

LIVESTOCK SECTOR BRIEF

INDONESIA

Food and Agriculture Organization
of the United Nations • FAO

Livestock Information, Sector Analysis
and Policy Branch • AGAL



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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) HANDBOOK OF OFFICIAL ANIMAL HEALTH 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	217.1 million
Population density on total land	119.9 persons/sqkm
Annual growth rate (1990-2000)	1.4 %
Population in agriculture	92.9 million
As proportion of total population	42.8 %
 Total land area	1,811,570 sqkm
Agricultural land	448,770 sqkm
As proportion of total land	24.8 %
Land under pasture	111,770 sqkm
As proportion of total land	24.9 %
Irrigated area	48,150 ha
Agricultural land per 100 people	20.7 ha
Agricultural land per 100 people in agriculture	48.3 ha
Agricultural population density on agricultural land	207 persons/sqkm
 GDP ¹	224,386 million US\$
GDP annual growth rate (1990-2000)	3.3 %
GDP per capita/year ¹	1,060 US\$
GDP per capita annual growth rate (1990-2000)	1.9 %
Agriculture, GDP	38,075 million US\$
As proportion of total GDP	17 %
Livestock, GDP ¹	4,769 million US\$
As proportion of agricultural GDP	12.5 %
Human development Rank	111 Ranking ²
Human development index	0.692
 Poverty incidence ³	
Total	27.1 %
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	150,128	182,117	211,559	217,131	2.0	1.5
Rural	116,944	126,419	122,696	120,465	0.8	-0.3
Urban	33,184	55,699	88,863	96,666	5.3	4.8

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	380,000	450,830	447,770	448,770	1.7	-0.1
Cropped ²	260,000	319,730	336,000	337,000	2.1	0.5
Pastures	120,000	131,100	111,770	111,770	0.9	-1.6

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

²Arable and permanent crops

Source: FAO (2005a)

2. LIVESTOCK RESOURCES

Livestock populations

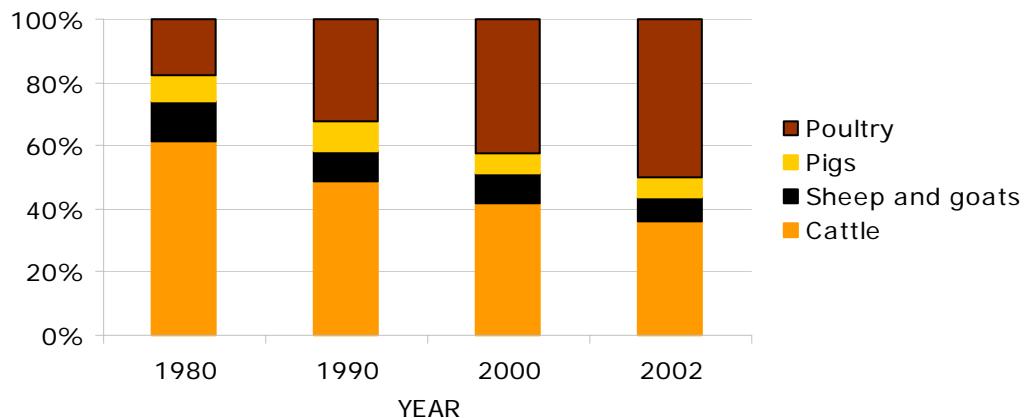
Values expressed in 1,000

Species	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Cattle and buffaloes	8,897	13,745	13,413	13,701	4.4	-0.2
Sheep and goats	11,815	17,304	19,993	20,210	3.9	1.5
Pigs	3,155	7,136	5,357	5,927	8.5	-2.8
Poultry	170,328	596,716	887,573	1,264,410	13.4	4.1
Total LUs	9,579	18,583	21,053	25,172	6.9	1.3

LU: Livestock unit; **conversion factors:** cattle (0.65), buffalo (0.70), sheep and goats (0.10), pigs (0.25) and poultry (0.01)

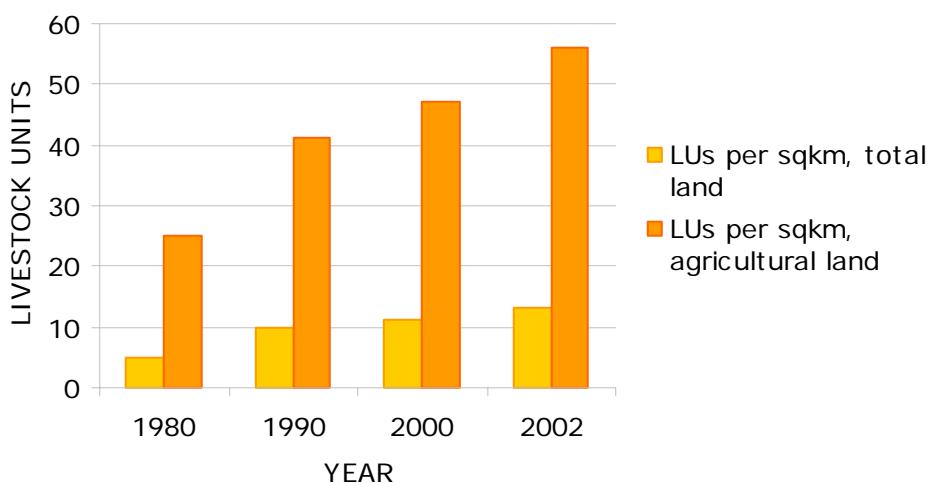
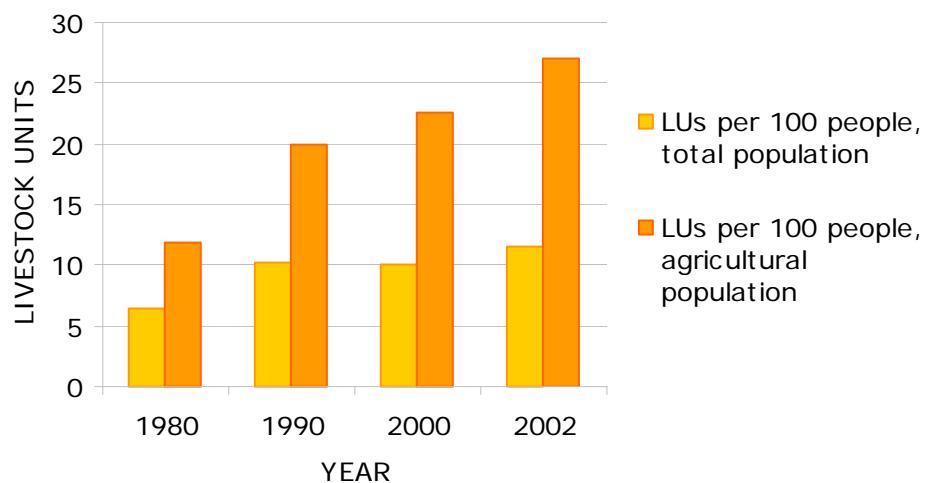
Source: FAO (2005a)

Contribution of different species to total livestock units



Source: FAO (2005a)

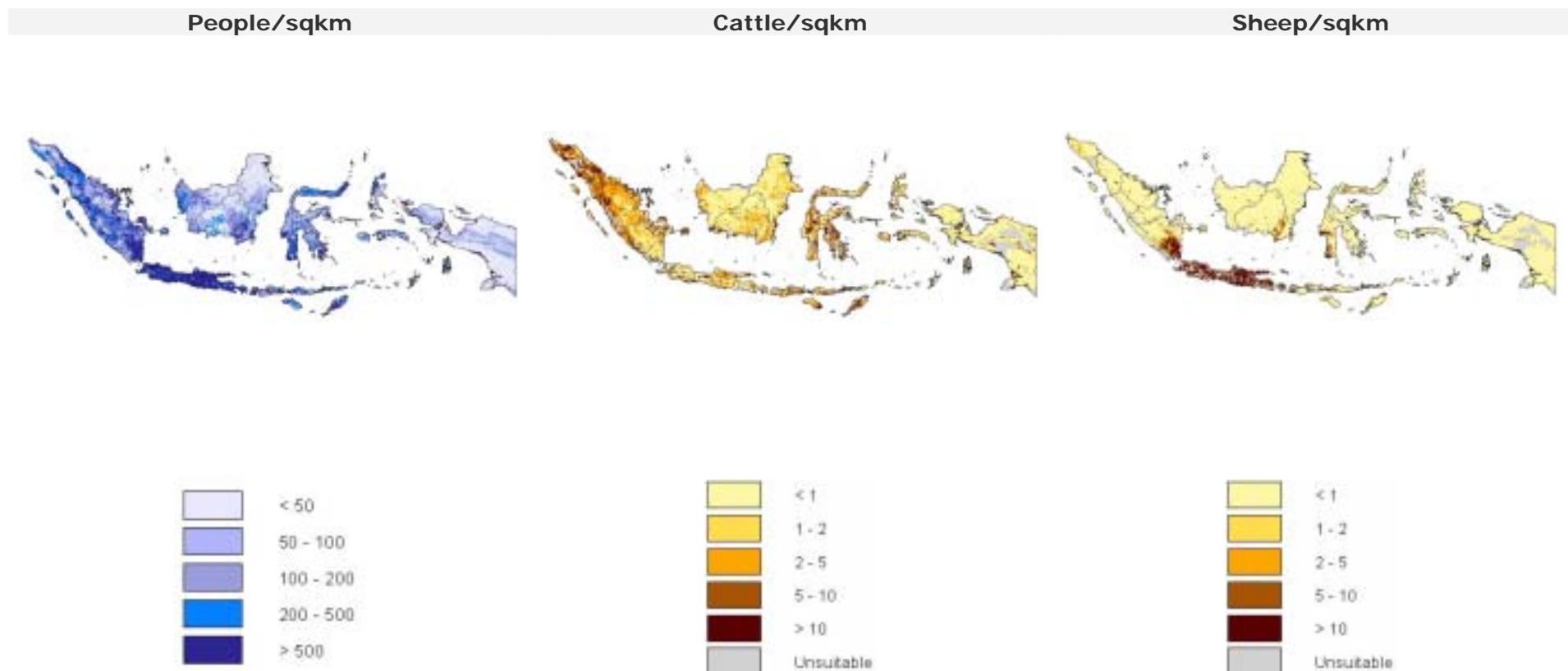
Selected indicators of livestock resources



Source: FAO (2005a)

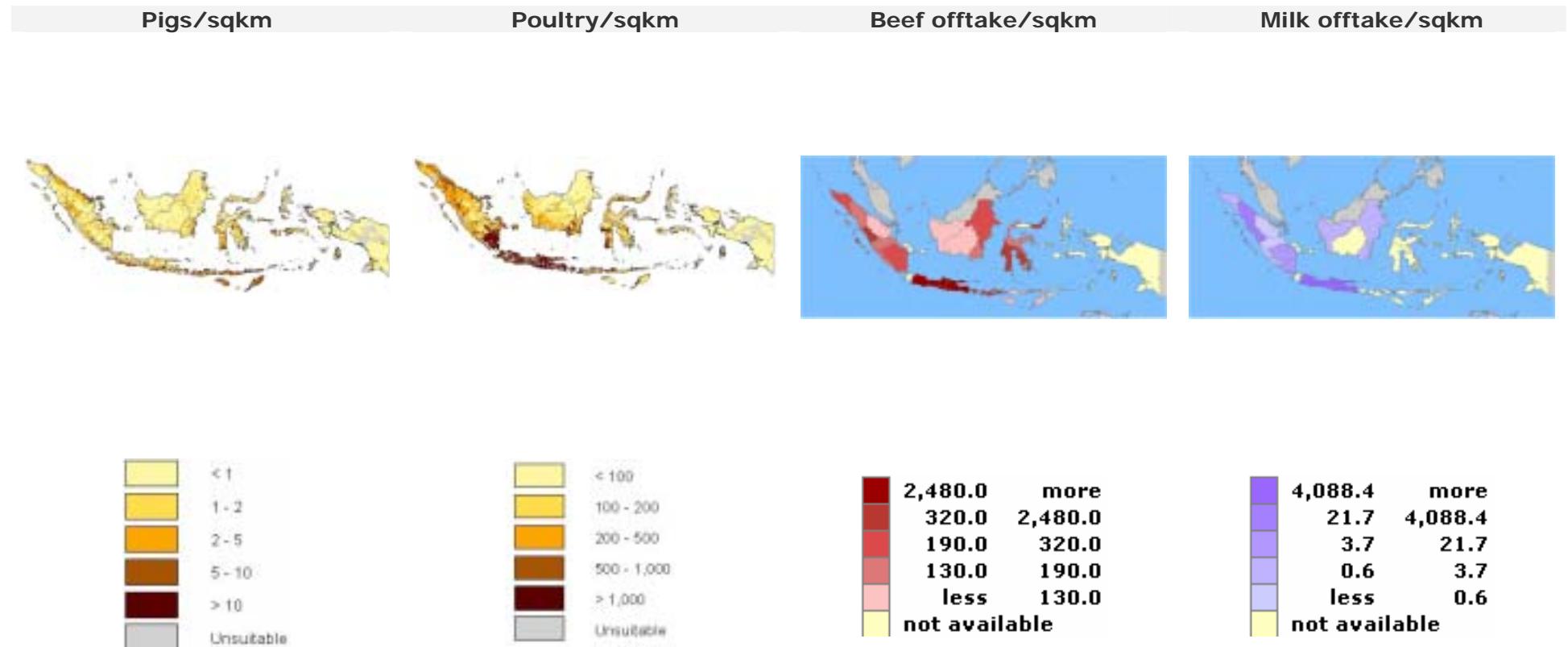
Densities of livestock species (2000)

Density calculated on total land area¹



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

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



Source: FAO (2005b)

3. LIVESTOCK PRODUCTION

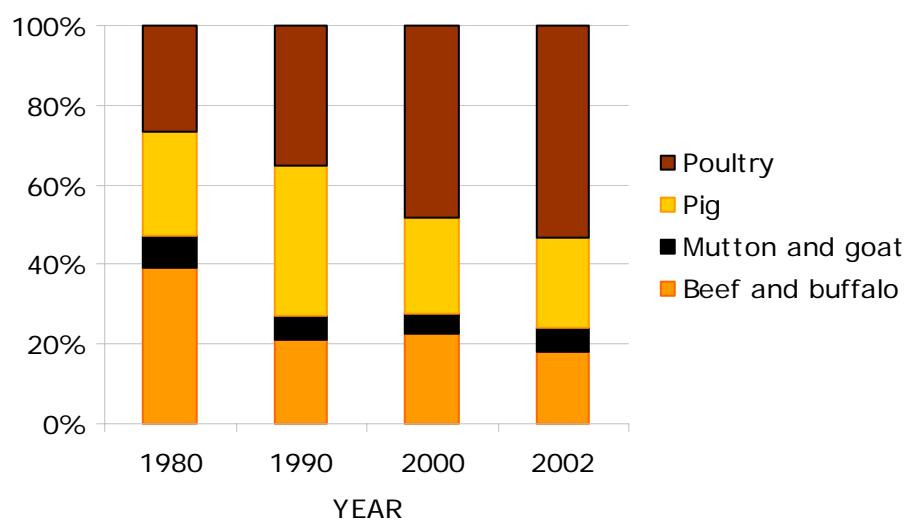
Trends in annual production of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	668.6	1448.4	1695.2	2076.8	8.0	1.6
Beef and buffalo	259.8	303.5	385.8	372.6	1.6	2.4
Mutton and goat	53.9	90.0	78.3	126.9	5.3	-1.4
Pig	176.0	544.5	412.5	471.4	12	-2.7
Poultry	177.3	508.7	817.7	1104.9	11.1	4.9
Milk, total	246.4	597.6	787.0	785.3	9.3	2.8
Eggs, total	259.4	484.0	783.0	945.8	6.4	4.9

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	287.4	205.3	200.5	195.1	11.9	12.1	15.4	15.0
Buffaloes	201.4	220.1	204.7	202.4	7.9	6.0	9.3	8.7
Sheep	10.0	10.0	11.9	13.5	42.7	52.8	37.7	66.6
Goat	10.0	10.0	10.0	10.0	47.2	51.6	35.7	46.4
Pigs	55.0	55.0	55.0	55.0	101.4	138.7	140.0	144.6
Poultry	0.8	0.8	0.8	0.8	129.3	106.3	114.9	109.0

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	761	1,176	1,413	1,377	1.6	2.8	3.2	3.2
Buffaloes								

Blanks represent no data

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	4.3	4.2	5.2	5.0	30.0	15.1	14.5	12.8

Source: FAO (2005a)

Estimated feed used for livestock production

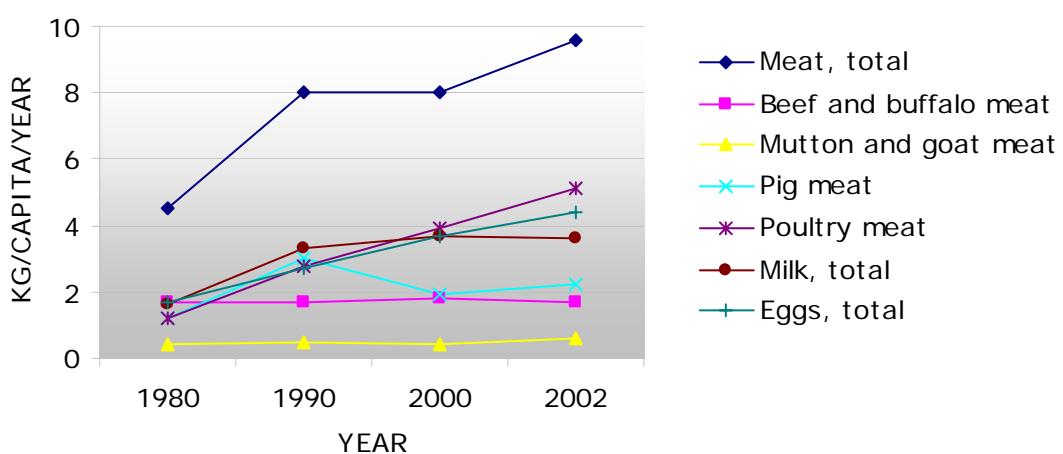
1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Maize	237.0	396.0	600.0	583.0	5.3	4.2
Barley	0.0	0.0	0.0	5.5		
Sorghum						
Millet						
Wheat						
Brans	2,612.7	5,131.4	6,459.0	6,513.2	7.0	2.3
Rice Paddy, equivalent	557.3	1,119.0	1,797.5	2,382.5	7.2	4.9
Roots and Tuber, dry equivalent	94.4	113.2	114.7	110.6	1.8	0.1
Pulses						
Oil crops						

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

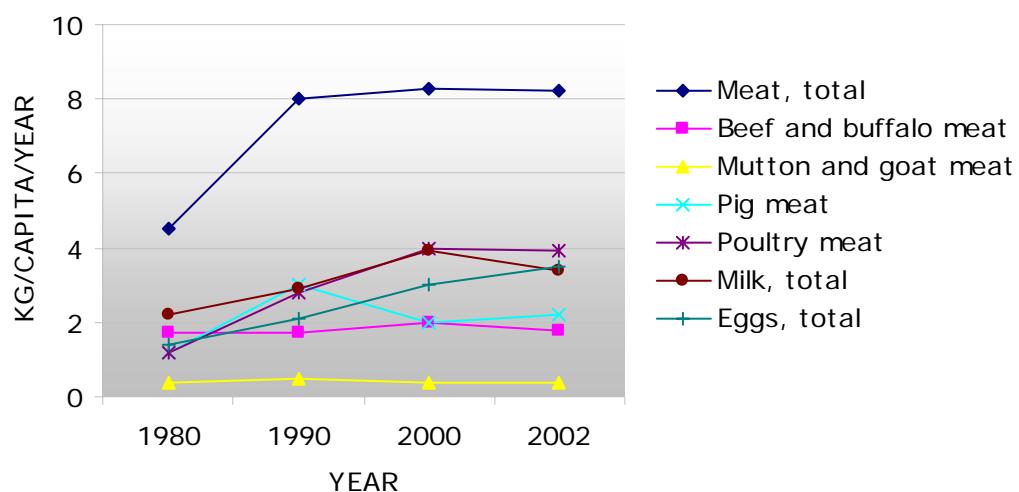
Trends in annual consumption of meat, milk and eggs

1,000 metric tonnes

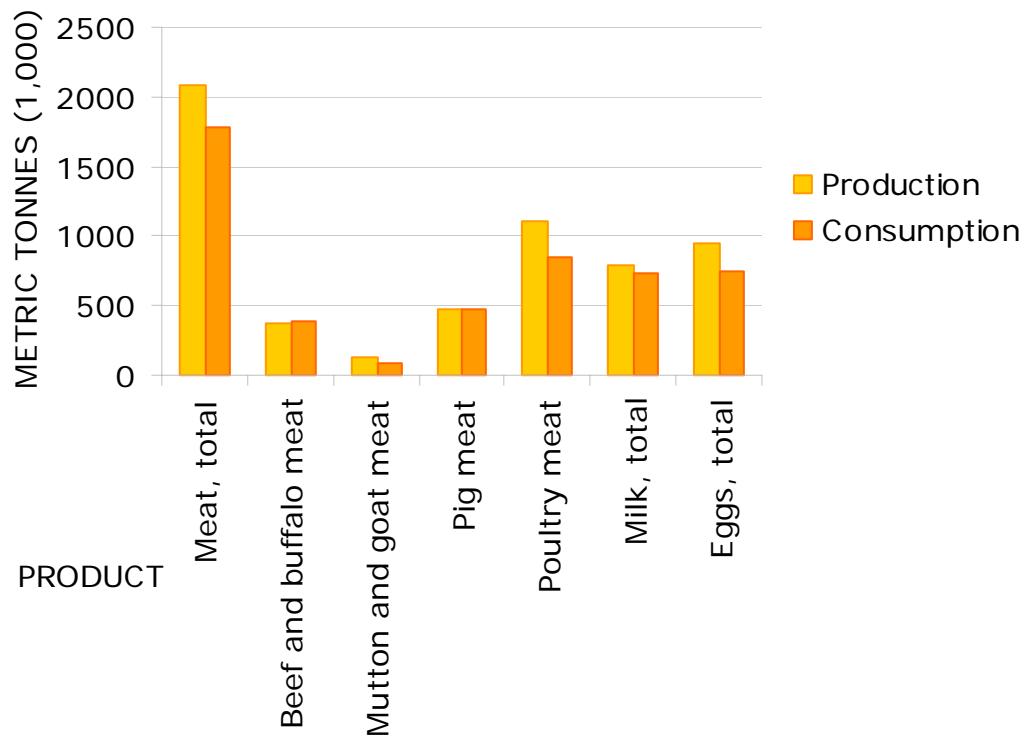
Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	671.1	1,454.8	1,764.8	1,788.3	8.0	2.0
Beef and buffalo	261.4	306.4	421.8	383.9	1.6	3.2
Sheep and goat	54.0	90.3	81.1	88.6	5.3	-1.1
Pig	176.4	547.5	414.5	473.2	12.0	-2.7
Poultry	177.8	508.9	845.4	841.5	11.1	5.2
Milk, total	331.2	537.0	834.3	737.6	5.0	4.5
Eggs, total	215.4	383.9	641.4	752.8	5.9	5.3

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 million US\$

Product	Exports				Imports			
	1980	1990	2000	2002	1980	1990	2000	2002
Total	26,664	28,983	64,475	61,210	15,767	27,157	50,265	49,363
Agricultural	2,737	2,802	4,942	6,207	1,555	1,591	4,055	4,167
% agricultural	10.3	9.7	7.7	10.1	9.9	5.9	8.1	8.4
Livestock	26	45	128	112	92	102	435	333
% livestock	0.1	0.2	0.2	0.2	0.6	0.4	0.9	0.7

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	0.24	0.29	0.35	0.58	0.37	0.38	3.06	1.13
Beef and buffalo	0.01	0.04	0.01	0.02	0.41	0.81	8.60	4.14
Sheep and goat	0.00	0.00	0.04	0.24	0.16	0.30	0.73	0.54
Pig	0.00	0.00	0.20	0.94	0.16	0.43	0.51	0.47
Poultry	0.00	0.03	0.09	0.30	0.26	0.07	1.74	0.14
Milk, equivalent	0.07	17.76	33.98	21.18	176.37	52.54	130.91	142.14
Eggs, total	0.00	0.03	0.03	0.05	0.05	0.01	0.12	0.10

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	0.12	0.09	2.73	0.46
Beef and buffalo	0.00	0.00	0.00	0.00	0.41	0.77	8.59	4.12
Sheep and goat	0.00	0.00	0.00	0.00	0.16	0.30	0.69	0.21
Pig	0.00	0.00	0.00	1.26	0.16	0.43	0.30	0.00
Poultry	0.00	0.00	0.00	1.18	0.26	0.04	1.65	0.00
Milk, equivalent	0.00	0.00	0.00	0.00	176.32	32.77	98.85	119.59
Eggs, total	0.00	0.02	0.00	0.00	0.05	0.00	0.09	0.05

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 and buffaloes	0	3,246	-3,246	0	11,376	-11,376	15	309,673	-309,658	514	171,122	-170,608
Sheep and goats	0	0	0	0	0	0	13	0	13	15	3	12
Pigs	0	0	0	160,365	1,498	158,867	337,734	327	337,407	318,151	607	317,544
Poultry (1,000)	58	2,630	-2,572	836	431	405	1,353	2,074	-721	631	6,988	-6,357
Value (1,000 US\$)												
Cattle and buffaloes	0	2,431	-2,431	0	7,996	-7,996	9	92,669	-92,660	333	47,572	-47,239
Sheep and goats	0	0	0	0	0	0	7	0	7	8	0	8
Pigs	0	0	0	12,604	1,316	11,288	33,313	54	33,259	27,645	260	27,385
Poultry (1,000)	27	2,869	-2,842	977	7,151	-6,174	2,783	10,186	-7,403	1,598	11,588	-9,990
Total	27	5,300	-5,273	13,581	16,463	-2,882	36,113	102,909	-66,797	29,584	59,420	-29,836

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	1,633	2,471	-838	4,228	5,496	-1,268	5,852	53,994	-48,142	11,963	20,220	-8,257
Beef and buffalo	14	1,079	-1,065	116	2,471	-2,355	34	36,286	-36,251	92	15,910	-15,818
Mutton and goat	0	86	-86	0	267	-267	35	592	-557	300	482	-182
Pig	0	278	-278	7	2,380	-2,373	839	2,098	-1,259	4,455	2,244	2,211
Poultry	0	468	-468	141	345	-204	751	14,682	-13,931	3,291	1,208	2,083
Other	1,619	560	-2,178	3,964	33	-3,996	4,193	337	-4,530	3,824	376	-4,200
Milk, equivalent	173	584,088	-583,914	106,133	282,110	-175,977	267,447	1,092,208	-824,761	166,320	1,048,394	-882,075
Eggs, total	0	111	-111	162	50	112	211	795	-584	445	789	-344
Hides and skins	3,155	5	3,150	155	612	-457	736	5,902	-5,165	1,600	3,143	-1,543
Value (1,000 US\$)												
Meat, total	4,778	5,134	-356	13,756	7,891	5,865	13,312	54,770	-41,458	23,531	23,111	420
Beef and buffalo	13	2,745	-2,732	67	5,970	-5,903	62	42,020	-41,957	172	19,086	-18,914
Mutton and goat	0	265	-265	0	592	-592	132	655	-523	300	939	-639
Pig	0	477	-477	7	624	-617	563	1,350	-787	3,165	1,447	1,718
Poultry	0	766	-766	254	543	-289	1,321	10,289	-8,968	6,311	1,180	5,131
Other	4,765	881	-5,646	13,428	162	-13,590	11,233	456	-11,688	13,583	459	-14,042
Milk, equivalent	157	81,589	-81,432	16,288	73,256	-56,968	74,769	259,911	-185,142	54,854	245,704	-190,850
Eggs, total	0	136	-136	317	47	270	252	3,312	-3,060	762	1,665	-903
Hides and skins	21,021	19	21,002	988	4,375	-3,387	2,184	12,880	-10,696	2,000	2,920	-920
Total	25,956	86,878	-60,922	31,349	85,569	-54,220	90,516	330,873	-240,356	81,147	273,400	-192,253

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	
Avian Influenza ¹	-	-	-	-	-	-	.../...
Bluetongue							
BSE ²	-	-	000	000	000	000	
CBPP ³	000	000	000	000	000	000	000
Classical swine fever	29,614/...	286/...	37,111/...	3,874/...	4,302/...	1,193/...	.../...
Foot and mouth disease	(1983)	(1983)	(1983)	(1983)	(1983)	(1983)	(1983)
Lumpy skin disease	000	000	000	000	000	000	000
Newcastle disease	703,613/...	411,009/...	1,368,442/...	581,648/...	.../...	201,196/...	.../...
Peste des petits ruminants	000	000	000	000	000	000	000
Rift Valley fever	000	000	000	000	000	000	000
Rinderpest	(1907)	(1907)	(1907)	(1907)	(1907)	(1907)	(1907)
Sheep and goat pox	-	-	-	-	-	-	-
Swine vesicular disease	000	000	000	000	000	000	000
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)

7. REFERENCES AND FURTHER READING

FAO (2005a) FAOSTAT data. Food and Agriculture Organisation, Rome.
<http://faostat.external.fao.org/default.jsp> (accessed July, 2005).

FAO (2005b) Global Livestock Production and Health Atlas. Food and Agriculture Organisation, Rome. <http://www.fao.org/ag/aga/glipha/index.jsp> (accessed July, 2005).

LandScan (2002) Global Population Database. Oak Ridge National Laboratory, Oakridge. <http://www.ornl.gov/gist/>

OIE (2004) HANDISTATUS II. Office International des Epizooties, Paris.
<http://www.oie.int/hs2/> (accessed July, 2005).

UNDP (2004). The Human development Reports, United Nations Development Programme, New York. <http://hdr.undp.org/statistics/>

World Bank (2002) The 2002 World Bank development indicators CD-Rom. The World Bank, Washington DC.