Supplementary Materials for

Quantitative Assessment of Spatial–Temporal Characteristics of Agricultural Development Level in China: A County-Level Analysis

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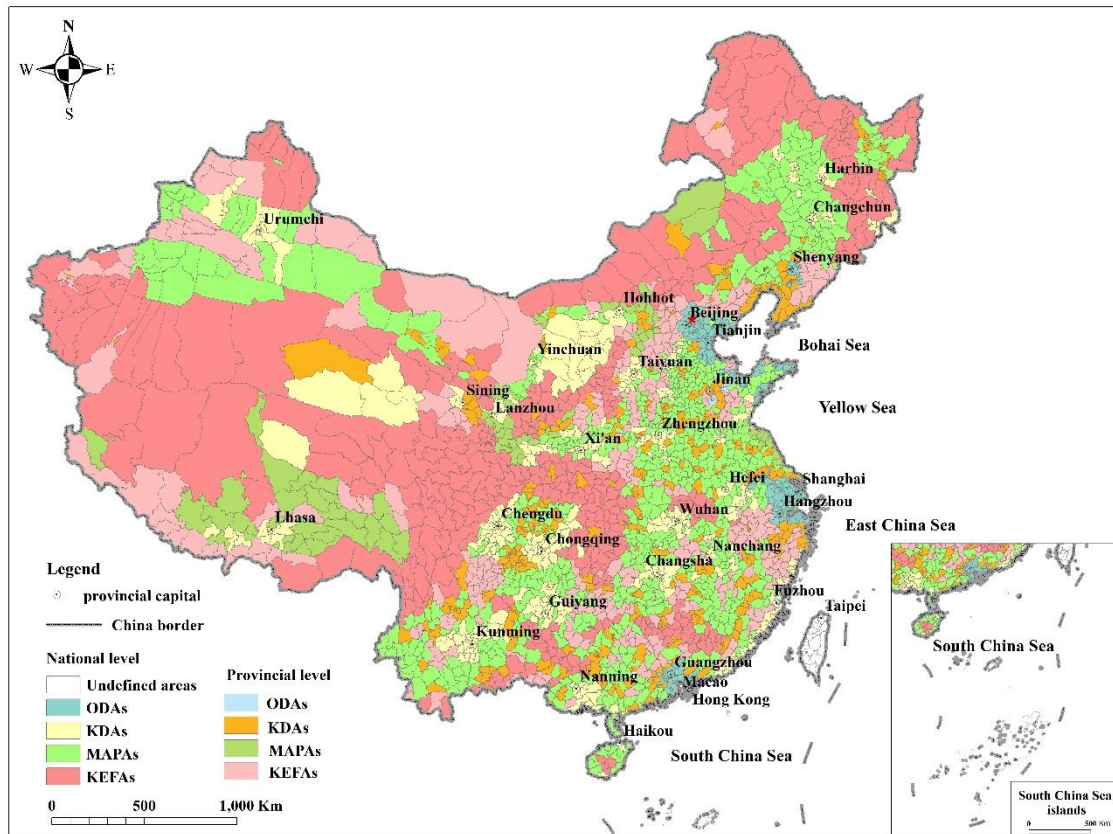**This file includes**

Fig. S1

Table S1 to S4

Figure S1 Main Functional Areas in China (Note: ODAs, KDAs, MAPAs, KEFAs represent Optimize development areas, Key development areas, Major agricultural production areas, and Key ecological functional areas in MFAP)

Table S1 Data source description

Category	Name	Sources	Resolution	Year
Spatial data	Areas of Land use	Resource and Environment Science and Data Center, Institute of Geographic Sciences and Natural Resources Research(http://www.resdc.cn/)	1km.grid	2009 2012 2015
	Areas of county administrative district	Ministry of Civil Affairs of the People's Republic of China (http://www.mca.gov.cn/)	.shp	2009
Attribute data	Gross Output Value of Agriculture, Forestry, Animal Husbandry and Fishery	Provincial and municipal Statistical yearbooks, the Economic Yearbook, the Development Yearbook, and Statistics bureau websites (http://www.stats.gov.cn/tjsj)	County level	2010 2013 2016
	Agricultural population			
	Definition of a county's major function	MFAP (2010–2020) of 31 provinces download from government websites(https://www.ndrc.gov.cn/)	County level	2010

Note: The publication of the statistical yearbooks lags behind the current time period. Gross Output Value of Agriculture, Forestry, Animal Husbandry and Fishery and Rural population in 2009, 2012 and 2015 was collected from statistical yearbooks in 2010, 2013 and 2016, respectively.

Table S2 ADL in counties across China

ADL	2009	2012	2015	2009 (%)	2012 (%)	2015(%)
Class I	443	687	747	15.54	24.11	26.21
Class II	637	611	622	22.35	21.44	21.82
Class III	978	914	867	34.32	32.07	30.42
Class IV	632	491	466	22.18	17.23	16.35
Class V	160	147	148	5.61	5.16	5.19
Class I~III	2058	2212	2236	72.21	77.61	78.46

Table S3 ADL in the regional level

ADL	Year	Class I	Class II	Class III	Class IV	Class V	Class I~III	Class I~III(%)
	2009	185	442	669	372	240	1296	67.92
Eastern	2012	270	376	579	300	220	1225	70.20
	2015	305	296	567	312	250	1168	67.51
	2009	124	398	813	392	70	1335	74.29
Central	2012	193	344	768	276	80	1305	78.57
	2015	204	348	738	264	80	1290	78.95
	2009	91	280	1209	1528	350	1580	45.69
Western	2012	132	358	1242	1180	330	1732	53.42
	2015	146	438	1164	1100	290	1748	55.70
	2009	45	154	249	224	135	448	55.51
Northeastern	2012	92	148	156	196	105	396	56.81
	2015	91	170	138	192	90	399	58.59

Table S4 ADL in "Seven regions & Twenty-three belts" agricultural strategic spatial pattern

ADL	Year	Class I	Class II	Class III	Class IV	Class V	Class I~III	Class I~III (%)
	2009	0	6	17	11	2	23	63.89
A1	2012	0	13	14	7	2	27	75.00
	2015	4	11	16	4	1	31	86.11
	2009	4	22	5	2	0	31	93.94
A2	2012	8	18	5	2	0	31	93.94
	2015	10	16	6	1	0	32	96.97
	2009	41	69	47	14	15	157	84.41
A3	2012	81	56	22	16	11	159	85.48
	2015	76	60	25	13	12	161	86.56
	2009	0	23	46	14	2	69	81.18
A4	2012	14	31	31	7	2	76	89.41
	2015	24	27	25	6	3	76	89.41
A5	2009	141	196	49	13	13	386	93.69
	2012	243	103	40	13	13	386	93.69

	2015	285	66	41	7	13	392	95.15
	2009	218	191	176	26	21	585	92.56
A6	2012	258	163	161	31	19	582	92.09
	2015	242	175	153	38	24	570	90.19
	2009	13	79	153	59	14	226	71.07
A7	2012	19	51	146	75	27	248	77.99
	2015	16	54	146	69	33	248	77.99