

## Annex E China Production Estimates and Environmental Indices

**Table E.1 China, 2013 area under maize, soybean, and wheat production and percentage difference with 2012 (thousand hectares)**

	Maize		Soybean		Wheat	
	2013	Δ%	2013	Δ%	2013	Δ%
Anhui	872	-2.2	822	-2.4	2593	-1.5
Chongqing	424	-2.4			363	-1.5
Fujian						
Gansu	1015	-1.1			737	-0.5
Guangdong						
Guangxi						
Guizhou	1037	-2.1				
Hebei	2967	2.9	112	3.2	1958	-1.9
Heilongjiang	4740	0.9	2714	-10.8	157	-34.0
Henan	3124	-1.9	445	-9.8	4925	-0.3
Hubei					1043	-1.9
Hunan						
Inner Mongolia	2682	2.0	640	-4.9	588	-0.2
Jiangsu	427	0.2	287	0.8	1930	1.7
Jiangxi						
Jilin	3501	3.8	310	-4.7		
Liaoning	2205	-0.3	224	-2.5		
Ningxia	254	-16.6			221	-4.5
Shaanxi	829	-0.6			1027	-6.8
Shandong	3118	0.6	294	-3.8	4146	0.5
Shanxi	1772	9.9	155	10.8	497	-3.2
Sichuan	1410	-0.9			1273	1.2
Yunnan	1516	-1.0				
Zhejiang						
Sub total	31894	0.9	6002	-6.9	21458	-1.1
Other provinces	3318	5.2	1662	-6.2	4135	-0.4
<b>China</b>	<b>35213</b>	<b>1.3</b>	<b>7664</b>	<b>-6.7</b>	<b>25593</b>	<b>-1.0</b>

Note: Δ% is percent difference with 2012.

**Table E.2 China, rice areas in China for single season, early, and late rice, 2013 and percentage difference with 2012 (thousand hectares)**

	Single rice		Early rice		Late rice	
	2013	Δ%	2013	Δ%	2013	Δ%
Anhui	1946	4.0	318	0.7	338	-1.3
Chongqing	784	-0.9				
Fujian			268	-3.6	210	13.8
Gansu						
Guangdong			975	0.3	1140	-3.3
Guangxi			1002	0.2	1089	-0.2
Guizhou	809	-0.6				
Hebei						
Heilongjiang	2991	1.3				

	Single rice		Early rice		Late rice	
	2013	Δ%	2013	Δ%	2013	Δ%
Henan	619	0.3				
Hubei	1325	-0.2	413	-1.3	521	-0.2
Hunan	1270	0.4	1514	-0.9	1514	-0.9
Inner Mongolia						
Jiangsu	2335	0.8				
Jiangxi	463	-0.7	1415	0.2	1358	-1.6
Jilin	720	1.0				
Liaoning	658	0.0				
Ningxia	59	-2.8				
Shaanxi	164	0.0				
Shandong						
Shanxi						
Sichuan	2207	-1.1				
Yunnan	919	-0.3				
Zhejiang			271	0.2	215	6.6
Sub total	17270		6176		6385	
Other provinces	1853		308		204	
<b>China</b>	<b>19124</b>	<b>1.3</b>	<b>6484</b>	<b>-0.3</b>	<b>6589</b>	<b>-0.7</b>

Note: Δ% is percent difference with 2012.

**Table E.3 China, 2013 yield of maize, soybean, and wheat, by province (tons/ha)**

	Maize		Soybean		Wheat	
	2013	Δ%	2013	Δ%	2013	Δ%
Anhui	4.357	-1.8	1.334	-1.7	4.262	-0.8
Chongqing	4.809	0.9			3.114	-0.8
Fujian						
Gansu	4.867	1.8			3.725	0.0
Guangdong						
Guangxi						
Guizhou	4.553	-0.6				
Hebei	5.607	3.3	1.553	0.5	5.232	0.2
Heilongjiang	5.376	1.5	1.704	-0.1	3.072	-2.3
Henan	5.345	0.7	1.745	0.1	5.175	-0.4
Hubei					4.226	-0.9
Hunan						
Inner Mongolia	5.657	2.6	1.320	0.8	3.247	2.8
Jiangsu	5.076	0.3	2.780	0.4	4.729	-1.0
Jiangxi						
Jilin	6.839	0.2	2.094	0.7		
Liaoning	6.017	0.6	2.326	-1.1		
Ningxia	6.639	2.1			3.337	-2.4
Shaanxi	4.824	2.9			3.786	-1.6
Shandong	5.961	4.9	2.371	-0.8	5.365	0.2
Shanxi	5.521	1.6	1.243	0.1	3.967	-1.6
Sichuan	5.006	2.3			3.587	0.5
Yunnan	3.886	1.2				
Zhejiang						

Note: Δ% is percent difference with 2012.

**Table E.4 China, yield of single cropped rice, early rice and late rice by province (thousand tons)**

	Single crop		Early rice		Late rice	
	2013	Δ%	2013	Δ%	2013	Δ%
Anhui	6.704	0.6	6.074	0.4	5.231	0.2
Chongqing	6.206	2.2				
Fujian			6.254	-3.6	5.471	0.3
Gansu						
Guangdong			5.418	2.0	5.111	-1.7
Guangxi			5.477	1.7	5.019	0.7
Guizhou	6.333	-0.6				
Hebei						
Heilongjiang	6.701	0.3				
Henan	6.631	1.4				
Hubei	7.973	-1.6	5.934	2.9	5.477	-0.1
Hunan	6.367	-2.1	5.646	0.4	5.884	-2.1
Inner Mongolia						
Jiangsu	7.159	-0.6				
Jiangxi	6.012	0.1	5.064	-1.8	5.354	-2.0
Jilin	7.035	0.4				
Liaoning	7.135	0.5				
Ningxia	7.827	0.4				
Shaanxi	6.400	2.4				
Shandong						
Shanxi						
Sichuan	6.606	2.8				
Yunnan	5.524	-1.4				
Zhejiang			5.646	-0.1	5.977	0.5

Note: Δ% is percent difference with 2012.

**Table E.5 Environmental indices in China: Rainfall (mm), October-September accumulation**

	2013 rainfall (mm)	Twelve-year average (2001-12)	Five-year average (2008-12)	2001-13 normalized trend	Coefficient of correlation	Significance level of trend	Difference between 2013 and 12-year average	Difference between 2013 and 5-year average
Anhui	310	384	414	14.039	0.276		-74	-104
Chongqing	209	164	159	2.768	0.06		45	50
Fujian	471	356	367	19.115	0.293		115	104
Gansu	150	125	118	-7.472	-0.216		25	32
Guangdong	754	549	560	15.224	0.301		205	194
Guangxi	507	389	403	9.679	0.253		118	104
Guizhou	230	228	240	12.399	0.338		2	-10
Hebei	185	158	167	13.608	0.259		27	18
Heilongjiang	67	78	79	7.436	0.113		-11	-12
Henan	224	314	312	0.761	0.013		-90	-88
Hubei	305	269	279	10.565	0.323		36	26
Hunan	343	253	265	19.858	0.462		90	78
Inner Mongolia	70	68	68	-2.147	-0.04		2	2
Jiangsu	384	416	431	11.159	0.403		-32	-47
Jiangxi	455	375	371	1.715	0.033		80	84
Jilin	61	94	104	24.191	0.375		-33	-43
Liaoning	80	105	106	4.438	0.056		-25	-26

Ningxia Huizu	84	74	64	-27.635	-0.491	*	10	20
Shaanxi	167	165	160	-8.467	-0.236		2	7
Shandong	297	301	281	-8.598	-0.13		-4	16
Shanxi	125	134	136	-4.396	-0.095		-9	-11
Sichuan	243	241	247	2.751	0.132		2	-4
Yunnan	411	364	363	2.659	0.091		47	48
Zhejiang	313	311	368	22.855	0.372		2	-55

Note: Rainfall accumulation (mm) between October 2012 and September 2013. Significance level of the trend: \* for  $p \leq 0.05$  and \*\* for  $p \leq 0.01$ . See also figure D.4a-c for a graphical representation of some of the variables in this table.

**Table E.6 Environmental indices in China: Temperature (°C), October-September accumulation**

	2013 temp (°C)	Twelve-year average (2001-12)	Five-year average (2008-12)	2001-13 normalized trend	Coefficient of correlation	Significance level of trend	Difference between 2013 and 12-year average	Difference between 2013 and 5- year average
Anhui	1496	1455	1433	-2.09	-0.304		41	63
Chongqing	604	558	556	-1.957	-0.102		46	48
Fujian	1065	1093	1076	-4.384	-0.549	*	-28	-11
Gansu	536	524	527	3.742	0.35		12	9
Guangdong	1911	1954	1941	-1.865	-0.381		-43	-30
Guangxi	1695	1674	1667	-0.131	-0.025		21	28
Guizhou	962	895	896	0.956	0.077		67	66
Hebei	985	1021	1000	-5.278	-0.483	*	-36	-15
Heilongjiang	328	360	355	-6.414	-0.211		-32	-27
Henan	1596	1513	1498	0.309	0.043		83	98
Hubei	1079	1026	1020	-0.721	-0.073		53	59
Hunan	991	942	948	1.064	0.075		49	43
Inner Mongolia	471	467	458	-1.867	-0.101		4	13
Jiangsu	1686	1686	1663	-2.44	-0.369		0	23
Jiangxi	1235	1214	1221	1.037	0.146		21	14
Jilin	507	529	514	-8.471	-0.488	*	-22	-7
Liaoning	590	629	608	-10.488	-0.565	*	-39	-18
Ningxia Huizu	575	572	571	3.17	0.212		3	4
Shaanxi	752	719	716	1.337	0.149		33	36
Shandong	1556	1533	1513	-1.688	-0.25		23	43
Shanxi	665	660	649	-1.662	-0.131		5	16
Sichuan	870	814	812	0.842	0.08		56	58
Yunnan	1133	1082	1093	3.244	0.556	*	51	40
Zhejiang	1007	990	982	-1.623	-0.155		17	25

Note: Temperature is temperature accumulation over a threshold of 5.0 °C between October 2012 and September 2013. Significance level of the trend: \* for  $p \leq 0.05$  and \*\* for  $p \leq 0.01$ . See also figure D.4a-c for a graphical representation of some of the variables in this table.

**Table E.7 Environmental indices in China: PAR ( $W/m^2$ ), October-September accumulation**

	2013 PAR ( $W/m^2$ )	Twelve-year average (2001-12)	Five-year average (2008-12)	2001-13 normalized trend	Coefficient of correlation	Significance level of trend	Difference between 2013 and 12-year average	Difference between 2013 and 5- year average
Anhui	8354	7874	7672	-3.477	-0.348		480	682
Chongqing	3578	3530	3461	-5.369	-0.455		48	117
Fujian	6102	6416	6395	-2.408	-0.13		-314	-293
Gansu	6030	6551	6502	-1.684	-0.189		-521	-472
Guangdong	8276	9172	9283	-1.285	-0.106		-896	-1007
Guangxi	7934	8088	8118	-0.055	-0.012		-154	-184
Guizhou	5596	5479	5393	-4.257	-0.454		117	203
Hebei	7976	7724	7695	1.309	0.145		252	281
Heilongjiang	5634	5754	5827	0.062	0.005		-120	-193
Henan	9759	8912	8728	-1.493	-0.114		847	1031
Hubei	6424	6002	5859	-3.449	-0.34		422	565
Hunan	5116	4819	4747	-3.032	-0.266		297	369
Inner Mongolia	6318	6470	6528	1.868	0.233		-152	-210
Jiangsu	10505	9701	9553	-0.849	-0.097		804	952
Jiangxi	6229	6128	6117	0.214	0.017		101	112
Jilin	6095	6063	6056	-1.704	-0.187		32	39
Liaoning	6403	6135	6062	-0.104	-0.008		268	341
Ningxia Huizu	5838	6412	6314	-2.005	-0.147		-574	-476
Shaanxi	6066	6254	6184	-0.803	-0.119		-188	-118
Shandong	9900	8967	8868	0.167	0.013		933	1032
Shanxi	6810	6755	6747	2	0.22		55	63
Sichuan	5780	5972	5905	-3.253	-0.455		-192	-125
Yunnan	8366	8794	8788	-1.808	-0.316		-428	-422
Zhejiang	5696	5985	5846	-4.768	-0.387		-289	-150

Note: PAR-1: Accumulated Photosynthetically active radiation ( $W/m^2$ ) over the growing season(s) between October 2012 and September 2013. Significance level of the trend: \* for  $p < 0.05$  and \*\* for  $p < 0.01$ . See also figure D.4a-c for a graphical representation of some of the variables in this table