

LIVESTOCK SECTOR BRIEF

JAPAN

Food and Agriculture Organization
of the United Nations • **FAO**

Livestock Information, Sector Analysis
and Policy Branch • **AGAL**



July 2005

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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	127.5 million
Population density on total land	349.7 persons/sqkm
Annual growth rate (1990-2000)	0.2 %
Population in agriculture	4.4 million
As proportion of total population	3.4 %
Total land area	364,500 sqkm
Agricultural land	51,900 sqkm
As proportion of total land	14.2 %
Land under pasture	4,280 sqkm
As proportion of total land	8.2 %
Irrigated area	26,070 ha
Agricultural land per 100 people	4.1 ha
Agricultural land per 100 people in agriculture	118.5 ha
Agricultural population density on agricultural land	84.4 persons/sqkm
GDP ¹	5,725,499 million US\$
GDP annual growth rate (1990-2000)	1.1 %
GDP per capita/year ¹	45,029 US\$
GDP per capita annual growth rate (1990-2000)	0.9 %
Agriculture, GDP	na million US\$
As proportion of total GDP	na %
Livestock, GDP ¹	na million US\$
As proportion of agricultural GDP	59.8 %
Human development Rank	9 Ranking ²
Human development index	0.938
Poverty incidence ³	
Total	na %
Urban	na %
Rural	na %

¹Constant 1995 US\$ ²The HDI rank is determined using HDI values to the fifth decimal point – from 177 countries, as compiled by the UNDP; ³National 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	116,807	123,537	127,034	127,478	0.6	0.3
Rural	47,230	45,621	44,240	44,270	-0.3	-0.3
Urban	69,577	77,916	82,794	83,207	1.1	0.6

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	60,610	56,930	52,580	51,900	-0.6	-0.8
Cropped ²	54,610	52,430	48,300	47,620	-0.4	-0.8
Pastures	6,000	4,500	4,280	4,280	-2.8	-0.5

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

²Arable and permanent crops

Source: FAO (2005a)

2. LIVESTOCK RESOURCES

Livestock populations

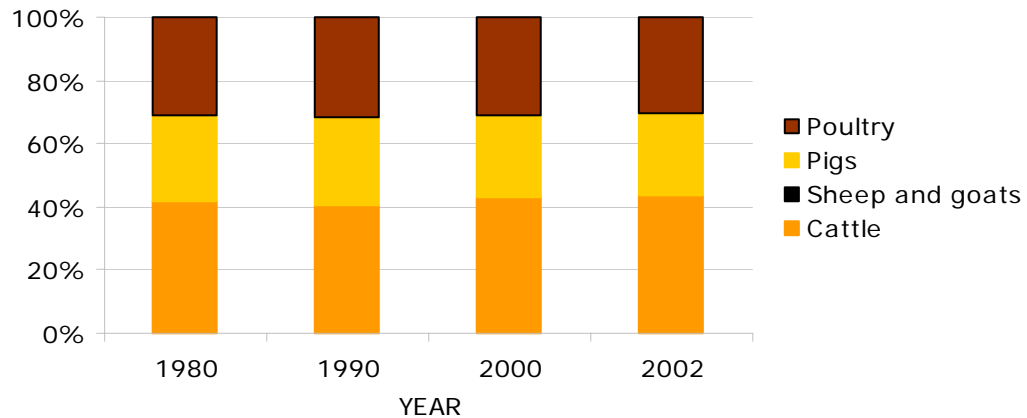
Values expressed in 1,000

Species	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Cattle	4,248	4,760	4,588	4,564	1.1	-0.4
Sheep and goats	79	65	45	46	-1.9	-3.6
Pigs	9,998	11,817	9,806	9,612	1.7	-1.8
Poultry	284,680	337,865	295,795	287,407	1.7	-1.3
Total LUs	9,177	10,623	9,543	9,389	1.5	-1.1

LU: *Livestock unit*; **conversion factors:** cattle (0.90), sheep and goats (0.10), pigs (0.25) and poultry (0.01)

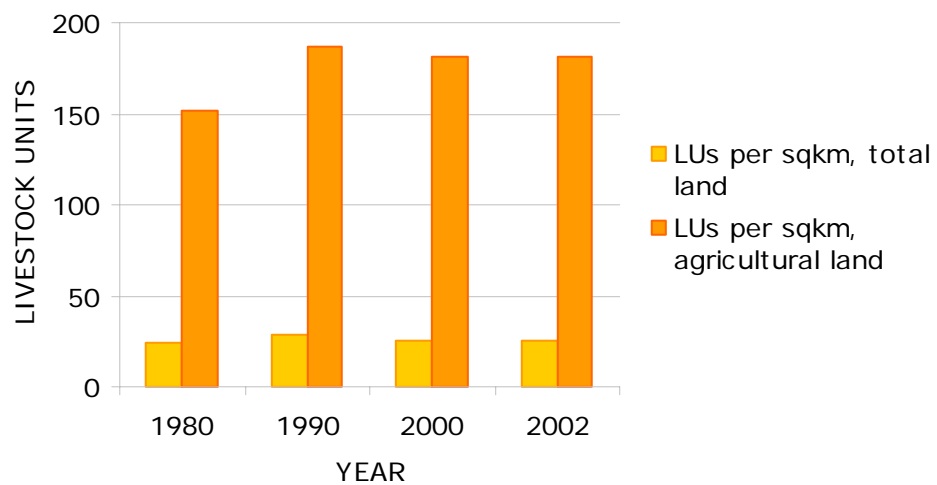
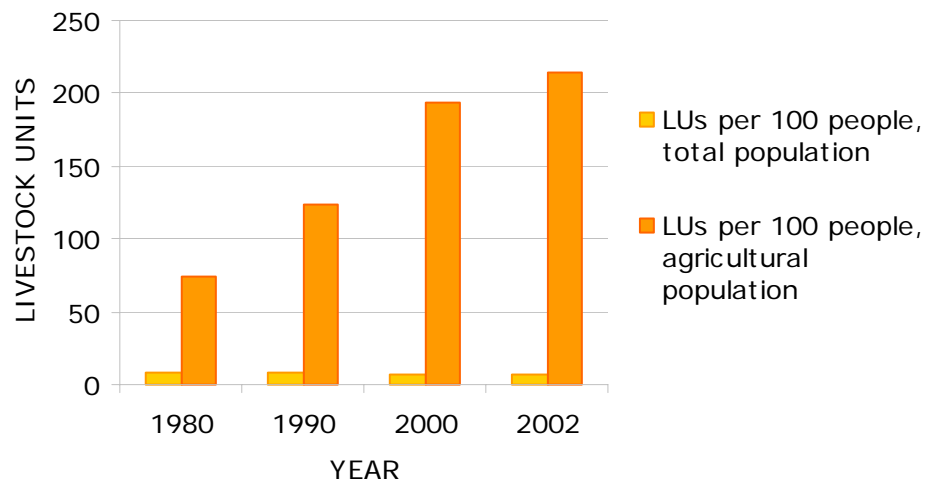
Source: FAO (2005a)

Contribution of different species to total livestock units



Source: FAO (2005a)

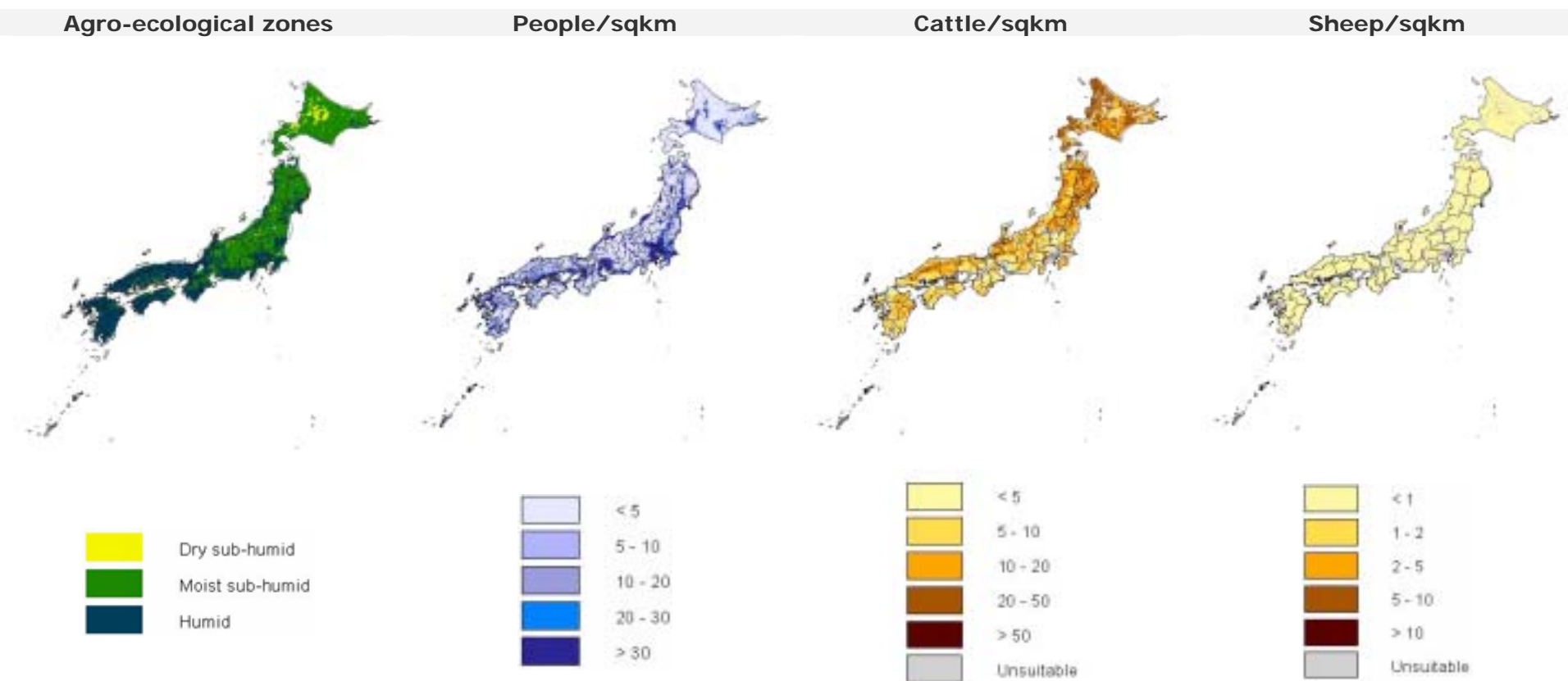
Selected indicators of livestock resources



Source: FAO (2005a)

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

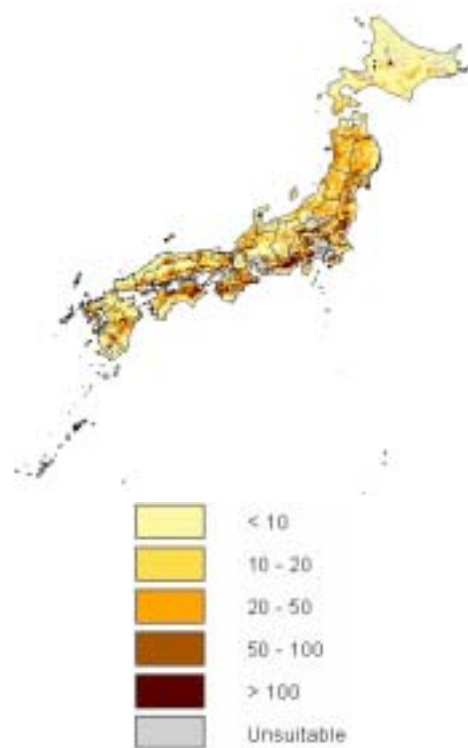
Density calculated on total land area¹



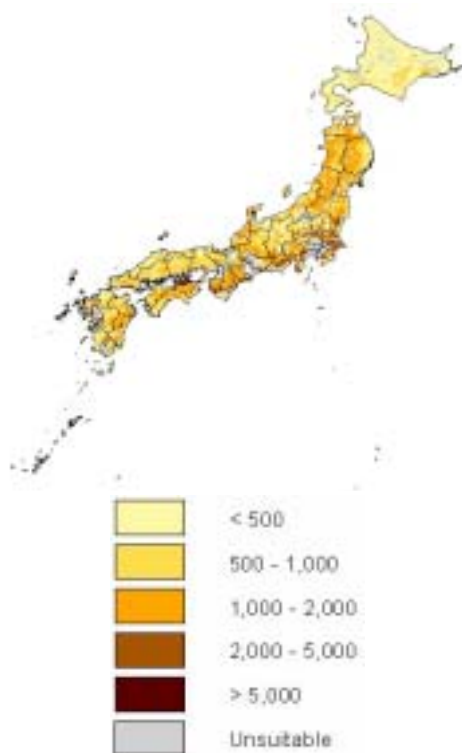
¹Densities for livestock populations and production is based on total land suitable for livestock production

Source: FAO (2001); LandScan (2002); FAO (2005b)

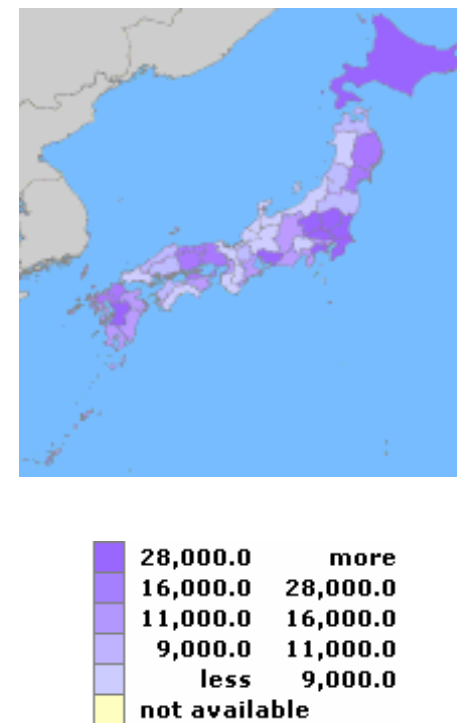
Pigs/sqkm



Poultry/sqkm



Milk offtake/sqkm



Source: FAO (2005b)

3. LIVESTOCK PRODUCTION

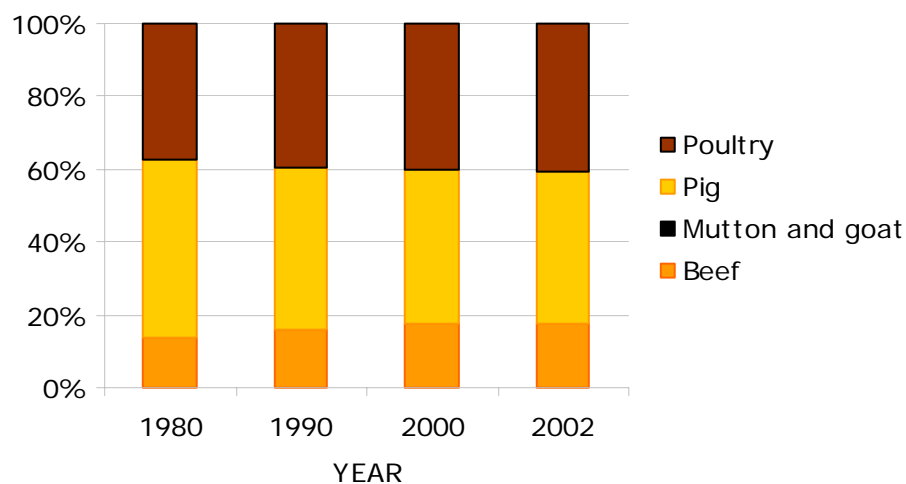
Trends in annual production of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	3,046.1	3,503.1	2,991.0	3,020.6	1.4	-1.6
Beef	418.1	549.5	530.4	536.6	2.8	-0.4
Mutton and goat	0.1	0.4	0.3	0.2	12.9	-3.8
Pig	1,475.0	1,555.2	1,255.8	1,244.6	0.5	-2.1
Poultry	1,128.1	1,391.2	1,194.5	1,229.1	2.1	-1.5
Milk, total	6,504.5	8,189.3	8,497.0	8,385.3	2.3	0.4
Eggs, total	2,001.6	2,419.0	2,535.4	2,528.9	1.9	0.5

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	339.5	395.1	414.2	433.4	29.0	29.2	27.9	27.1
Sheep	24.7	25.9	31.1	31.0	13.8	31.4	36.0	33.2
Goat	17.0	23.8	25.0	25.0	6.7	17.8	17.7	11.0
Pigs	74.0	74.4	76.0	76.5	199.5	176.9	168.5	169.3
Poultry	1.6	2.0	2.0	2.0	249.1	209.6	204.5	218.4

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	4,574	5,870	6,792	6,879	33.5	29.3	27.3	26.7

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	16.4	17.7	18.1	18.4	42.8	40.5	47.5	47.9

Source: FAO (2005a)

Estimated feed used for livestock production

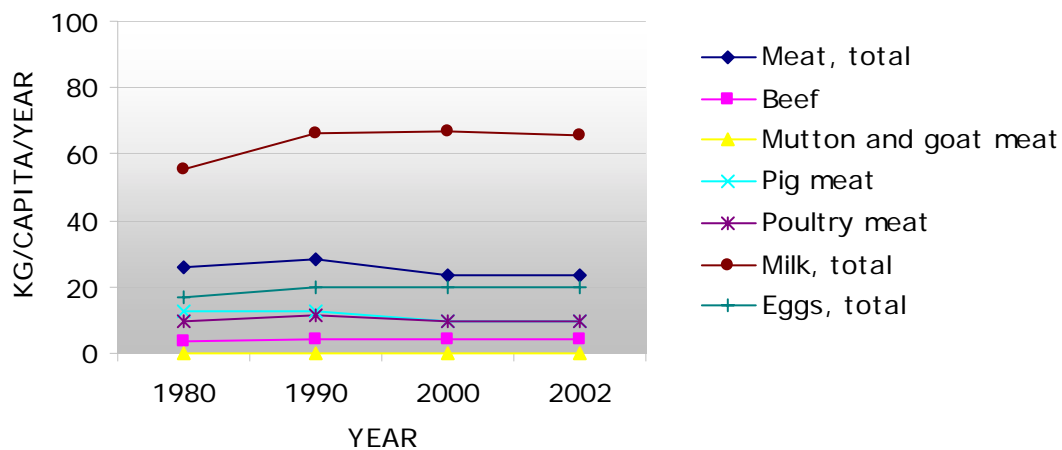
1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Maize	10,615	12,303	11,662	12,542	1.5	-0.5
Barley	1,519	1,390	1,375	1,282	-0.9	-0.1
Sorghum	4,219	3,780	2,178	1,775	-1.1	-5.4
Millet	29	19	6	5	-4.3	-10.8
Wheat	647	613	446	440	-0.5	-3.1
Brans	2,657	3,403	3,097	2,988	2.5	-0.9
Rice Paddy, equivalent	17	32	141	147	6.7	15.8
Roots and Tuber, dry equivalent	86	38	22	13	-7.8	-5.5
Pulses	9	15	9	5	5.2	-5
Oil crops	62	235	235	242	14.2	0.0

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

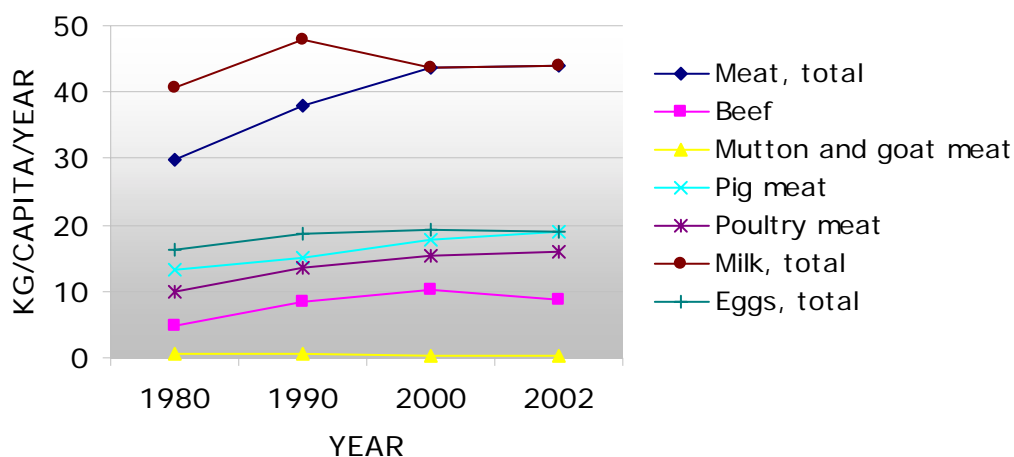
Trends in annual consumption of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	3,493	4,691	5,544	5,599	3.0	1.7
Beef	571	1,036	1,289	1,098	6.1	2.2
Sheep and goat	77	63	27	25	-2.0	-8.2
Pig	1,561	1,881	2,245	2,412	1.9	1.8
Poultry	1,172	1,665	1,960	2,046	3.6	1.6
Milk, total	4,765	5,923	5,540	5,603	2.2	-0.7
Eggs, total	1,919	2,317	2,455	2,437	1.9	0.6

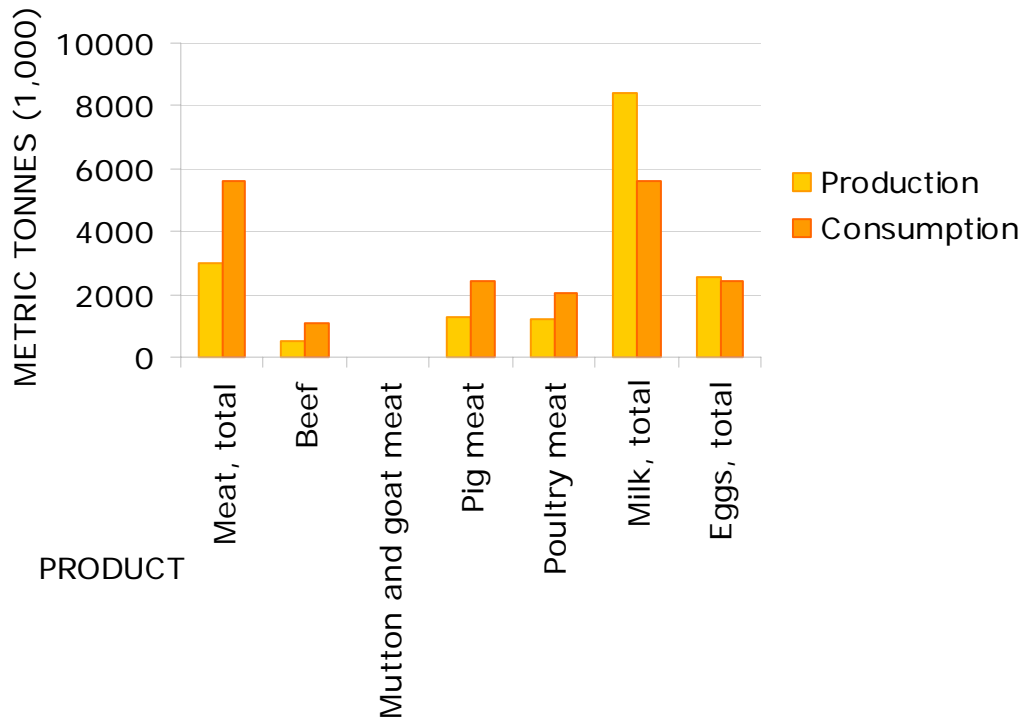
Source: FAO (2005a)

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	145.0	317.0	513.0	445.0	155.0	288.0	445.0	393.0
Agricultural	0.9	1.2	1.6	1.6	17.7	28.7	36.2	33.6
% agricultural	0.6	0.4	0.3	0.4	11.4	10.0	8.1	8.6
Livestock	0.0	0.1	0.1	0.1	2.1	6.1	8.9	8.5
% livestock	0.0	0.0	0.0	0.0	1.4	2.1	2.0	2.2

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	0.14	0.26	0.18	0.14	15.12	27.68	48.63	46.12
Beef	0.03	0.20	0.18	0.08	30.09	49.80	74.81	59.35
Sheep and goat	0.00	0.00	0.00	0.00	101.89	101.42	101.05	101.19
Pig	0.00	0.03	0.06	0.04	7.47	19.27	39.64	43.37
Poultry	0.35	0.53	0.29	0.27	6.16	18.91	41.19	42.03
Milk, equivalent	0.01	0.01	0.04	0.05	29.22	23.40	30.27	29.20
Eggs, total	0.00	0.00	0.00	0.00	0.02	0.04	0.08	0.08

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	0.00	0.00	15.00	27.49	48.54	46.05
Beef	0.00	0.00	0.00	0.00	30.06	49.70	74.73	59.31
Sheep and goat	0.00	0.00	0.00	0.00	101.89	101.42	101.05	101.19
Pig	0.00	0.00	0.00	0.00	7.46	19.25	39.61	43.35
Poultry	0.00	0.00	0.00	0.00	5.82	18.46	41.01	41.86
Milk, equivalent	0.00	0.00	0.00	0.00	29.20	23.39	30.20	29.12
Eggs, total	0.00	0.00	0.00	0.00	0.02	0.04	0.07	0.08

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	8	14,459	-14,451	14	36,060	-36,046	3	14,920	-14,917	0	14,544	-14,544
Sheep and goats	0	745	-745	0	86	-86	0	2	-2	0	5	-5
Pigs	155	1,342	-1,187	0	1,108	-1,108	0	431	-431	0	291	-291
Poultry (1,000)	864	1,050	-186	335	1,008	-673	124	916	-792	110	1,111	-1,001
Value (1,000 US\$)												
Cattle	80	23,613	-23,533	86	47,569	-47,483	29	16,499	-16,470	0	17,813	-17,813
Sheep and goats	0	347	-347	0	122	-122	0	5	-5	0	19	-19
Pigs	153	2,598	-2,445	0	2,702	-2,702	0	1,049	-1,049	0	1,286	-1,286
Poultry (1,000)	1,664	6,650	-4,986	579	9,216	-8,637	198	8,148	-7,950	184	8,284	-8,100
Total	1,897	33,208	-31,311	665	59,609	-58,944	227	25,701	-25,474	184	27,402	-27,218

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	4,415	528,287	-523,872	9,050	1,298,730	-1,289,681	5,355	2,696,289	-2,690,934	4,311	2,582,534	-2,578,224
Beef	139	171,684	-171,545	1,096	515,812	-514,717	977	964,270	-963,293	414	651,509	-651,095
Mutton and goat	0	78,641	-78,641	0	64,059	-64,059	0	27,156	-27,156	0	24,960	-24,960
Pig	64	116,520	-116,456	468	362,507	-362,038	766	889,757	-888,991	541	1,045,979	-1,045,438
Poultry	3,944	72,172	-68,228	7,424	314,768	-307,344	3,509	807,317	-803,808	3,290	859,718	-856,428
Other	268	89,270	-89,537	62	41,585	-41,646	102	7,788	-7,890	65	368	-434
Milk, equivalent	818	1,392,251	-1,391,433	804	1,385,821	-1,385,016	3,680	1,676,743	-1,673,063	4,179	1,635,714	-1,631,536
Eggs, total	0	356	-356	0	900	-900	40	1,844	-1,804	64	2,053	-1,989
Hides and skins	18,814	258,093	-239,279	46,370	260,120	-213,750	42,223	84,701	-42,478	67,115	61,062	6,053
Value (1,000 US\$)												
Meat, total	4,586	1,348,283	-1,343,697	16,061	4,598,121	-4,582,060	17,537	7,686,283	-7,668,746	7,909	7,381,503	-7,373,594
Beef	650	484,092	-483,442	9,244	1,992,383	-1,983,139	11,274	2,667,103	-2,655,829	3,199	1,560,955	-1,557,756
Mutton and goat	0	146,528	-146,528	0	134,846	-134,846	0	68,407	-68,407	0	83,157	-83,157
Pig	50	425,798	-425,748	890	1,749,283	-1,748,393	1,849	3,501,881	-3,500,032	891	4,061,028	-4,060,137
Poultry	2,394	112,560	-110,166	5,799	628,810	-623,011	3,765	1,399,770	-1,396,005	3,432	1,635,287	-1,631,855
Other	1,492	179,305	-180,797	128	92,799	-92,927	649	49,122	-49,771	387	41,076	-41,463
Milk, equivalent	361	278,215	-277,854	1,182	530,200	-529,018	6,758	744,307	-737,549	4,903	758,885	-753,982
Eggs, total	1	828	-827	0	2,186	-2,186	113	2,875	-2,762	126	3,758	-3,632
Hides and skins	15,984	434,059	-418,075	83,151	822,390	-739,239	34,049	235,067	-201,018	62,564	171,256	-108,692
Total	20,932	2,061,385	-2,040,453	100,394	5,952,897	-5,852,503	58,457	8,668,532	-8,610,075	75,502	8,315,402	-8,239,900

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	(1951)	(1951)	(1951)	(1951)	(1926)	(1925)	(1925)
Bluetongue	-				9/1	(12/2001)	(12/2001)
BSE ²	000	000	000	000	3/3	2/2	4/4
CBPP ³	(1941)	(1941)	(1941)	(1941)	(1941)	(1941)	(1941)
Classical swine fever	(12/1992)	(12/1992)	(12/1992)	(12/1992)	(12/1992)	(12/1992)	(12/1992)
Foot and mouth disease	(1908)	(1908)	(1908)	22/3	(05/2000)	(05/2000)	(05/2000)
Lumpy skin disease	000	000	000	000	000	000	000
Newcastle disease	(02/1996)	4/1	359/8	7,112/5	988/10	26,608/9	(09/2002)
Peste des petits ruminants	000	000	000	000	000	000	000
Rift Valley fever	000	000	000	000	000	000	000
Rinderpest	(1924)	(1924)	(1924)	(1924)	(1924)	(1924)	(1924)
Sheep and goat pox	(1921)	(1921)	(1921)	(1921)	(1921)	(1921)	(1921)
Swine vesicular disease	(1975)	(1975)	(1975)	(1975)	(1975)	(1975)	(1975)
Vesicular stomatitis	000	000	000	000	000	000	000

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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