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Livestock Information, Sector Analysis
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Data contained in this Livestock Sector Brief are taken from official sources. Official sources are no guarantee for data accuracy and the figures reported in this brief should be taken as indicative and not be used for official purposes. The Food and Agriculture Organization of the United Nations assumes no responsibility for its accuracy, completeness and coherence.

PREFACE

The Livestock Sector Briefs (LSB) are intended to provide a quick overview and an approximate outlook for the livestock sector of the respective country using figures and quantitative indicators originating from official sources. The LSBs are complemented by a synthesis of policy documents available in the public domain.

The majority of the data in the LSBs refer to the country as a whole and come from FAOSTAT, which is available on the internet (<http://faostat.external.fao.org/default.jsp>). FAO, as part of its mandate, compiles information and data on various aspects of food and agriculture from all countries. The data are analysed and interpreted to support FAO's programmes and activities and, in accordance with the basic functions of the Organization, they are disseminated to the public through publications, CD-ROM, diskettes and the Internet. The country level data are officially submitted to the Division for Statistics of FAO (ESS) by various ministries of the respective countries. For details of data collection procedures see <http://faostat.fao.org/abcdq/about.htm>. The figures submitted often display inconsistencies across ministries, for example reported meat production does not always match reported meat consumption when taking into account imports and exports. FAO tries to reconcile the figures, to the effect that FAO statistics may differ from those originally submitted.

The LSBs utilise FAOSTAT data from the following domains: human population, land use, agriculture production, food supply and agricultural and food trade. These are used to derive a standard set of indicators that can quickly be compared across the countries.

Data on the economy are from the World Bank's World Development Indicators CD-Rom, which is also available online <http://www.worldbank.org/data/> and is updated every year. Animal health data are taken from the Office International des Epizooties (OIE) HANDISTATUS II <http://www.oie.int/hs2/>. These are official data supplied by member nations.

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1. GENERAL INFORMATION

Human population, land and socio-economics

Human population	291.0 million
Population density on total land	31.8 persons/sqkm
Annual growth rate (1990-2000)	1.1 %
Population in agriculture	6.1 million
As proportion of total population	2.1 %
Total land area	9,158,960 sqkm
Agricultural land	4,118,630 sqkm
As proportion of total land	45.0 %
Land under pasture	2,337,950 sqkm
As proportion of total land	56.8 %
Irrigated area	225,000 ha
Agricultural land per 100 people	141.5 ha
Agricultural land per 100 people in agriculture	6,794.20 ha
Agricultural population density on agricultural land	1.5 persons/sqkm
GDP ¹	9,196,400 million US\$
GDP annual growth rate (1990-2000)	3.2 %
GDP per capita/year ¹	31,891 US\$
GDP per capita annual growth rate (1990-2000)	2.0 %
Agriculture, GDP	na million US\$
As proportion of total GDP	na %
Livestock, GDP ¹	na million US\$
As proportion of agricultural GDP	na %
Human development Rank	8 Ranking ²
Human development index	0.939
Poverty incidence ³	
Total	na %
Urban	na %
Rural	na %

¹Constant 1995 US\$ ² The HDI rank is determined using HDI values to the fifth decimal point – from 177 countries, as compiled by the UNDP; ³ National poverty line; na: not available

Source: World Bank (2002); UNDP (2004); FAO (2005a)

Human population trends

Values expressed in 1,000

Population segment	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Total	231,428	255,712	285,003	291,038	1.0	1.1
Rural	60,778	63,161	59,568	58,627	0.4	-0.6
Urban	170,650	192,551	225,434	232,411	1.2	1.6

Source: FAO (2005a)

Trends in agricultural¹ land

Values expressed in sqkm

Land type	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Total	4,281,630	4,269,480	4,128,770	4,118,630	0.0	-0.3
Cropped ²	1,906,240	1,877,760	1,788,770	1,780,680	-0.2	-0.5
Pastures	2,375,390	2,391,720	2,340,000	2,337,950	0.1	-0.2

¹The sum of area under arable land, permanent crops and permanent pastures

²Arable and permanent crops

Source: FAO (2005a)

2. LIVESTOCK RESOURCES

Livestock populations

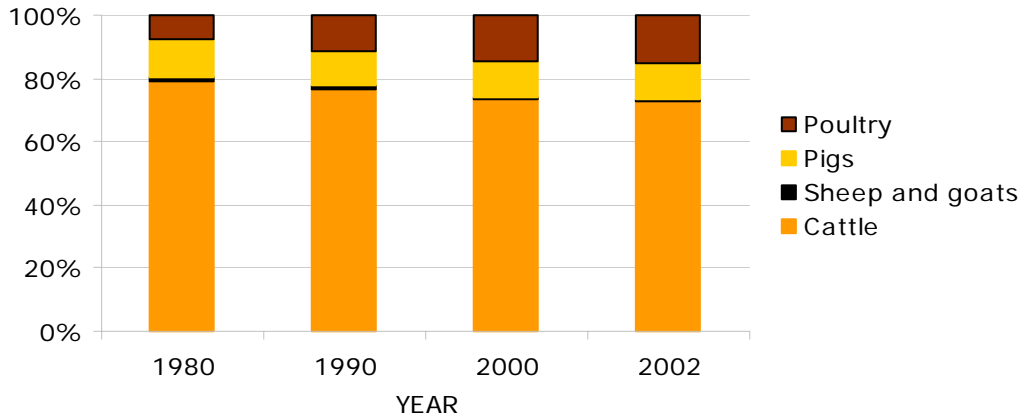
Values expressed in 1,000

Species	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Cattle	111,242	95,816	98,198	96,723	-1.5	0.2
Sheep and goats	14,099	13,258	8,332	7,873	-0.6	-4.5
Pigs	67,318	53,788	59,342	59,722	-2.2	1.0
Poultry	1,109,800	1,428,300	1,952,600	2,033,150	2.6	3.2
Total LUs	141,214	125,440	133,744	133,103	-1.2	0.6

LU: Livestock unit; **conversion factors:** cattle (1.0), sheep (0.15), goats (0.10), pigs (0.25) and poultry (0.01)

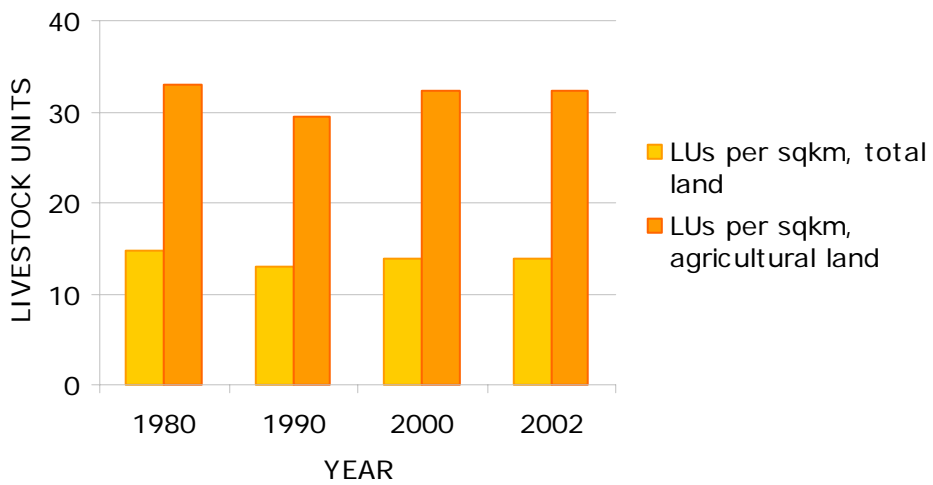
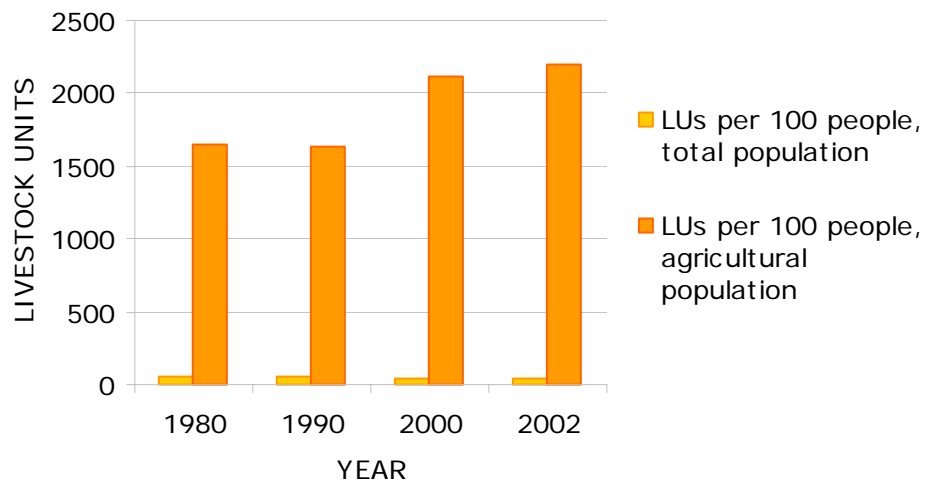
Source: FAO (2005a)

Contribution of different species to total livestock units



Source: FAO (2005a)

Selected indicators of livestock resources

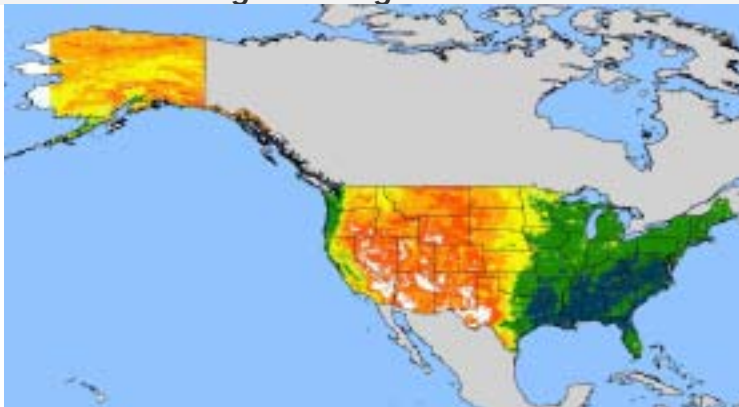


Source: FAO (2005a)

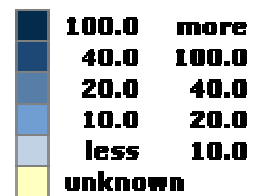
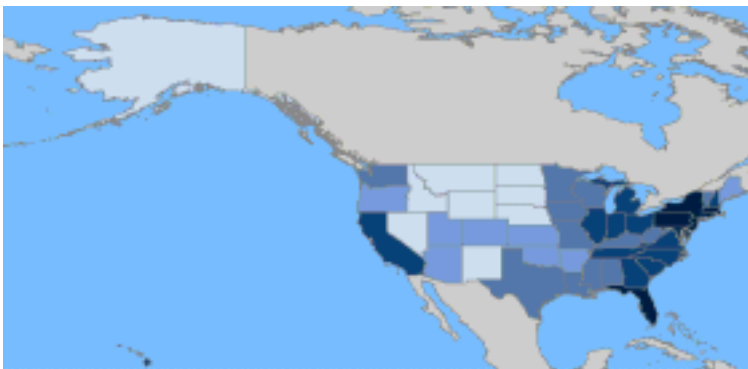
Agro-ecological zones and densities of livestock species (2000)

Density calculated on total land area

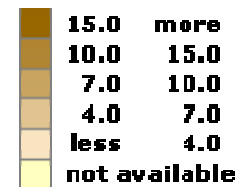
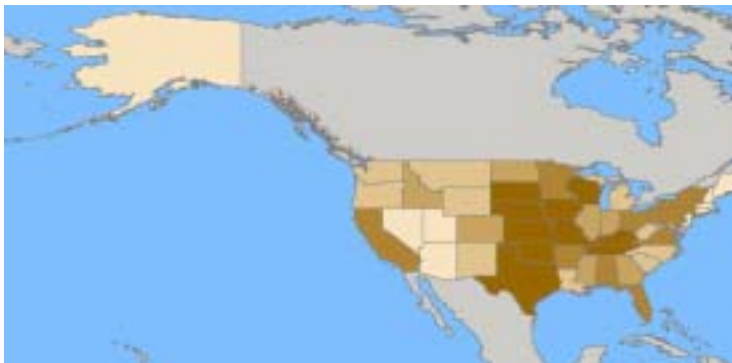
Agro-ecological zones



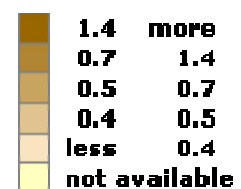
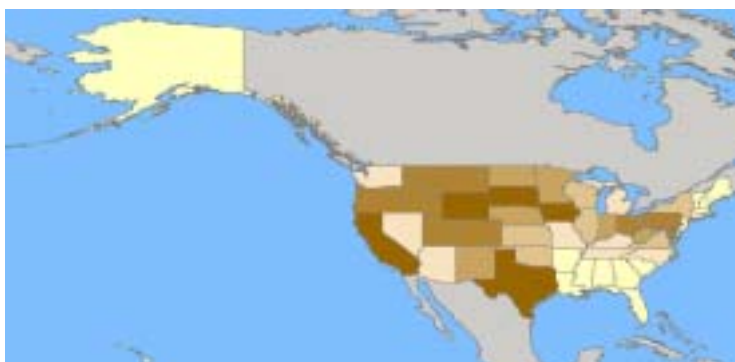
People/sqkm



Cattle/sqkm

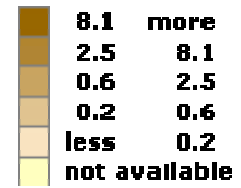
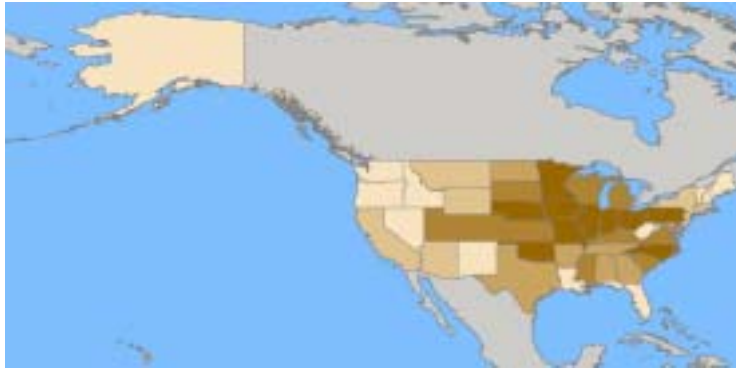


Sheep/sqkm

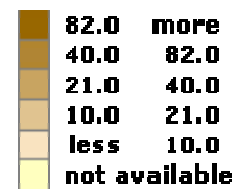
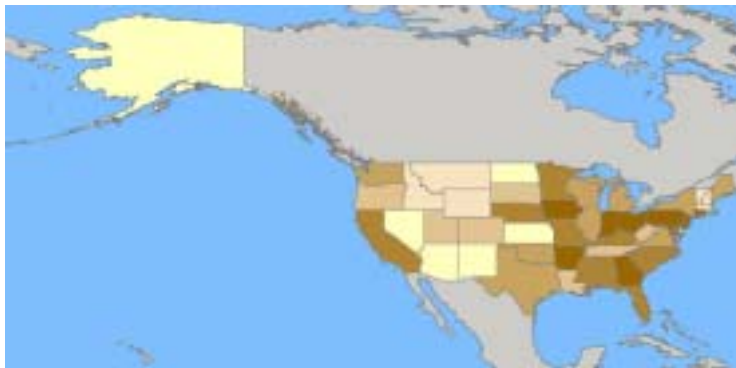


Source: FAO (2001), FAO (2005b)

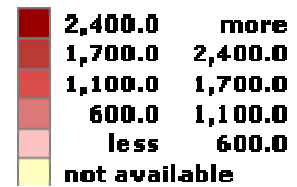
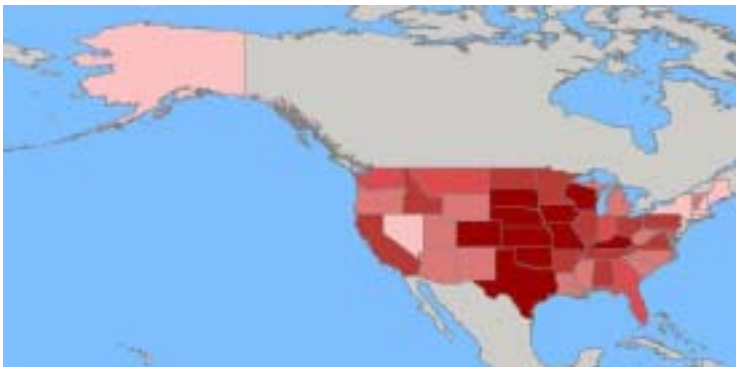
Pigs/sqkm



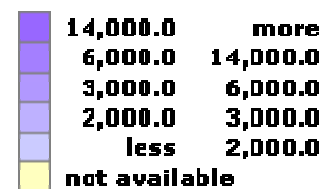
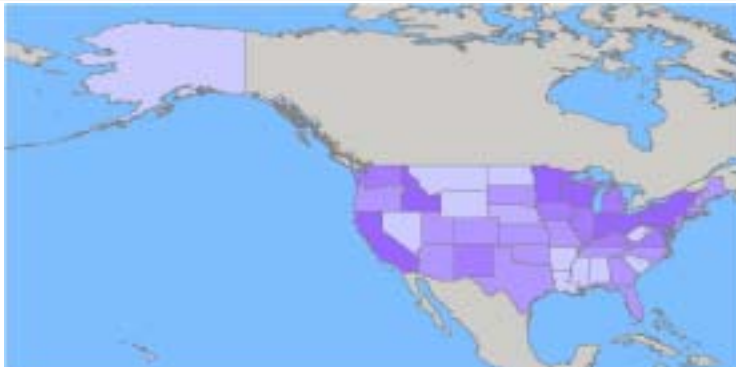
Chickens/sqkm



Beef offtake/sqkm



Milk offtake/sqkm



FAO (2005b)

3. LIVESTOCK PRODUCTION

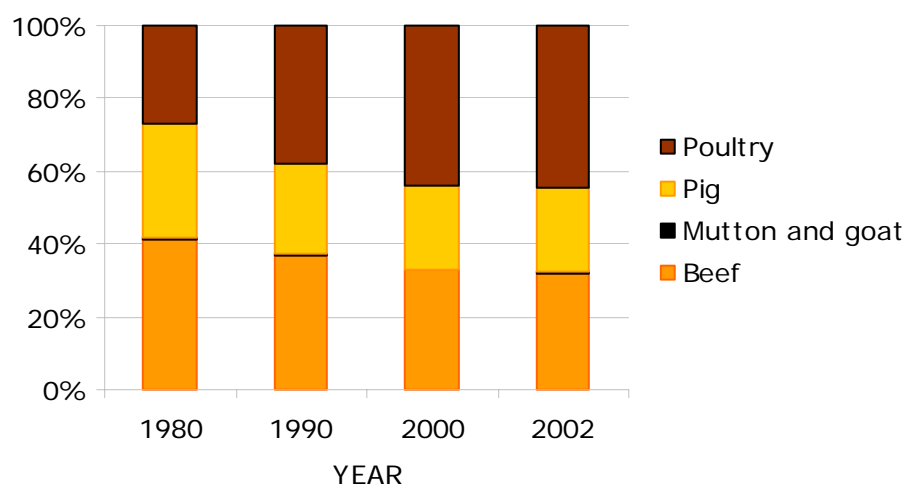
Trends in annual production of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	24,455	28,639	37,640	38,988	1.6	2.8
Beef	9,999	10,465	12,298	12,427	0.5	1.6
Mutton and goat	144	165	106	101	1.3	-4.3
Pig	7,536	6,964	8,597	8,929	-0.8	2.1
Poultry	6,487	10,759	16,416	17,311	5.2	4.3
Milk, total	58,244	67,005	76,023	77,139	1.4	1.3
Eggs, total	4,126	4,034	4,998	5,165	-0.2	2.2

Source: FAO (2005a)

Composition of total meat production



Source: FAO (2005a)

Carcass weights and percentage slaughtered by species

Species/year	Carcass weight (kg/animal)				Percentage slaughtered/year			
	1980	1990	2000	2002	1980	1990	2000	2002
Cattle	271.7	296.7	327.2	336.1	33.1	36.8	38.3	38.2
Sheep	25.1	28.6	30.1	30.1	45.2	50.6	50.2	50.6
Pigs	77.6	81.5	87.6	89	144.4	158.8	165.3	168.1
Poultry	1.5	1.7	1.9	1.9	388.2	442.1	446.7	443.2

Source: FAO (2005a)

Milk yields and proportion of dairy animals

Species/year	Milk yield (kg/year)				Percentage milked			
	1980	1990	2000	2002	1980	1990	2000	2002
Cattle	5,393	6,705	8,254	8,439	9.7	10.4	9.4	9.5

Source: FAO (2005a)

Egg yields and proportion of laying birds

Species/year	Eggs (kg/year)				Percentage laying			
	1980	1990	2000	2002	1980	1990	2000	2002
Chicken	14.3	14.9	15.2	15.2	27.3	20.3	17.7	17.5

Source: FAO (2005a)

Estimated feed used for livestock production

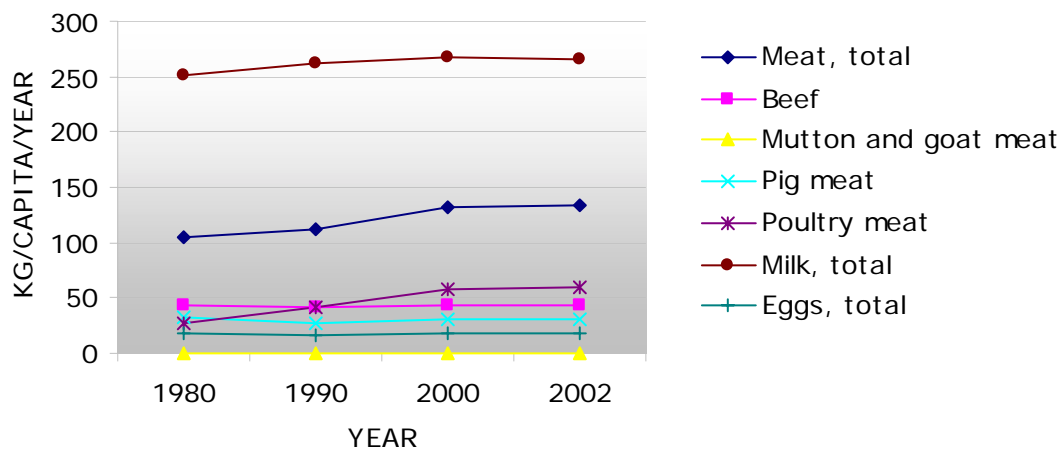
1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Maize	107,497	118,597	148,396	142,100	1.0	2.3
Barley	3,653	4,463	2,683	1,500	2.0	-5.0
Sorghum	8,197	10,414	5,651	4,500	2.4	-5.9
Millet	54	113	145	28	7.6	2.6
Wheat	1,606	13,129	8,285	3,400	23.4	-4.5
Brans	4,686	6,207	7,015	6,799	2.9	1.2
Rice Paddy, equivalent						
Roots and Tuber, dry equivalent	54	212	150	92	14.7	-3.4
Pulses	13	4	4	8	-10.7	-1.3
Oil crops	749	2,084	3,649	3,399	10.8	5.8

Blanks represent no data

Source: FAO (2005a)

Trends in annual per capita production of meat, milk and eggs



Source: FAO (2005a)

4. CONSUMPTION OF MEAT, MILK AND EGGS

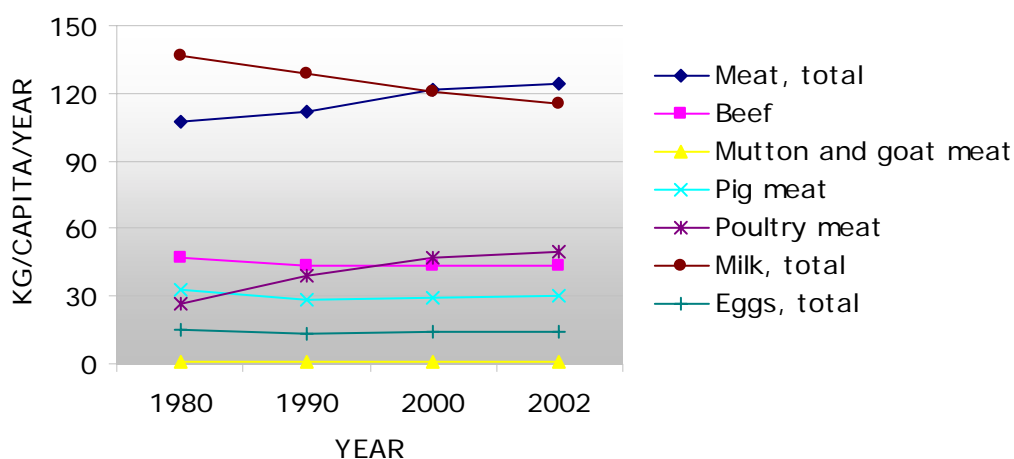
Trends in annual consumption of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	24,932	28,685	34,614	36,130	1.4	1.9
Beef	10,893	11,049	12,380	12,562	0.1	1.1
Sheep and goat	160	182	157	165	1.3	-1.5
Pig	7,584	7,228	8,424	8,711	-0.5	1.5
Poultry	6,072	10,035	13,481	14,504	5.2	3.0
Milk, total	31,535	32,904	34,300	33,716	0.4	0.4
Eggs, total	3,595	3,418	4,125	4,249	-0.5	1.9

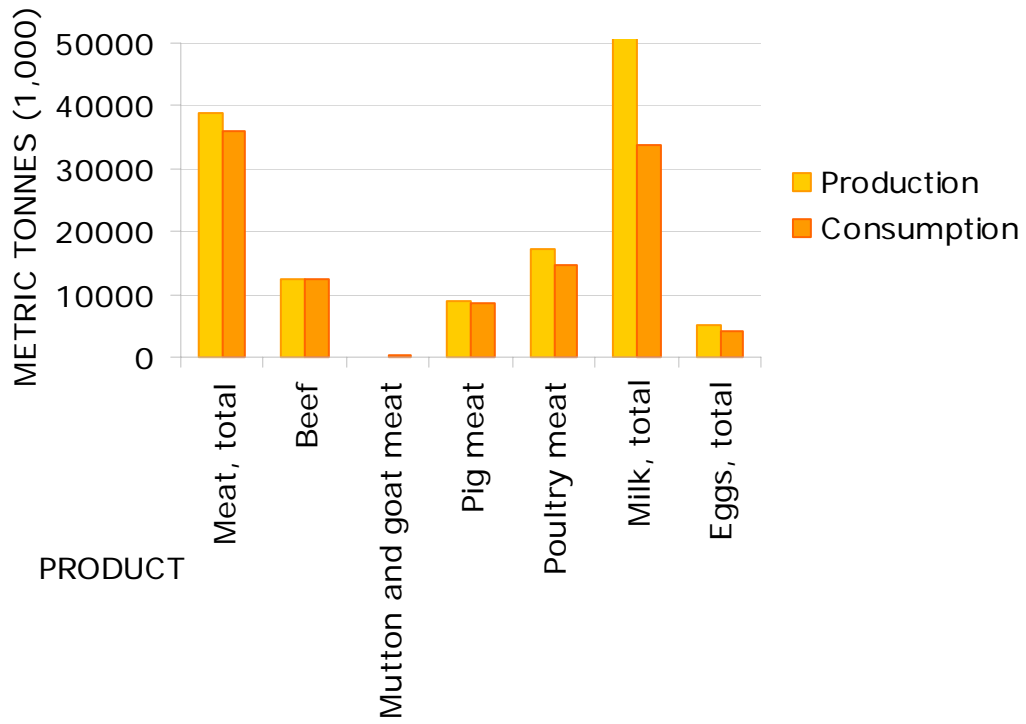
Source: FAO (2005a)

Trends in annual per capita consumption of meat, milk and eggs



Source: FAO (2005a)

Production versus consumption for meat, milk and eggs (2002)



Source: FAO (2005a)

5. TRADE IN LIVESTOCK AND LIVESTOCK PRODUCTS

Trade in agricultural and livestock¹ products

Values in billion US\$

Product	Exports				Imports			
	1980	1990	2000	2002	1980	1990	2000	2002
Total	280.0	557.0	1,100.0	1,020.0	294.0	629.0	1,470.0	1,440.0
Agricultural	42.9	45.2	56.5	55.6	18.4	27.1	44.9	45.0
% agricultural	15.3	8.1	5.1	5.4	6.3	4.3	3.1	3.1
Livestock	2.5	5.4	10.0	9.0	3.4	5.4	7.3	7.7
% livestock	0.9	1.0	0.9	0.9	1.2	0.9	0.5	0.5

¹Total trade in goods and services expressed in current US\$. Source: World Bank (2002)
Agricultural trade refers to all agricultural products, while livestock trade refers to trade in livestock products and live animals. Source: FAO (2005b)

Export/import 'dependency' for livestock products

Product	Exports as percentage of production				Imports as percentage of consumption			
	1980	1990	2000	2002	1980	1990	2000	2002
Meat, total	2.38	4.21	12.47	11.37	4.63	4.92	5.29	5.44
Beef	0.86	4.13	9.47	8.63	8.35	8.99	10.57	10.91
Sheep and goat	0.42	2.65	2.36	3.41	9.62	11.55	38.56	44.82
Pig	1.19	1.42	6.75	7.31	2.85	5.36	5.17	5.51
Poultry	5.29	5.63	17.74	15.52	0.00	0.05	0.15	0.23
Milk, equivalent	2.11	1.54	3.80	3.39	2.92	3.78	5.69	6.03
Eggs, total	1.31	0.90	1.29	1.18	0.11	0.22	0.09	0.09

Source: FAO (2005a)

Product	Net exports as percentage of production				Net imports as percentage of consumption			
	1980	1990	2000	2002	1980	1990	2000	2002
Meat, total	0.00	0.00	7.60	10.08	2.29	0.72	0.00	0.00
Beef	0.00	0.00	0.00	0.00	7.56	5.08	1.15	2.38
Sheep and goat	0.00	0.00	0.00	0.00	9.23	9.15	36.96	42.73
Pig	0.00	0.00	1.68	2.29	1.66	4.00	0.00	0.00
Poultry	5.29	5.59	17.62	40.91	0.00	0.00	0.00	0.00
Milk, equivalent	0.54	0.00	1.23	1.00	0.00	0.65	0.00	0.00
Eggs, total	1.21	0.71	1.22	1.38	0.00	0.00	0.00	0.00

Source: FAO (2005a)

Trade in live animals

Species	1980			1990			2000			2002		
	Export	Import	Net trade	Export	Import	Net trade	Export	Import	Net trade	Export	Import	Net trade
Quantities (count)												
Cattle	66,340	679,214	-612,874	119,991	2,135,000	-2,015,009	481,584	2,191,199	-1,709,615	243,394	2,505,279	-2,261,885
Sheep and goats	123,521	20,521	103,000	564,512	25,771	538,741	443,027	52,960	390,067	432,010	151,036	280,974
Pigs	16,291	247,288	-230,997	56,777	890,252	-833,475	69,342	4,359,355	-4,290,013	206,659	5,741,275	-5,534,616
Poultry (1,000)	38,319	4,684	33,635	53,584	6,892	46,692	53,232	11,956	41,276	58,330	17,481	40,849
Value (1,000 US\$)												
Cattle	55,728	236,286	-180,558	88,639	999,524	-910,885	271,727	1,172,382	-900,655	130,844	1,448,615	-1,317,771
Sheep and goats	5,085	1,351	3,734	18,949	2,033	16,916	20,810	5,813	14,997	21,207	12,817	8,390
Pigs	6,732	25,981	-19,249	10,160	96,964	-86,804	11,922	299,637	-287,716	38,178	301,112	-262,934
Poultry (1,000)	48,796	4,209	44,587	101,217	16,073	85,144	98,082	24,110	73,972	105,749	31,557	74,192
Total	116,341	267,827	-151,486	218,965	1,114,594	-895,629	402,541	1,501,943	-1,099,402	295,978	1,794,101	-1,498,123

Net trade: Exports less Imports

Blanks represent no data

Source: FAO (2005a)

Trade in livestock products

Product	1980			1990			2000			2002		
	Export	Import	Net trade	Export	Import	Net trade	Export	Import	Net trade	Export	Import	Net trade
Quantities (metric tonnes)												
Meat, total	582,129	1,153,891	-571,762	1,206,672	1,411,779	-205,107	4,693,589	1,831,719	2,861,870	4,433,061	1,967,086	2,465,975
Beef	86,262	909,473	-823,211	432,570	993,368	-560,798	1,165,207	1,308,132	-142,925	1,071,868	1,370,512	-298,643
Mutton and goat	610	15,366	-14,756	4,370	20,969	-16,599	2,506	60,409	-57,903	3,448	74,095	-70,647
Pig	90,055	216,272	-126,218	98,670	387,454	-288,784	580,118	435,576	144,542	652,635	480,196	172,438
Poultry	343,386	26	343,360	606,194	5,274	600,920	2,911,794	19,755	2,892,038	2,686,907	32,854	2,654,053
Other	61,816	12,753	-74,569	64,868	4,714	-69,581	33,964	7,846	-41,810	18,203	9,429	-27,632
Milk, equivalent	1,231,844	919,958	311,886	1,030,521	1,245,365	-214,844	2,885,840	1,952,127	933,713	2,616,270	2,032,767	583,503
Eggs, total	53,953	4,069	49,884	36,416	7,651	28,765	64,582	3,576	61,006	60,886	3,907	56,979
Hides and skins	547,425	35,954	511,471	699,524	46,210	653,314	697,985	91,219	606,766	658,271	61,995	596,276
Value (1,000 US\$)												
Meat, total	993,927	2,334,364	-1,340,437	2,837,238	3,169,686	-332,448	6,849,564	3,902,947	2,946,617	6,010,867	4,163,516	1,847,351
Beef	258,136	1,786,102	-1,527,966	1,589,496	2,071,398	-481,902	3,252,355	2,551,108	701,247	2,644,364	2,746,482	-102,118
Mutton and goat	2,319	36,287	-33,968	12,193	53,724	-41,531	5,787	237,297	-231,510	6,992	277,612	-270,620
Pig	199,178	486,191	-287,013	386,811	1,015,063	-628,252	1,554,690	1,040,131	514,559	1,565,066	1,026,707	538,359
Poultry	403,173	1,151	402,022	674,354	19,608	654,746	1,960,970	47,681	1,913,288	1,733,162	79,656	1,653,506
Other	131,121	24,633	-155,754	174,384	9,893	-184,277	75,763	26,731	-102,493	61,283	33,059	-94,342
Milk, equivalent	142,505	457,658	-315,153	254,173	832,098	-577,925	589,004	1,350,573	-761,569	540,769	1,299,376	-758,607
Eggs, total	76,738	5,019	71,719	68,333	22,147	46,186	108,500	13,923	94,576	111,343	14,506	96,837
Hides and skins	1,050,946	230,083	820,863	1,768,779	176,483	1,592,296	1,667,405	170,339	1,497,066	1,758,295	143,142	1,615,153
Total	2,264,116	3,027,124	-763,008	4,928,523	4,200,414	728,109	9,214,472	5,437,782	3,776,690	8,421,274	5,620,540	2,800,734

Net trade: Exports less Imports

Blanks represent no data

Source: FAO (2005a)

6. LIVESTOCK HEALTH

Total number of cases/outbreaks of selected diseases reported in all susceptible species

Disease	1997	1998	1999	2000	2001	2002	2003
African swine fever	000	000	000	000	000	000	000
Avian Influenza ¹	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)
Bluetongue	.../...	.../...	.../...	.../...	.../...	.../...	.../...
BSE ²	000	000	000	000	000	000	1/1
CBPP ³	(1892)	(1892)	(1892)	(1892)	(1892)	(1892)	(1892)
Classical swine fever	(1976)	(1976)	(1976)	(1976)	(1976)	(1976)	(1976)
Foot and mouth disease	(1929)	(1929)	(1929)	(1929)	(1929)	(1929)	(1929)
Lumpy skin disease	000	000	000	000	000	000	000
Newcastle disease	0/0	32/1	(06/1998)	(06/1998)	(06/1998)	74,257/302	2,960,813/630
Peste des petits ruminants	000	000	000	000	000	000	000
Rift Valley fever	000	000	000	000	000	000	000
Rinderpest	000	000	000	000	000	000	000
Sheep and goat pox	000	000	000	000	000	000	000
Swine vesicular disease	000	000	000	000	000	000	000
Vesicular stomatitis	.../350	225/130	(11/1998)	(11/1998)	(11/1998)	(11/1998)	(11/1998)

¹ Highly pathogenic avian influenza

² Bovine spongiform encephalopathy

³ Contagious bovine pleuropneumonia

no/ no number of cases/outbreaks, ... no information available, - disease not reported, 000 disease never reported; (month/year) date of the last reported occurrence of the disease in previous years

Source: OIE (2004)

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