



Supplement of

High-resolution ammonia emissions inventories in China from 1980 to 2012

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Table captions

Table S1. The defined threshold of intensive rearing system for different livestock categories (unit is capita)

Table S2. Interannual emissions (Gg) of typical livestock categories from 1980 to 2012.

Table S1. The defined threshold of intensive rearing system for different livestock categories (unit is capita)*

Beef	Dairy cow	Goat/Sheep	Pig	Laying hen	Broiler
50	100	100	500	2,000	50,000

* The values are derived from EOCAIY (2007); when the values exceed above threshold, they are defined as intensive system.

Table S2. Interannual emissions (Gg) of typical livestock categories from 1980 to 2012.

	Beef	Dairy cows	Goat	Sheep	Pigs	Horse	Donkey	Mule	Laying hen	Laying duck	Broilers	Meat duck
1980	1,326	53	285	394	285	186	128	73	73	24	20	3
1981	1,369	34	278	401	276	186	128	73	79	26	22	3
1982	1,402	56	266	390	282	188	177	84	94	30	25	3
1983	1,436	57	242	363	286	188	177	84	113	36	31	4
1984	1,503	59	225	348	300	188	177	84	132	42	36	5
1985	1,591	62	219	345	325	188	177	84	157	49	43	5
1986	1,678	66	240	362	343	186	181	86	153	50	42	6
1987	1,723	73	274	374	341	182	184	88	159	51	44	6
1988	1,778	75	320	402	360	179	187	90	181	55	49	6
1989	1,824	83	345	413	375	180	189	91	179	56	48	6
1990	1,849	97	361	389	400	174	190	92	191	60	52	7
1991	1,880	98	352	385	413	172	189	94	172	69	67	8
1992	1,925	99	356	382	435	171	186	94	191	78	76	9
1993	2,015	103	383	389	460	170	189	97	243	96	95	11
1994	2,182	112	436	412	501	160	185	93	327	120	120	13
1995	2,329	124	519	456	561	172	182	91	417	147	147	16
1996	2,456	132	588	476	499	69	182	91	479	166	167	18
1997	2,032	117	456	442	516	152	164	82	502	177	178	20
1998	2,172	119	512	468	572	152	164	82	475	159	156	18
1999	2,213	123	506	468	587	151	157	74	484	164	165	18
2000	2,230	148	540	480	635	151	157	74	547	179	179	20
2001	2,221	162	549	480	649	143	150	74	562	185	185	21
2002	2,250	202	574	496	667	140	145	71	573	190	188	21
2003	2,272	246	632	563	678	137	140	67	612	203	199	23
2004	2,289	305	664	601	698	133	136	64	636	209	201	23
2005	2,325	319	673	616	740	129	134	61	682	225	219	25
2006	2,082	304	661	604	744	111	126	59	684	230	224	26
2007	1,685	336	495	510	622	124	119	51	582	215	217	25
2008	1,664	337	522	460	663	120	117	51	600	226	228	26
2009	1,666	333	509	478	809	120	113	60	609	235	236	27
2010	1,661	376	476	487	676	120	111	48	625	245	243	28
2011	1,526	366	463	478	660	118	112	45	630	246	244	29
2012	1,507	382	382	401	349	112	110	43	679	263	259	31

Figure captions

Figure S1. Annual populations of major livestock animals (cattle (a), sheep (b), pig (c), poultry (d)) in China from 1980 to 2012 (unit: million head); the values are derived from EOCAY (1981-2013) and EOCAIY (1999-2013).

Figure S2. Annual production of synthetic fertilizers (categorized as urea, ABC and others (AN, AS and others)) from 1980 to 2012 in China; the values are derived from Zhang et al. (2012)

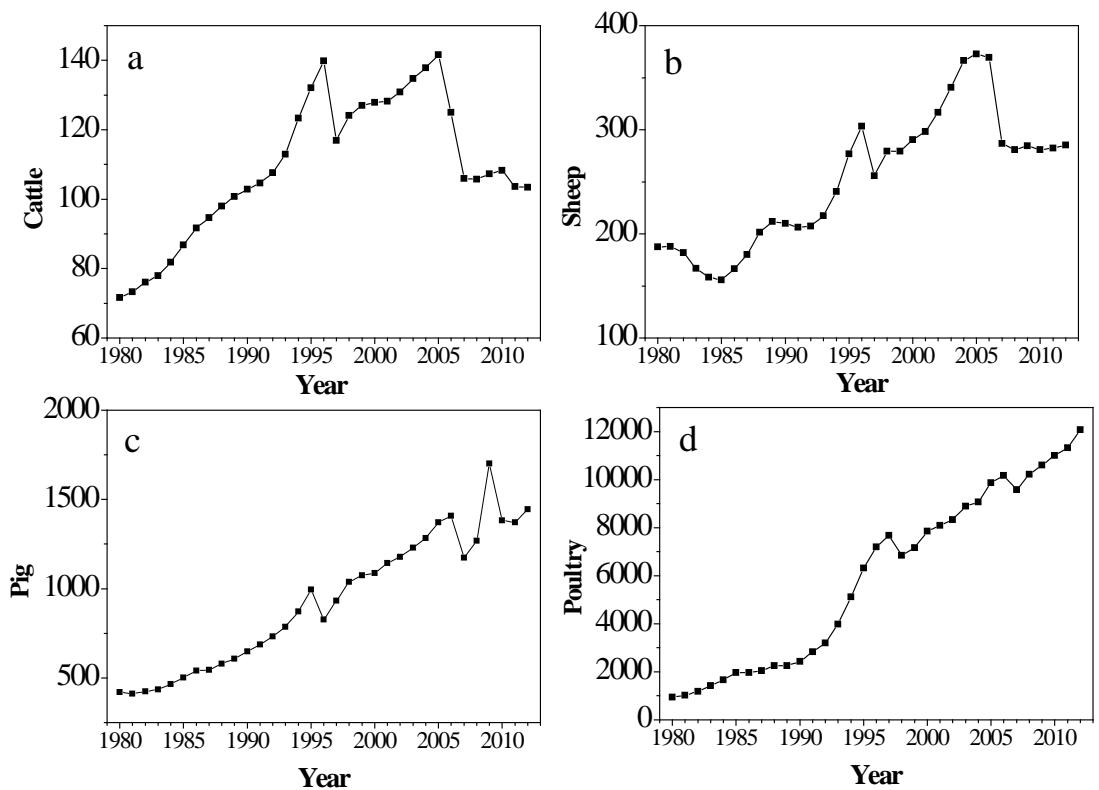


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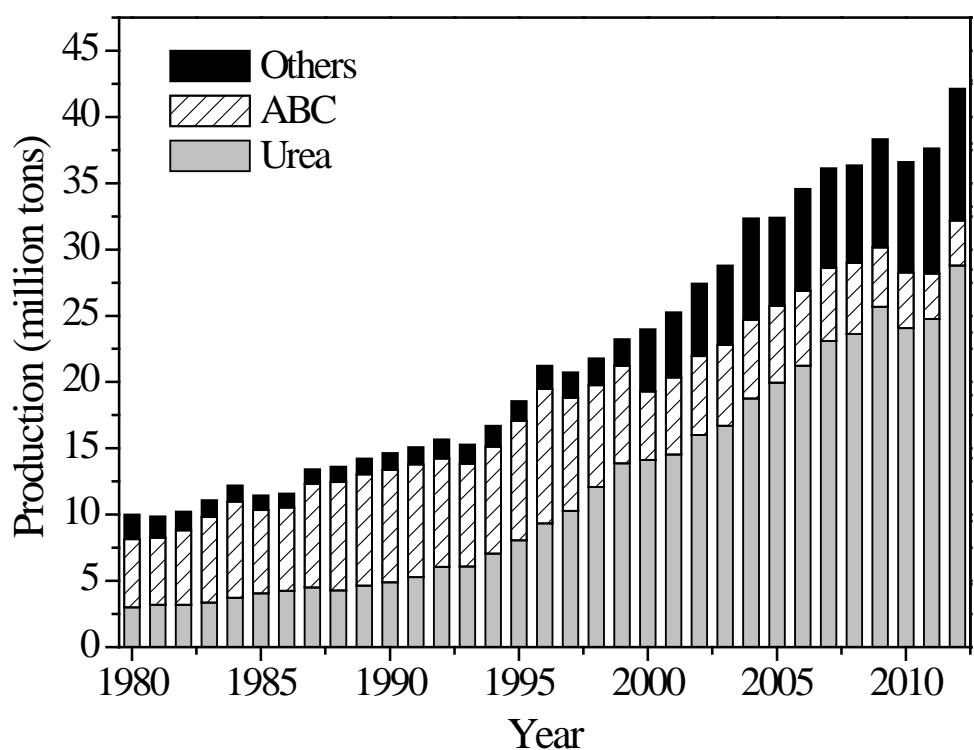


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References:

- EOCAIY: China Animal Industry Yearbook 1999-2013 [in Chinese], China Agriculture Press, Beijing, 1999-2013.
- EOCAIY: China Animal Industry Yearbook 2007 [in Chinese], China Agriculture Press, Beijing, 2007.
- EOCAY: China Agriculture Yearbook 1981-2013 [in Chinese] China Agriculture Press, Beijing, 1981-2013.
- Zhang, W. F., Zhang, F. S., LI, Y. X., Huang, G. Q., and Wu, L.: China Fertilizer Development Report [in Chinese]. China Agricultural University Press 2012.