

Types of farmland- converted lands	Variables	Area	Logistic Regression Model	$R^2$	$P$ -Value
L01-10	Temperature	NE	$y=1.95x+681.036$	0.004	0.232
		NW	$y=12.094x+381.399$	0.0045	<0.001
		SW	$y=23.232x+488.786$	0.274	<0.001
		SC	$y=43.034x+4.154$	0.573	<0.001
		E	$y=43.256x+30.298$	0.413	<0.001
		N	$y=13.821x+429.827$	0.108	<0.001
	Precipitation	NE	$y=0.329x+481.271$	0.362	<0.001
		NW	$y=0.752x+219.335$	0.795	<0.001
		SW	$y=0.301x+538.675$	0.204	<0.001
		SC	$y=0.246x+497.201$	0.408	<0.001
		E	$y=0.202x+498.1$	0.43	<0.001
		N	$y=0.766x+204.581$	0.579	<0.001
	Density of Rural Population	NE	$y=0.144x+704.51$	0.011	0.048
		NW	$y=1.854x+403.084$	0.296	<0.001
		SW	$y=-0.489x+899.84$	0.063	<0.001
		SC	$y=-0.725x+983.141$	0.15	<0.001
		E	$y=-0.836x+914.902$	0.218	<0.001
		N	$y=0.84x+473.002$	0.222	<0.001
	Output Value of Animal Husbandry	NE	$y=-1.743x+713.884$	0.047	<0.001
		NW	$y=11.695x+459.792$	0.058	<0.001
		SW	$y=-2.234x+865.499$	0.014	0.007
		SC	$y=-11.145x+947.912$	0.147	<0.001
		E	$y=-7.535x+780.204$	0.16	<0.001
		N	$y=3.487x+520.622$	0.034	0.001
L11-20	Temperature	NE	$y=5.659x+671.169$	0.028	0.001
		NW	$y=9.363x+391.926$	0.023	0.001
		SW	$y=24.991x+480.998$	0.231	<0.001
		SC	$y=45.391x-18.635$	0.707	<0.001
		E	$y=41.214x+98.699$	0.462	<0.001
		N	$y=10.356x+445.757$	0.053	<0.001
	Precipitation	NE	$y=0.342x+485.267$	0.329	<0.001

	NW	$y=0.825x+180.651$	0.805	<0.001
	SW	$y=0.325x+533.163$	0.173	<0.001
	SC	$y=0.26x+501.426$	0.506	<0.001
	E	$y=0.183x+557.2$	0.436	<0.001
	N	$y=0.829x+159.76$	0.572	<0.001
Density of Rural Population	NE	$y=0.094x+697.187$	0.004	0.235
	NW	$y=2.05x+381.345$	0.306	<0.001
	SW	$y=-0.591x+930.811$	0.067	<0.001
	SC	$y=-0.636x+993.396$	0.129	<0.001
	E	$y=-0.789x+940.197$	0.237	<0.001
	N	$y=0.653x+476.023$	0.118	<0.001
	NE	$y=-1.973x+728.955$	0.051	<0.001
Output Value of Animal Husbandry	NW	$y=10.24x+458.59$	0.039	<0.001
	SW	$y=-2.762x+889.932$	0.015	0.004
	SC	$y=-11.81x+979.116$	0.184	<0.001
	E	$y=-5.179x+796.575$	0.107	<0.001
	N	$y=1.359x+528.522$	0.004	0.213

Table S3 Regression model statistical information