

Agricultural Production

EarthTrends
Data Tables:
Agriculture
and Food



Source: Food and Agriculture Organization of the United Nations (FAO).

	Agricultural Production Indices (Base Year 1999-2001)(a)				Cereals			Pulses			Roots & Tubers			Total Meat Production 1000mt 2001-2003(b)
	Total		Per Capita		Total Production 1000mt 2003(b)	Total Area Harvested (1000 ha) 2003(b)	Yields kg/ha 2001-2003(b)	Total Production 1000mt 2003(b)	Total Area Harvested (1000 ha) 2003(b)	Yields kg/ha 2001-2003(b)	Total Production 1000mt 2003(b)	Total Area Harvested (1000 ha) 2003(b)	Yields kg/ha 2001-2003(b)	
	1991-1993(b)	2001-2003(b)	1991-1993(b)	2001-2003(b)										
	82.6	103.2	92.3	100.6	2,070,963	670,933	3,087	55,679	69,890	718	687,193	52,533	13,081		246,826
WORLD	82.6	103.2	92.3	100.6	2,070,963	670,933	3,087	55,679	69,890	718	687,193	52,533	13,081	246,826
ASIA (EXCL. MIDDLE EAST)	..	..	..	..	927,074	280,891	3,300	23,137	32,179	718	283,662	17,216	16,479	93,967
Armenia	101.1	106.5	90.7	107.9	361	196	1,848	4	3	1,485	415	32	13,154	53
Azerbaijan	110.9	113.4	120.8	111.5	2,027	777	2,610	36	10	3,435	690	57	12,195	124
Bangladesh	76.1	102.7	91.3	98.5	39,075	11,796	3,313	354	464	764	3,544	282	12,564	439
Bhutan	90.1	87.7	106.5	82.7	112	72	1,563	2	2	800	51	6	8,752	7
Cambodia	66.7	102.9	84.0	98.0	4,249	2,068	2,054	22	33	663	191	28	6,980	198
China (c)	66.0	108.1	71.1	106.5	391,950	80,869	4,847	5,450	3,691	1,477	181,786	10,305	17,641	68,023
Georgia	105.2	101.6	102.1	103.3	700	348	2,012	10	11	943	421	37	11,520	106
India (f)	78.6	100.5	90.8	97.4	227,206	97,182	2,335	12,149	21,257	571	31,053	1,625	19,129	5,789
Indonesia	86.2	105.2	96.9	102.5	61,314	14,755	4,155	314	331	949	20,529	1,588	12,933	1,834
Japan	106.2	98.0	108.4	97.6	11,754	1,998	5,881	93	58	1,620	4,556	166	27,374	2,975
Kazakhstan	147.2	107.8	137.0	109.1	15,519	13,467	1,153	33	25	1,326	2,258	164	13,738	666
Korea, Dem People's Rep	122.9	106.9	133.3	105.7	4,146	1,301	3,186	300	350	857	2,395	218	11,030	214
Korea, Rep	82.2	96.4	88.0	95.2	7,134	1,161	6,135	30	27	1,120	947	39	24,443	1,675
Kyrgyzstan	79.3	102.8	87.2	99.9	1,713	619	2,770	32	20	1,596	1,237	70	18,410	198
Lao People's Dem Rep	60.5	112.9	73.5	107.9	2,533	807	3,140	17	17	983	277	27	10,054	85
Malaysia	80.4	107.5	98.2	103.1	2,180	696	3,132	..	..	..	458	50	9,222	1,027
Mongolia	93.3	94.9	101.5	92.6	160	211	758	1	1	869	64	9	6,874	273
Myanmar	66.6	113.8	75.5	110.8	24,031	7,060	3,403	2,526	2,988	843	505	49	10,336	519
Nepal	76.5	105.2	92.2	100.5	7,197	3,315	2,171	243	303	800	1,527	158	9,677	246
Pakistan (f)	75.9	101.7	92.9	96.7	27,325	12,061	2,266	866	1,777	491	2,247	137	16,456	1,838
Philippines	80.3	108.3	95.0	104.4	17,860	6,524	2,737	56	77	723	2,359	369	6,389	2,205
Singapore	332.2	78.2	419.4	74.7	..	..	..	..	..	..	0	0	10,000	97
Sri Lanka	85.9	100.7	92.7	99.1	2,908	864	3,371	20	22	915	348	40	8,677	119
Tajikistan	140.0	114.1	153.7	112.2	678	379	1,784	9	9	993	383	24	15,750	31
Thailand	86.7	105.7	94.6	103.5	31,148	11,659	2,674	291	340	856	18,113	1,047	17,298	2,234
Turkmenistan	100.4	93.7	118.2	90.8	2,280	865	2,621	10	7	1,402	29	6	4,889	134
Uzbekistan	101.7	103.3	116.9	100.1	5,154	1,469	3,553	14	14	1,058	756	52	14,472	512
Viet Nam	63.7	111.3	72.2	108.3	36,227	8,301	4,363	250	337	741	6,394	600	10,631	2,301
EUROPE	..	83.7	..	108.9	407,781	121,513	3,349	7,716	3,762	2,053	134,101	8,484	15,813	52,410
Albania	73.5	103.7	69.9	102.8	509	162	3,154	27	26	1,011	166	11	15,104	71
Austria	90.6	95.4	93.4	95.3	4,424	797	5,543	110	44	2,504	646	22	28,984	863
Belarus	140.7	105.6	137.1	106.6	5,232	2,226	2,372	267	183	1,478	7,929	570	14,035	618
Belgium	..	97.7	..	97.4	2,520	299	8,417	7	2	4,140	2,665	61	43,635	1,749
Bosnia and Herzegovina	114.5	94.4	118.1	90.7	1,082	337	3,191	18	15	1,207	368	44	8,405	34
Bulgaria	124.7	102.0	117.5	103.7	5,654	1,958	2,859	24	42	577	586	50	11,625	483
Croatia	94.9	96.8	90.2	96.9	3,158	709	4,439	17	12	1,490	594	64	9,181	186
Czech Rep (d)	124.8	97.1	124.1	97.3	6,634	1,584	4,184	74	34	2,136	1,026	48	21,268	785
Denmark	97.7	100.7	100.5	100.2	9,073	1,535	5,909	138	39	3,501	1,526	37	40,911	2,116
Estonia	171.4	100.5	153.5	102.7	538	266	2,023	6	3	1,915	305	17	17,817	65
Finland	99.9	103.0	102.8	102.6	3,798	1,182	3,213	11	5	2,265	710	30	24,039	360
France	96.5	97.0	99.8	96.1	61,605	9,073	6,781	1,950	464	4,215	6,397	160	39,937	6,524
Germany	94.5	96.3	96.7	96.2	44,207	6,951	6,354	527	171	3,072	11,074	283	39,098	6,520
Greece	96.6	96.6	102.6	96.0	4,582	1,288	3,557	41	24	1,714	908	47	19,298	486
Hungary	105.9	101.3	102.8	102.1	11,834	2,977	3,957	58	32	1,847	754	34	21,974	1,152
Iceland	96.4	104.0	104.7	102.1	..	..	..	..	..	..	10	1	12,069	26
Ireland	95.9	96.6	103.6	94.3	2,053	294	6,987	8	2	4,661	499	15	33,487	996
Italy	99.3	94.5	100.3	94.6	19,882	4,198	4,733	126	79	1,593	1,916	79	24,211	4,187
Latvia	211.7	105.8	191.3	107.8	1,015	437	2,329	4	3	1,389	688	54	12,860	64
Lithuania	145.7	102.1	138.9	103.2	2,499	897	2,790	55	34	1,595	1,344	98	13,753	159
Macedonia, FYR	96.3	90.5	100.5	89.5	501	198	2,537	27	11	2,466	177	14	12,892	25
Moldova, Rep	164.2	104.0	161.1	104.3	2,219	963	2,280	51	50	1,011	338	42	8,036	84
Netherlands	104.8	95.8	110.0	94.8	1,717	228	7,529	16	4	4,517	6,926	161	42,897	2,577
Norway	105.4	98.2	110.0	97.3	1,244	328	3,793	..	..	0	347	15	23,148	270
Poland	105.9	100.0	106.8	100.1	25,743	8,426	3,054	204	99	2,059	16,211	921	17,827	3,045
Portugal	94.6	98.1	95.8	97.7	1,315	485	2,702	22	37	591	1,257	83	15,126	723
Romania	101.2	104.5	98.7	104.9	15,394	5,683	2,693	59	41	1,466	4,007	280	14,307	1,049
Russian Federation	130.7	107.9	127.9	109.0	77,907	40,911	1,899	1,478	973	1,528	34,861	3,195	10,912	4,686
Serbia and Montenegro	104.9	98.5	106.8	98.7	7,614	2,066	3,667	130	55	2,349	949	98	9,706	794
Slovakia (d)	118.2	99.0	119.6	98.8	3,032	815	3,710	45	18	2,599	400	26	15,398	327
Slovenia	82.1	103.6	83.5	103.9	496	101	4,887	1	0	1,973	137	7	19,401	190
Spain	85.1	102.4	87.7	101.8	20,381	6,585	3,092	443	524	835	2,934	112	26,236	5,246
Sweden	94.8	100.1	96.8	99.9	5,399	1,154	4,678	85	31	2,747	896	31	28,505	548
Switzerland	104.7	99.9	107.8	99.9	1,042	168	6,199	15	4	3,750	504	14	37,046	438
Ukraine	146.8	102.1	140.5	103.7	32,161	13,094	2,409	747	441	1,709	17,488	1,599	10,936	1,605
United Kingdom	106.8	96.7	109.7	96.1	21,145	3,106	6,799	921	260	3,545	6,511	156	41,643	3,296
MIDDLE EAST & N. AFRICA	..	..	..	..	88,639	38,419	2,306	3,428	3,835	894	16,076	720	22,323	8,427
Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	87.4	108.1	100.9	104.5	2,947	2,743	1,076	41	61	665	1,200	70	17,043	542
Egypt	71.8	101.6	83.8	97.7	19,235	2,656	7,244	518	175	2,965	2,265	93	24,243	1,441
Iran, Islamic Rep	77.0	106.5	86.3	103.9	18,645	8,400	2,209	599	1,149	522	3,597	174	20,773	1,608
Iraq	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Israel	81.3	106.1	101.9	101.8	258	91	2,860	16	8	2,007	410	12	33,803</	

Agricultural Production

	Agricultural Production Indices (Base Year 1999-2001) ^a				Cereals			Pulses			Roots & Tubers			Total Meat Production 2001-2003(b)
	Total		Per Capita		Total Production	Total Area Harvested	Yields	Total Production	Total Area Harvested	Yields	Total Production	Total Area Harvested	Yields	
	1991-1993(b)	2001-2003(b)	1991-1993(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	
	1991-1993(b)	2001-2003(b)	1991-1993(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	2001-2003(b)	
SUB-SAHARAN AFRICA	79.1	103.1	97.5	98.2	90,082	84,142	1,071	8,413	16,659	484	170,089	20,934	8,127	8,321
Angola	67.9	112.2	85.0	105.7	608	1,124	546	71	253	289	6,003	711	8,462	139
Benin	64.9	108.0	81.2	102.5	963	900	1,077	111	154	714	4,331	432	10,053	50
Botswana	118.0	106.5	142.2	104.0	32	174	185	18	34	522	14	2	7,297	60
Burkina Faso	74.9	118.3	94.3	111.5	3,270	3,375	968	407	108	3,764	82	12	6,570	141
Burundi	115.1	106.4	124.5	101.1	279	211	1,326	282	313	900	1,677	234	7,153	23
Cameroon	75.5	105.4	92.4	101.2	1,471	710	2,108	271	253	1,071	3,898	420	9,260	218
Central African Rep	74.1	104.8	88.8	102.0	197	185	1,069	30	31	968	1,025	284	3,610	106
Chad	73.2	107.5	93.6	101.3	1,310	1,934	679	123	209	587	683	93	7,310	120
Congo	79.8	103.9	103.3	98.5	8	10	779	9	12	774	918	102	8,962	27
Congo, Dem Rep	122.5	97.5	148.1	92.6	1,565	2,023	774	184	312	588	15,853	1,994	7,952	213
Côte d'Ivoire	73.0	94.4	87.0	91.3	1,644	1,350	1,216	9	13	685	5,088	942	5,403	168
Equatorial Guinea	98.9	98.2	121.4	93.1	..	..	..	..	..	..	105	37	2,853	1
Eritrea (e)	70.4	86.9	82.8	81.0	127	325	393	45	77	580	122	41	2,976	29
Ethiopia (e)	72.2	107.3	87.9	102.2	9,219	7,160	1,293	1,082	1,286	877	4,665	609	7,665	549
Gabon	87.7	100.9	108.8	97.2	33	20	1,652	0	0	667	447	78	5,721	32
Gambia	62.2	81.9	81.4	77.8	170	141	1,202	3	13	246	8	3	3,000	7
Ghana	70.2	110.0	85.0	105.2	1,826	1,451	1,253	15	154	105	15,240	1,375	11,082	169
Guinea	75.7	104.7	93.1	101.7	1,071	763	1,403	60	70	857	1,298	242	5,363	53
Guinea-Bissau	73.6	102.4	93.0	96.7	155	143	1,091	2	4	622	99	13	7,795	18
Kenya	79.1	100.7	96.1	97.5	2,947	1,941	1,516	391	930	420	2,115	262	8,074	456
Lesotho	89.7	102.5	98.9	101.7	227	246	920	11	19	602	90	5	16,667	22
Liberia	63.1	99.4	89.1	90.2	122	123	983	4	6	636	544	80	6,828	22
Madaqascar	92.6	101.3	116.9	95.6	2,877	1,417	2,031	91	101	905	3,420	530	6,460	297
Malawi	64.3	89.9	74.8	86.3	1,837	1,642	1,117	251	484	519	3,881	264	14,590	58
Mali	77.8	105.9	97.2	99.8	2,553	2,951	872	102	318	323	139	11	13,055	237
Mauritania	83.5	103.7	103.7	97.6	130	157	860	34	73	467	7	3	2,329	78
Mozambique	66.7	102.5	83.2	98.7	1,686	2,008	838	205	430	477	6,173	983	6,339	93
Namibia	104.5	93.0	131.2	89.6	101	252	403	9	8	1,133	280	33	8,484	83
Niger	74.9	108.9	98.7	101.4	3,279	7,990	410	404	3,383	119	139	7	18,740	132
Nigeria	75.3	102.4	94.5	97.1	22,220	21,095	1,053	2,232	5,165	432	66,986	7,741	8,657	1,022
Rwanda	103.6	112.2	130.8	104.1	300	306	980	260	386	673	3,226	465	6,937	36
Senegal	75.1	87.6	91.1	83.5	894	1,187	755	20	115	192	133	26	5,207	165
Sierra Leone	118.5	106.7	128.3	99.0	279	231	1,207	56	82	681	367	75	4,931	22
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	85.7	101.6	98.0	99.9	11,756	4,464	2,632	107	84	1,273	1,663	71	23,412	1,657
Sudan	72.6	107.0	87.4	102.4	5,220	8,684	595	241	173	1,391	171	66	2,612	696
Tanzania, United Rep	89.7	104.0	111.9	99.8	4,284	2,870	1,492	445	775	574	8,087	1,205	6,714	355
Togo	78.4	106.0	98.9	100.5	778	773	1,008	49	164	298	1,296	193	6,713	33
Uganda	79.8	107.2	101.2	100.8	2,329	1,411	1,651	689	934	738	8,448	1,056	8,000	289
Zambia	86.7	97.3	103.9	94.6	941	628	1,485	17	32	531	1,014	170	5,972	127
Zimbabwe	75.4	88.6	86.6	87.4	1,246	1,645	763	53	69	769	211	43	4,915	207
NORTH AMERICA	85.0	99.0	..	..	367,571	72,673	5,052	4,344	2,929	1,487	25,921	714	36,281	42,607
Canada	83.5	92.4	90.5	90.9	43,267	17,101	2,521	2,901	2,146	1,354	4,747	173	27,435	4,224
United States	85.2	99.7	93.0	97.6	..	55,572	5,830	1,444	783	1,841	21,173	542	39,095	38,383
C. AMERICA & CARIBBEAN	..	..	..	..	..	..	2,673	2,449	2,992	817	5,462	595	9,175	6,707
Belize	67.1	101.2	81.8	97.0	57	20	2,837	8	7	1,212	4	0	10,046	16
Costa Rica	69.7	116.0	84.9	111.6	207	57	3,631	14	22	660	229	17	13,386	184
Cuba	97.3	106.8	101.2	106.1	992	323	3,064	111	103	1,073	1,527	204	7,456	204
Dominican Rep	105.6	107.6	120.8	104.3	730	163	4,529	53	64	833	282	37	7,555	328
El Salvador	95.7	95.9	111.6	92.8	788	352	2,264	79	84	937	89	5	17,350	118
Guatemala	78.2	101.3	96.9	96.2	1,167	664	1,758	130	154	843	257	15	16,872	243
Haiti	98.4	100.9	110.0	98.3	378	445	851	70	106	657	760	191	3,991	97
Honduras	83.3	105.4	104.2	100.5	535	387	1,380	60	91	663	36	5	7,469	149
Jamaica	89.1	101.0	95.5	99.2	2	1	1,177	4	4	1,073	217	13	16,921	104
Mexico	80.2	103.4	91.9	100.4	30,131	10,504	2,870	1,713	2,088	819	1,775	74	23,931	4,790
Nicaragua	72.6	108.4	91.1	103.1	857	489	1,751	192	245	784	85	8	10,171	126
Panama	96.1	101.6	112.8	97.8	332	132	2,528	8	20	381	80	8	9,793	160
Trinidad and Tobago	89.7	116.8	93.8	115.9	6	2	2,703	3	2	1,994	8	1	9,828	58
SOUTH AMERICA	75.7	107.3	85.8	104.3	113,259	35,867	3,154	3,879	4,813	805	47,256	3,527	13,398	28,151
Argentina	75.6	100.9	83.9	98.5	34,047	10,447	3,265	309	270	1,152	2,740	122	22,544	4,010
Bolivia	70.4	108.4	83.9	104.3	1,341	750	1,789	41	38	1,078	1,373	200	6,869	430
Brazil	74.0	111.6	82.7	108.7	58,128	18,585	3,119	2,959	3,934	750	26,365	1,894	13,916	17,451
Chile	79.0	105.3	88.7	102.7	3,394	649	5,224	94	52	1,807	1,211	61	19,739	1,041
Colombia	92.2	102.8	106.7	99.6	3,841	1,134	3,389	156	142	1,095	5,042	377	13,380	1,427
Ecuador	77.0	105.0	89.1	101.8	1,851	872	2,122	54	99	545	552	76	7,297	577
Guyana	66.2	100.6	68.5	100.0	483	120	4,012	1	1	1,480	40	5	8,765	21
Paraguay	85.1	105.8	104.4	100.8	1,402	689	2,036	66	79	839	4,094	274	14,935	423
Peru	58.7	107.1	67.4	103.9	3,869	1,160	3,336	171	163	1,052	4,557	419	10,859	903
Suriname	132.4	99.4	139.1	97.7	183	48	3,835	0	0	727	6	0	13,853	9
Uruguay	81.4	95.2	86.3	93.8	1,857	536	3,468	7	7	971	204	16	12,652	514
Venezuela	79.1	102.7	94.0	99.0	2,839	869	3,264	22	29	763	1,059	81	13,099	1,343
OCEANIA	76.8	97.0	86.5	94.5	..	..	1,844	2,123	2,041	1,023	3,598	278	12,949	5,641
Australia	74.2	93.1	81.8	91.3	32,137	17,705	1,806	2,081	2,020	1,013	1,266	42	29,894	3,855
Fiji	99.5	97.5	109.6	95.5	16	6	2,484	1	1	1,				

VARIABLE DEFINITIONS AND METHODOLOGY

Agricultural production indices (total and per capita) present net production after deduction for feed and seed of a country's agriculture sector relative to the base period 1999-2001. The agricultural production index includes all crop and livestock products originating in each country. Intermediate agricultural inputs, including fodder crops, are not counted.

For a given country, the index is calculated as the average annual output of the agricultural sector during the period of interest divided by the average 1999-2001 production. This ratio is then multiplied by 100 to obtain the index number.

Net production quantities of each commodity are weighted by 1999-2001 average prices using the Laspeyres formula and summed for each year. Each agricultural commodity is assigned an "international" price, which remains the same regardless of the country where it was produced. International prices are calculated using the Geary-Khamis formula. Indices are calculated from net production data presented on a calendar year basis.

Total production refers to the average annual mass of output produced in a given country or region during each period. Data are reported in thousand metric tons.

Total Area Harvested refers to the area from which a crop is gathered. Area harvested excludes areas which may have been sown or planted but were not harvested due to damage, failure, etc. The "net harvested area" of temporary crops is typically reported, while the "gross harvested area" is usually reported for permanent crops. Gross area can include uncultivated patches, footpaths, ditches, headlands, shoulders, shelterbelts, etc. Data are reported in thousands of hectares.

Yields refers to the average annual output produced per unit of harvested area in a given country or region during each period (i.e. $\text{yield} = \text{total production} / \text{harvested area}$). Data are reported in kilograms per hectare of cropland.

Cereals include wheat, barley, maize, rye, oats, millet, sorghum, rice, buckwheat, alpiste/canary seed, fonio, quinoa, triticale, wheat flour, and the cereal component of blended foods. Cereal crops harvested for hay or harvested green for food, feed or silage or used for grazing are excluded, although mixed grains and buckwheat are included.

Pulses include beans, lentils, pigeon peas, cowpeas, and vetches harvested for dry grain only. Pulses used for feed are included.

Roots and tubers covers all root crops grown principally for human consumption, such as cassava, yucca, taro, and yams. Root crops grown principally for feed such as turnips, mangels and swedes are not included.

Meat production data refer to the average annual amount of meat, reported in thousands of metric tons, produced in a given country or region during each period. Data describe total meat production, that is from both commercial and farm slaughter. Data are given in terms of dressed carcass weight, excluding offal and slaughter fats. Total meat production comprises horse meat, poultry meat and meat from all other domestic or wild animals such as camels, rabbits, reindeer and game animals.

FREQUENCY OF UPDATE BY DATA PROVIDERS

As of August 2004, all data were available through 2003. FAO updates the data annually.

DATA RELIABILITY AND CAUTIONARY NOTES

Agricultural production data are governed by established accounting practices and are therefore generally considered to be reliable. However, countries vary in the quality of data they have available to report. In the absence of reliable sources or when information for the latest year is not available in time, figures for quantities and values are estimated on the basis of trade returns of trading partners. Problems also arise in compiling these data into internationally comparable agricultural statistics and in estimating data that are missing. Each variable in FAO's database can have as many as 30,000 data points associated with it for different countries and years. Officials need to ascertain, based on limited information, which one of various figures reported by various sources (national publications, FAO questionnaires, international publications, etc.) is the most recent or the most reliable. Variable definitions and coverage do not always conform to FAO recommendations, and therefore may not always be completely consistent across countries.

Agricultural Production Indices:

Agricultural production indices are not directly measured; they are derived from a set of formulas and algorithms. The calculation therefore contains an unavoidable amount of subjectivity. Reliability is limited by the accuracy and precision of agricultural production and price data. While these data can illustrate rough comparisons and trends over time, rigid score comparisons and rankings are discouraged.

The country-level indices reported here may differ from other calculations of agricultural production due to varying concepts of production, coverage, weights, time reference of data, and methods of calculation.

Total Production, Yields:

Production of subsistence crops is seldom reported in records of sales and processing, resulting in missing data points. Estimates of missing data are usually made by following the observed trend of the commodity in question in previous years, while also considering the trends in neighboring countries. When a complete time series is missing for a particular data set, FAO officials base their estimates on first-hand accounts through country visits and data from neighboring countries.

Yields:

Data rely on accurate estimates of the sown and harvested crop area. However, in many countries, the sown area is changed annually by governments to control prices and production through subsidies and other programs. Weather, soil quality, and seed availability often affect crop area in developing countries.

Total Meat Production:

Estimates rely on accurate production figures from processing plants and import/export figures of live animals. Trade data are usually given by number rather than by weight, and the size of domestic animals can vary by a factor of 10 depending on the age and the condition of the animal. As a result, estimates of "average carcass weight" used to determine meat production can vary in accuracy.

Cereals:

Area data relate to harvested area. Some countries report sown or cultivated area only; however, in these countries the sown or cultivated area does not differ significantly in normal years from the area actually harvested, either because practically the whole area sown is harvested or because the area surveys are conducted around the harvest period.

SOURCE

Food and Agriculture Organization of the United Nations (FAO), *FAOSTAT on-line statistical service*. Available on-line at <http://apps.fao.org>. FAO: Rome, 2004.