

## Appendix A. Supplementary data

**Table S1.** Results of survey in Yuanping, Qingyuan and Kulun (The percentage of each item in N is in brackets)

Socio-demographics and Perception indicator	Yuanping N = 87	Qingyuan N = 90	Kulun N = 76	Total N = 253
<i>Gender</i>				
Male	48 (19.0)	61 (24.1)	55 (21.7)	164 (64.8)
Female	39 (15.4)	29 (11.5)	21 (8.3)	89 (35.2)
<i>Age</i>				
18–24	8 (3.1)	6 (2.3)	5 (1.8)	19 (7.2)
25–35	10 (3.9)	13 (5.4)	8 (3.1)	31 (12.4)
36–45	24 (9.4)	25 (9.9)	30 (11.8)	79 (31.1)
46–55	22 (8.6)	27 (10.6)	22 (8.6)	71 (27.8)
56–65	18 (7.1)	15 (5.9)	9 (3.5)	42 (16.5)
>65	5 (1.8)	4 (1.4)	5 (1.8)	14 (5.0)
<i>Education</i>				
No education	9 (3.6)	6 (2.4)	6 (2.4)	21 (8.3)
Basic	38 (15.0)	44 (17.4)	35 (13.8)	117 (46.2)
Sec/Tech	39 (15.4)	40 (15.8)	34 (13.4)	113 (44.7)
Tertiary	1 (0.4)	0 (0)	1 (0.4)	2 (0.8)
<i>Marital Status</i>				
Single	5 (2.0)	10 (4.0)	7 (2.8)	22 (8.7)
Married	79 (31.2)	78 (30.8)	69 (27.3)	226 (89.3)
Divorce/Separated	2 (0.8)	1 (0.4)	1 (0.4)	4 (1.6)
Widowed	1 (0.4)	1 (0.4)	0 (0)	2 (0.8)
<i>Per capita disposable income (Yuan)</i>				
<5000	3 (1.2)	3 (1.2)	8 (3.1)	14 (5.5)
5000–7500	9 (3.6)	4 (1.2)	8 (3.1)	21 (8.3)
7501–10000	12 (4.7)	9 (3.6)	13 (5.1)	34 (13.4)
10001–15000	27 (10.7)	33 (13.0)	18 (7.1)	78 (30.8)
15001–20000	15 (5.9)	28 (11.1)	21 (8.3)	64 (25.3)
>20000	21 (8.3)	14 (5.5)	8 (3.1)	43 (17.0)
<i>Household size</i>				
1–3	35 (13.8)	61 (24.1)	43 (17.0)	139 (54.9)
4–5	44 (17.4)	22 (8.7)	25 (9.9)	91 (36.0)
>5	8 (3.2)	7 (2.8)	9 (3.6)	24 (9.5)
<i>Size of farmland per capita (mu)①</i>				
<1	9 (3.6)	12 (4.7)	3 (1.2)	24 (9.5)
1–3	32 (12.6)	33 (13.0)	8 (3.2)	73 (28.9)
3–5	17 (6.7)	25 (9.9)	14 (5.5)	56 (22.1)
5–10	19 (7.5)	17 (6.7)	30 (11.9)	66 (26.1)
>10	10 (4.0)	3 (1.2)	21 (8.3)	34 (13.4)
<i>Decreased rainfall</i>				
Disagree	20 (7.9)	35 (13.8)	7 (2.8)	62 (24.5)
Neutral	34 (13.4)	38 (15.0)	28 (11.1)	100 (39.5)
Agree	33 (13.0)	17 (6.7)	41 (16.2)	91 (35.9)
<i>Increased maximum temperature</i>				
Disagree	13 (5.1)	16 (6.3)	14 (5.6)	43 (17.0)
Neutral	32 (12.6)	37 (14.6)	22 (8.7)	91 (35.9)

Agree	42 (16.6)	37 (14.6)	40 (15.9)	119 (47.1)
<i>Increased minimum temperature</i>				
Disagree	15 (5.9)	31 (12.3)	19 (7.5)	65 (25.7)
Neutral	33 (13.0)	31 (12.3)	25 (0.9)	89 (35.2)
Agree	39 (15.4)	28 (11.1)	32 (12.6)	99 (39.1)
<i>Erratic rainfall</i>				
Disagree	19 (7.5)	30 (11.9)	17 (6.7)	66 (26.1)
Neutral	31 (12.3)	38 (15.0)	20 (7.9)	89 (35.2)
Agree	37 (14.6)	22 (8.7)	39 (15.4)	98 (38.7)
<i>Prolonged and severe droughts</i>				
Disagree	10 (3.9)	39 (15.5)	10 (3.9)	59 (23.3)
Neutral	45 (17.8)	37 (14.6)	23 (9.1)	105 (41.5)
Agree	32 (12.6)	14 (5.6)	43 (17.0)	89 (35.2)
<i>Frequent flood events</i>				
Disagree	34 (13.4)	23 (9.1)	30 (11.9)	87 (34.4)
Neutral	12 (4.7)	23 (9.1)	34 (13.5)	69 (27.3)
Agree	41 (16.2)	44 (17.3)	12 (4.8)	97 (38.3)
<i>Severe rainstorms</i>				
Disagree	13 (5.1)	16 (6.3)	15 (5.9)	54 (21.3)
Neutral	44 (17.4)	45 (17.8)	39 (15.4)	128 (50.6)
Agree	30 (11.9)	29 (11.5)	22 (8.7)	81 (32.1)
<i>Intensified heatwaves</i>				
Disagree	14 (5.5)	16 (6.4)	14 (5.5)	54 (21.4)
Neutral	33 (13.0)	37 (14.6)	20 (7.9)	90 (35.5)
Agree	40 (15.8)	37 (14.6)	42 (16.7)	119 (47.1)
<i>Climate change is happening</i>				
Disagree	5 (1.9)	3 (1.2)	3 (1.2)	11 (4.3)
Neutral	11 (4.3)	55 (21.7)	4 (1.6)	70 (27.7)
Agree	71 (28.1)	32 (12.6)	69 (27.3)	172 (68.0)
<i>Countermeasures on climate change</i>				
Yes	36 (14.2)	24 (9.5)	70 (27.7)	130 (51.4)
No	51(20.1)	66(26.1)	6(2.4)	123(48.6)
<i>Concrete measures (open questions)</i>				

①: Chinese dimension, 1 mu = 1/15ha