Morin Dawa	Broadleaf Forest	Middle temperate zone	9.13%
15	Inner Mongolia	Yakeshi City	Coniferous forests	Middle temperate zone	9.02%
16	Inner Mongolia	Zhalantun City	Broadleaf Forest	Middle temperate zone	6.90%

17	Inner Mongolia	Holingola	Meadow	Middle temperate zone	84.46%
18	Inner Mongolia	Kailu County	Cultivated Plants	Middle temperate zone	34.68%
19	Inner Mongolia	Horqin Northeast County	Broadleaf Forest	Middle temperate zone	53.07%
20	Inner Mongolia	Horqin East Middle County	Grassland	Middle temperate zone	26.30%
21	Inner Mongolia	Kulun Banner	Cultivated Plants	Middle temperate zone	47.77%
22	Inner Mongolia	Naiman Banner	Grassland	Middle temperate zone	46.77%
23	Inner Mongolia	Jarud Banner	Grassland	Middle temperate zone	58.01%
24	Inner Mongolia	Horqin Right Wing Front Banner	Grassland	Middle temperate zone	45.84%
25	Inner Mongolia	Horqin Right Wing Middle Banner	Cultivated Plants	Middle temperate zone	55.05%
26	Inner Mongolia	Tuquan County	Cultivated Plants	Middle temperate zone	32.84%
27	Inner Mongolia	Ulan Hot City	Cultivated Plants	Middle temperate zone	26.39%
28	Inner Mongolia	Jalaid Banner	Cultivated Plants	Middle temperate zone	25.64%
29	Inner Mongolia	Eerguna City	Coniferous forests	Northern Middle temperate	13.92%
30	Inner Mongolia	Urad Front Banner	Cultivated Plants	Middle temperate zone	55.22%
31	Inner Mongolia	Urad Middle Banner	Grassland	Middle temperate zone	81.53%
32	Inner Mongolia	Otog Front Banner	Grassland	Middle temperate zone	80.75%
33	Inner Mongolia	Hangjin Banner	Grassland	Middle temperate zone	50.95%
34	Inner Mongolia	Uxin Banner	Grassland	Middle temperate zone	64.58%
35	Ningxia	Pengyang County	Cultivated Plants	Southern Middle temperate	55.87%
36	Ningxia	Xiji County	Cultivated Plants	Southern Middle temperate	30.28%
37	Ningxia	Yuanzhou District	Cultivated Plants	Southern Middle temperate	48.14%
38	Ningxia	Jingyuan County	Cultivated Plants	Southern Middle temperate	36.20%

39	Ningxia	Yanchi County	Grassland	Middle temperate zone	86.65%
40	Ningxia	Haiyuan County	Cultivated Plants	Middle temperate zone	65.58%
41	Ningxia	Shapotou District	Desert	Middle temperate zone	73.96%
42	Sichuan	Huili City	Coniferous forests	Subtropical Climate Zone	14.14%
43	Sichuan	Tibetan Autonomous County of Muli	Coniferous forests	Highland Climate Zone	21.60%
44	Sichuan	Yanyuan County	Coniferous forests	Subtropical Climate Zone	22.11%
45	Sichuan	Jiuzhaigou County	Thicket	Highland Climate Zone	33.33%
46	Sichuan	Kangding City	Thicket	Highland Climate Zone	52.48%
47	Sichuan	Zhaojue County	Thicket	Subtropical Climate Zone	35.63%
48	Sichuan	Heishui County	Meadow	Highland Climate Zone	41.17%
49	Sichuan	Li County	Thicket	Subtropical Climate Zone	35.82%
50	Sichuan	Songpan County	Meadow	Highland Climate Zone	53.51%
51	Sichuan	Xiaojin County	Coniferous forests	Subtropical Climate Zone	46.57%
52	Yunnan	Deqin County	Coniferous forests	Highland Climate Zone	35.55%
53	Yunnan	Weixi Lisu Autonomous County	Thicket	Subtropical Climate Zone	13.27%
54	Yunnan	Shangri-la City	Coniferous forests	Highland Climate Zone	24.17%

*Data on were obtained from the Resource and Environmental Science and Data Centre[1].

Reference

1. Climate zoning in China and data on the spatial distribution of 1 million vegetation types in China. Available online: https://www.resdc.cn/Default.aspx (accessed on 2024.1.12).