

# LIVESTOCK SECTOR BRIEF

## IRAN

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

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



December 2005

## TABLE OF CONTENTS

Preface .....	ii
<b>1. General Information.....</b>	<b>1</b>
Human population, land and socio-economics .....	1
Human population trends .....	2
Trends in agricultural land .....	2
<b>2. Livestock Resources.....</b>	<b>2</b>
Livestock populations .....	2
Contribution of different species to total livestock units .....	3
Selected indicators of livestock resources .....	3
Agro-ecological zones and densities of livestock species (2000) .....	4
<b>3. Livestock Production .....</b>	<b>6</b>
Trends in annual production of meat, milk and eggs .....	6
Composition of total meat production .....	6
Carcass weights and percentage slaughtered by species.....	7
Milk yields and proportion of dairy animals.....	7
Egg yields and proportion of laying birds.....	7
Estimated feed used for livestock production .....	8
Trends in annual per capita production of meat, milk and eggs.....	8
<b>4. Consumption of Meat, Milk and Eggs .....</b>	<b>9</b>
Trends in annual consumption of meat, milk and eggs .....	9
Trends in annual per capita consumption of meat, milk and eggs.....	9
Production versus consumption for meat, milk and eggs (2002).....	10
<b>5. Trade in Livestock and Livestock Products.....</b>	<b>11</b>
Trade in agricultural and livestock products.....	11
Export/import 'dependency' for livestock products .....	11
Trade in live animals .....	12
Trade in livestock products .....	13
<b>6. Livestock Health .....</b>	<b>14</b>
Total number of cases/outbreaks of selected diseases reported in all susceptible species .....	14
<b>7. References and Further Reading.....</b>	<b>15</b>

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.

For any feedback and comment, please contact:

Gianluca Franceschini  
Livestock Information, Sector Analysis and Policy Branch  
Animal Production and Health Division  
Food and Agricultural Organisation  
Viale delle Terme di Caracalla  
00100 Rome, Italy

Tel: 00 39 06 57054463  
Fax: 00 39 06 57055749  
Email: [Gianluca.Franceschini@fao.org](mailto:Gianluca.Franceschini@fao.org)

## 1. GENERAL INFORMATION

### Human population, land and socio-economics

Human population	68.1 million
Population density on total land	41.6 persons/sqkm
Annual growth rate (1990-2000)	1.4 %
Population in agriculture	17.4 million
As proportion of total population	25.5 %
Total land area	1,636,200 sqkm
Agricultural land	610,880 sqkm
As proportion of total land	37.3 %
Land under pasture	440,000 sqkm
As proportion of agricultural land	72.0 %
Irrigated area	75,000 ha
Agricultural land per 100 people	89.7 ha
Agricultural land per 100 people in agriculture	352 ha
Agricultural population on agricultural land	28.4 persons/sqkm
GDP <sup>1</sup>	118,036 million US\$
GDP annual growth rate (1990-2000)	3.7 %
GDP per capita/year <sup>1</sup>	1,801 US\$
GDP per capita annual growth rate (1990-2000)	2.1 %
Agriculture, GDP	27,190 million US\$
As proportion of total GDP	23.0 %
Livestock, GDP <sup>1</sup>	8,150 million US\$
As proportion of agricultural GDP	30.0 %
Human development Rank	101 Ranking <sup>2</sup>
Human development index	0.732
Poverty incidence <sup>3</sup>	
Total	na %
Urban	na %
Rural	na %

<sup>1</sup>Constant 1995 US\$ <sup>2</sup> The HDI rank is determined using HDI values to the fifth decimal point – from 177 countries, as compiled by the UNDP; <sup>3</sup> 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	39,343	56,703	66,443	68,070	3.7	1.6
Rural	19,817	24,762	23,644	23,197	2.3	-0.5
Urban	19,526	31,941	42,799	44,874	5.0	3.0

Source: FAO (2005a)

## Trends in agricultural<sup>1</sup> land

Values expressed in sqkm

Land type	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Total	577,130	605,000	603,260	610,880	0.5	0.0
Cropped <sup>2</sup>	137,130	165,000	163,260	170,880	1.9	-0.1
Pastures	440,000	440,000	440,000	440,000	0.0	0.0

<sup>1</sup>The sum of area under arable land, permanent crops and permanent pastures

<sup>2</sup>Arable and permanent crops

Source: FAO (2005a)

## 2. LIVESTOCK RESOURCES

### Livestock populations

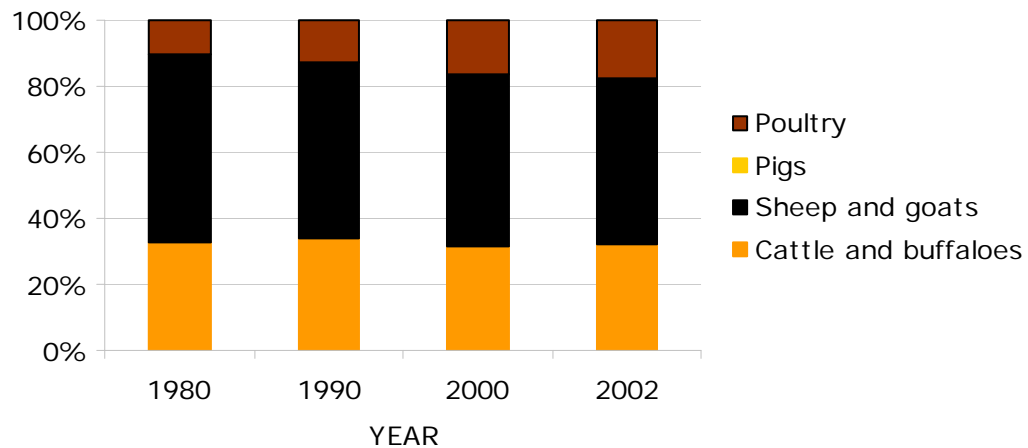
Values expressed in 1,000

Species	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Cattle and buffaloes	5,414	7,972	8,761	9,262	3.9	0.9
Sheep and goats	51,858	69,329	79,657	79,657	2.9	1.4
Pigs	15	0	0	0	-100.0	0.0
Poultry	92,665	164,000	254,600	274,600	5.9	4.5
Total LUs	9,106	12,980	15,355	15,832	3.6	1.7

**LU:** Livestock unit; **conversion factors:** cattle (0.55), buffalo (0.60), sheep and goats (0.10), pigs (0.25) and poultry (0.01)

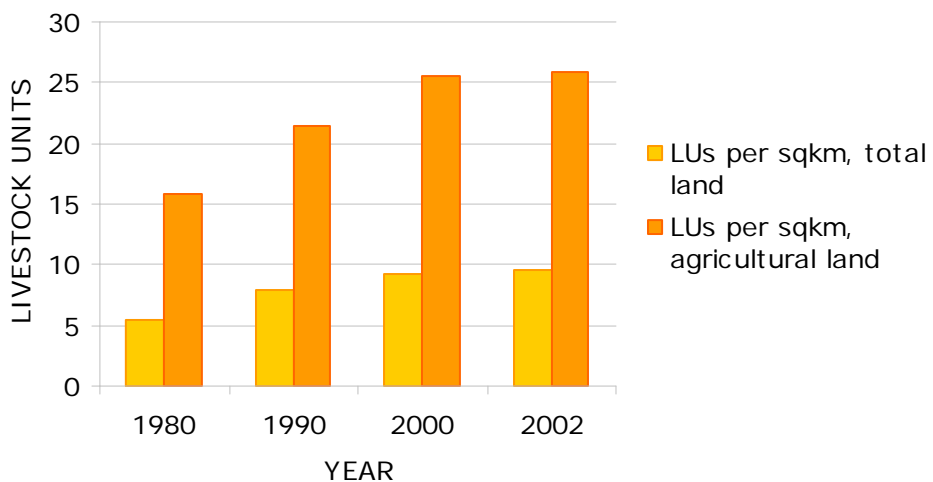
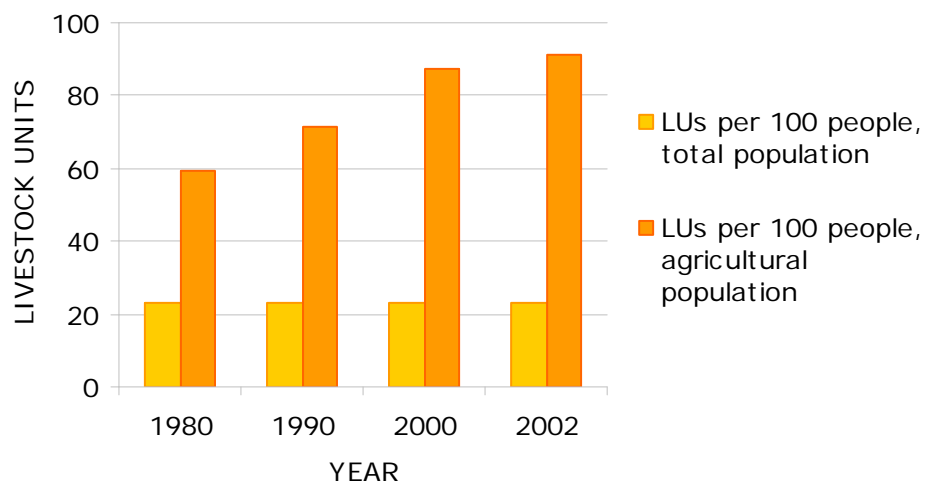
Source: FAO (2005a)

### Contribution of different species to total livestock units



Source: FAO (2005a)

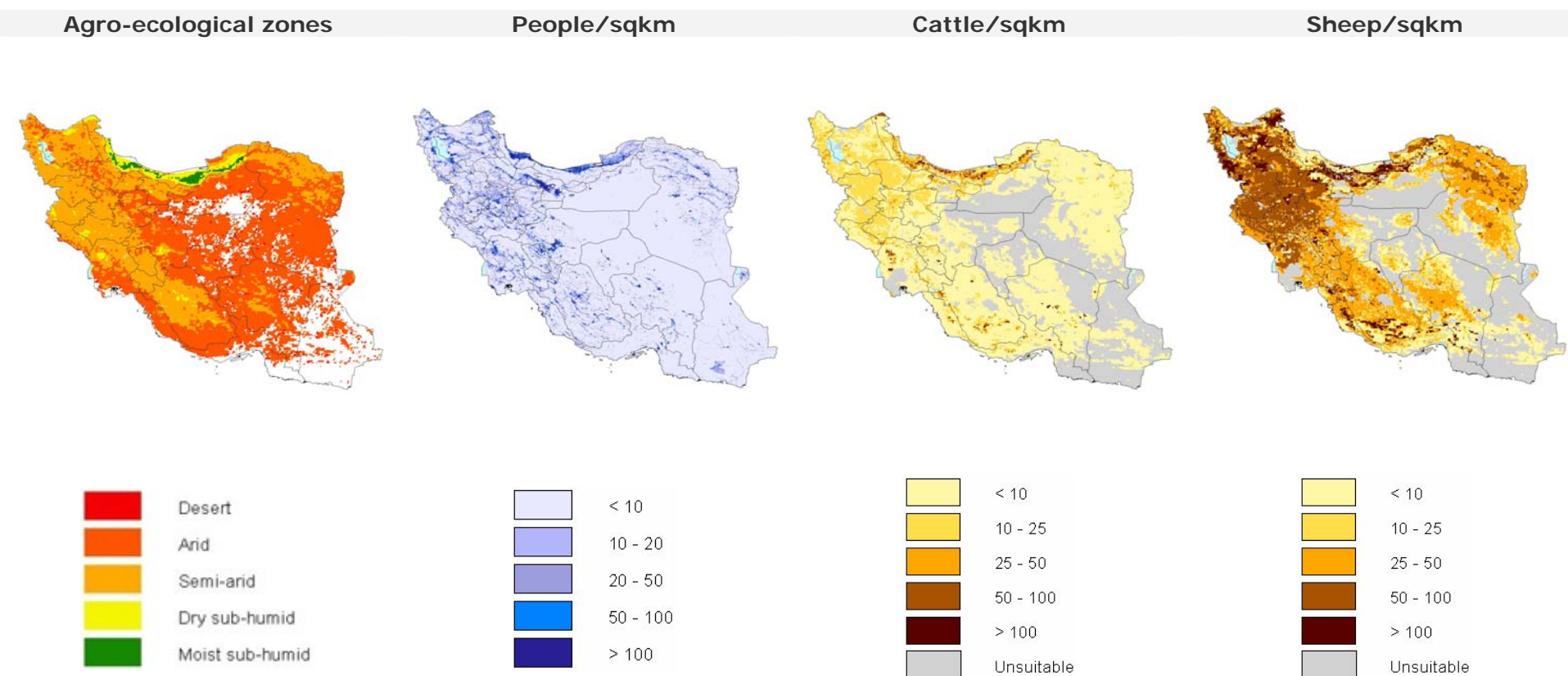
### Selected indicators of livestock resources



Source: FAO (2005a)

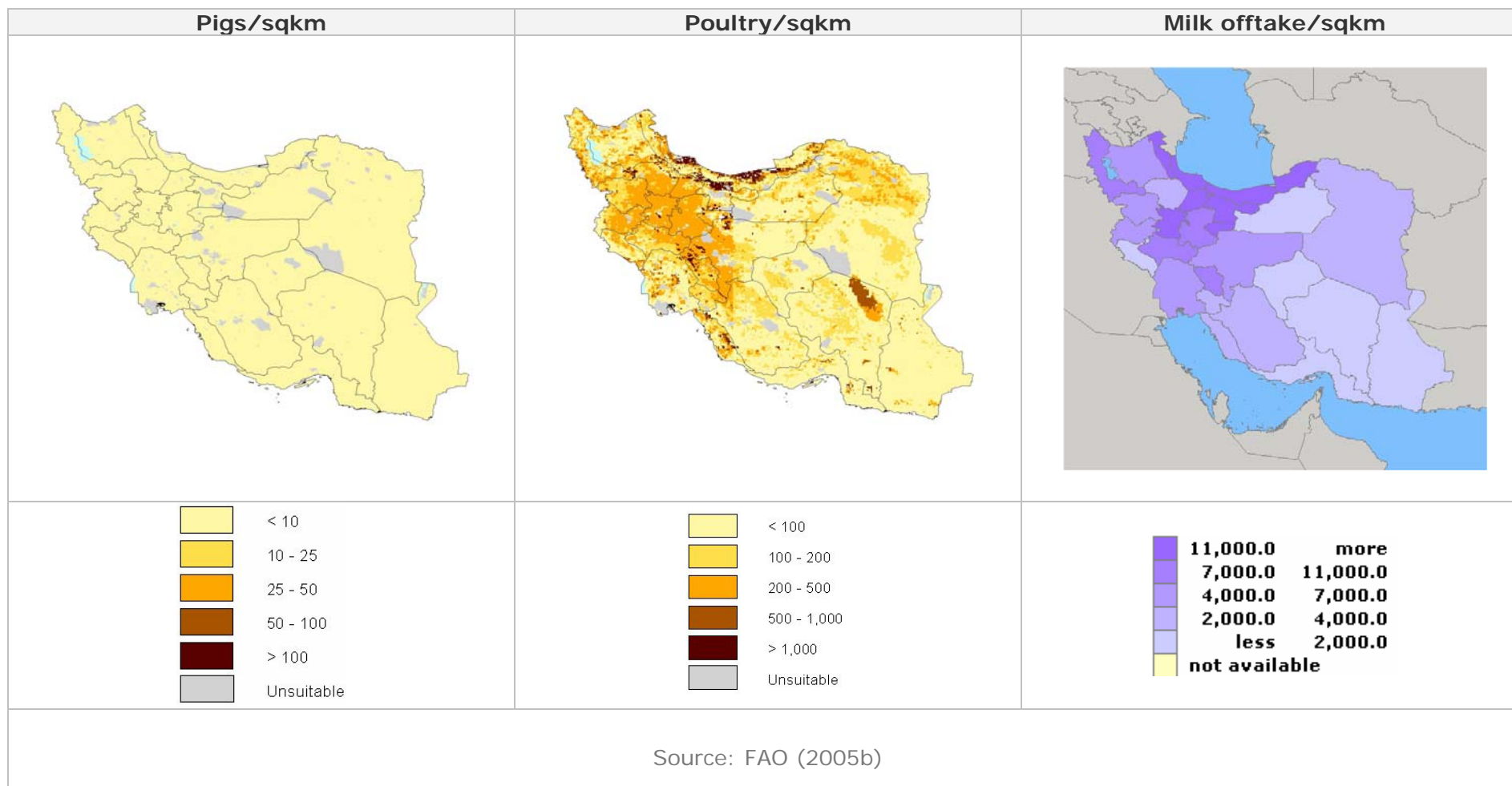
## Agro-ecological zones and densities of livestock species (2000)

Density calculated on total land area<sup>1</sup>



<sup>1</sup>Densities for livestock populations and production is based on total land suitable for livestock production

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





### 3. LIVESTOCK PRODUCTION

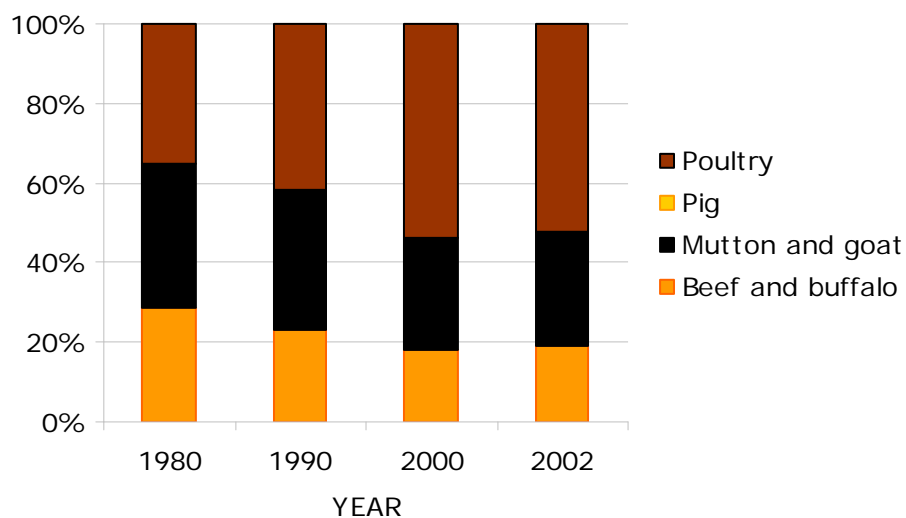
#### Trends in annual production of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	639.7	977.6	1,555.50	1,574.30	4.3	4.8
Beef and buffalo	178.7	220.6	280.6	296.8	2.1	2.4
Mutton and goat	224.8	337.5	435.7	449.7	4.1	2.6
Pig	0	0	0	0	0.0	0.0
Poultry	220	396.2	825.5	813.1	6.1	7.6
Milk, total	2,800.00	3,900.00	5,889.20	5,877.00	3.4	4.2
Eggs, total	172	295	579	588	5.5	7.0

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	90	105	130.5	135.4	36.7	26.6	24.9	24
Buffaloes	160	160	160	160	20	15	15.1	15
Sheep	16	16	17.5	18	27.5	33.4	34.6	35.6
Goat	14	14	14	14	30	28.7	30.4	29
Pigs	0	0	0	0	0	0	0	0
Poultry	1.4	1.4	1.2	1.1	166.5	169.2	266.4	265

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	851	959	1,253	1,244	36.0	36.0	45.9	45.8
Buffaloes	1,149	1,150	1,138	1,130	24.0	24.0	38.7	38.2

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	10.1	12	16.5	16.3	18.9	15.4	14.0	13.3

Source: FAO (2005a)

## Estimated feed used for livestock production

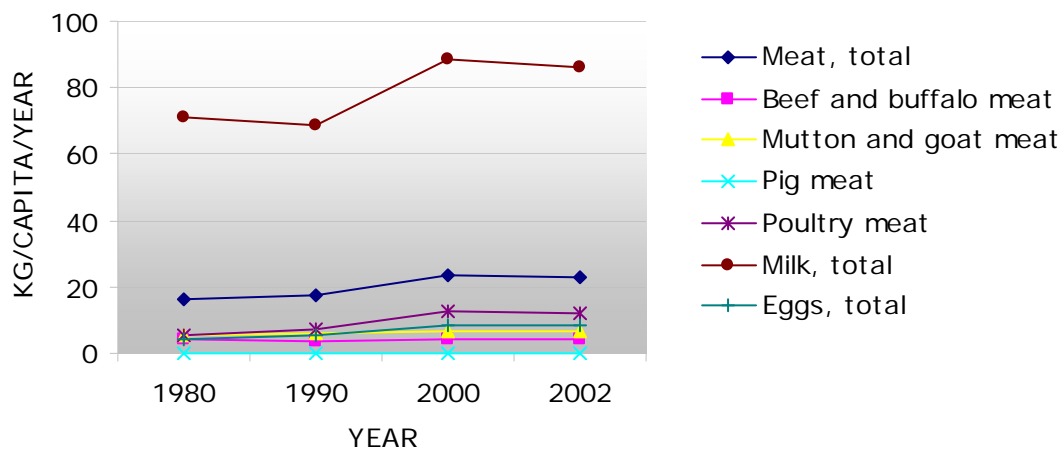
1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Maize	649.5	978.5	2,107.70	2,543.10	4.2	8.0
Barley	1,467.20	3,511.60	2,455.60	2,987.30	9.1	-3.5
Sorghum	0	0	0	28.1		
Millet	9.4	12	5.8	6	2.5	-7.0
Wheat	450	880	2,230.00	2,450.00	6.9	9.7
Brans	697.3	1,069.80	1,278.10	1,371.30	4.4	1.8
Rice Paddy, equivalent	0	90	300	330		12.8
Roots and Tuber, dry equivalent						
Pulses						
Oil crops	0.1	0.2	0	0.9	10.4	-19.3

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

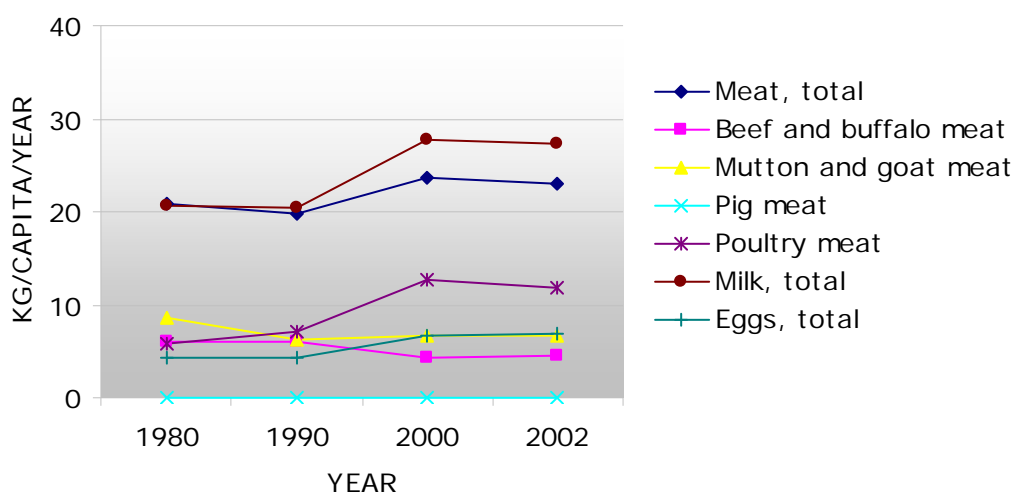
### Trends in annual consumption of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	816.6	1,115.9	1,575.5	1,572.9	3.2	3.5
Beef and buffalo	239.8	344.9	287.9	305.9	3.7	-1.8
Sheep and goat	334.8	352.5	435.8	449.7	0.5	2.1
Pig	0	0	0	0	0.0	0.0
Poultry	225.7	395.2	838.2	802.6	5.8	7.8
Milk, total	814.6	1,157.9	1,844.8	1,857.5	3.6	4.8
Eggs, total	170.8	252.1	442.9	467	4.0	5.8

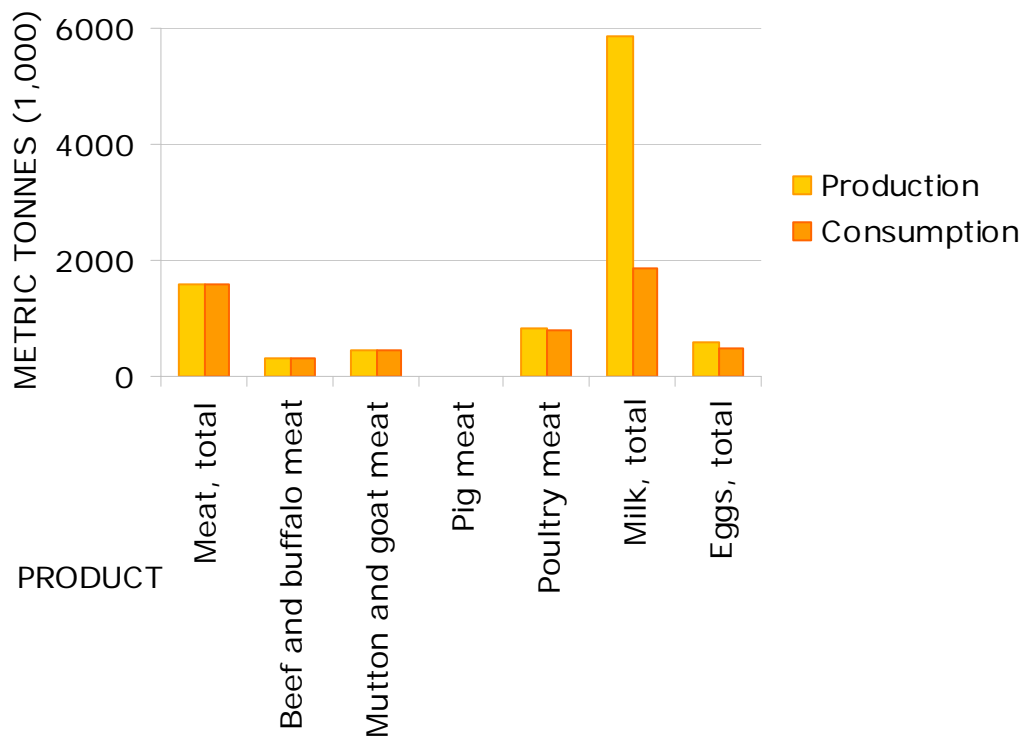
Source: FAO (2005a)

### 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 livestock<sup>1</sup> products

Values in million US\$

Product	Exports				Imports			
	1980	1990	2000	2002	1980	1990	2000	2002
Total	12,338.1	26,476.4	25,243.9	33,512.9	15,214.8	28,331.2	13,543.3	31,708.0
Agricultural	141.5	456.6	1,011.4	1,092.3	2,170.6	2,676.1	2,918.2	2,106.3
% agricultural	1.1	1.7	4	3.3	14.3	9.4	21.5	6.6
Livestock	9.6	66.3	79.2	53.8	737	468.4	89.5	72.3
% livestock	0.1	0.3	0.3	0.2	4.8	1.7	0.7	0.2

<sup>1</sup>Total 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	0.10	0.00	0.47	0.79	21.90	12.55	1.98	0.82
Beef and buffalo	0.34	0.00	0.01	0.00	26.01	36.24	2.88	3.36
Sheep and goat	0.00	0.00	0.03	0.00	32.86	4.26	0.06	0.00
Pig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poultry	0.00	0.00	0.87	1.49	2.82	0.00	2.70	0.32
Milk, equivalent	0.00	0.00	0.17	0.37	83.16	45.26	9.49	10.91
Eggs, total	0.00	0.00	6.69	3.16	12.83	0.00	0.05	0.07

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	21.82	12.55	1.51	0.02
Beef and buffalo	0.00	0.00	0.00	0.00	25.76	36.24	2.87	3.35
Sheep and goat	0.00	0.00	0.00	0.00	32.86	4.26	0.03	0.00
Pig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poultry	0.00	0.00	0.00	4.33	2.82	0.00	1.84	0.00
Milk, equivalent	0.00	0.00	0.00	0.00	83.16	45.26	8.95	9.74
Eggs, total	0.00	0.00	6.65	10.63	12.83	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
<b>Quantities (count)</b>												
Cattle and buffaloes	0	0	0	0	8,000	-8,000	0	0	0	1,833	0	1,833
Sheep and goats	0	1,304,000	-1,304,000	0	0	0	414	3,880	-3,466	61,000	0	61,000
Pigs		0	0		0	0		0	0		0	0
Poultry (1,000)	0	18,000	-18,000	0	700	-700	1,044	183	861	2,312	215	2,097
<b>Value (1,000 US\$)</b>												
Cattle and buffaloes	0	0	0	0	11,000	-11,000	0	0	0	1,303	0	1,303
Sheep and goats	0	60,082	-60,082	0	0	0	31	170	-139	5,300	0	5,300
Pigs		0	0		0	0		0	0		0	0
Poultry (1,000)	0	30,074	-30,074	0	1,180	-1,180	846	2,325	-1,479	1,022	2,199	-1,177
<b>Total</b>	<b>0</b>	<b>90,156</b>	<b>-90,156</b>	<b>0</b>	<b>12,180</b>	<b>-12,180</b>	<b>877</b>	<b>2,495</b>	<b>-1,618</b>	<b>7,625</b>	<b>2,199</b>	<b>5,426</b>

**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
<b>Quantities (metric tonnes)</b>												
Meat, total	628	178,818	-178,190	0	140,000	-140,000	7,367	31,208	-23,841	12,505	12,872	-367
Beef and buffalo	604	62,371	-61,767	0	125,000	-125,000	26	8,292	-8,266	8	10,270	-10,262
Mutton and goat	0	110,000	-110,000	0	15,000	-15,000	128	260	-132	5	0	5
Pig	0	0	0	0	0	0	3	0	3	371	9	362
Poultry	0	6,361	-6,361	0	0	0	7,211	22,656	-15,445	12,096	2,574	9,522
Other	0	84	-84	0	0	0	0	0	0	0	0	0
Milk, equivalent	0	677,375	-677,375	0	524,040	-524,040	9,930	175,001	-165,071	21,669	202,609	-180,940
Eggs, total	0	21,913	-21,913	5	0	5	38,751	241	38,510	18,600	319	18,281
Hides and skins	2,461	4,495	-2,034	14,039	1,400	12,639	17,544	433	17,111	9,499	111	9,388
<b>Value (1,000 US\$)</b>												
Meat, total	455	320,387	-319,932	0	290,000	-290,000	2,062	35,480	-33,418	5,908	15,781	-9,873
Beef and buffalo	455	118,964	-118,509	0	260,000	-260,000	103	12,815	-12,712	9	13,382	-13,373
Mutton and goat	0	187,000	-187,000	0	30,000	-30,000	325	334	-9	11	0	11
Pig	0	0	0	0	0	0	8	0	8	165	7	158
Poultry	0	14,329	-14,329	0	0	0	1,626	22,331	-20,705	5,691	2,377	3,314
Other	0	94	-94	0	0	0	0	0	0	0	0	0
Milk, equivalent	0	270,142	-270,142	0	161,180	-161,180	1,531	50,426	-48,895	3,837	50,949	-47,112
Eggs, total	0	47,048	-47,048	40	0	40	23,139	424	22,715	9,376	2,032	7,344
Hides and skins	9,051	9,209	-158	66,220	5,000	61,220	40,263	635	39,628	26,492	1,205	25,287
<b>Total</b>	<b>9,506</b>	<b>646,786</b>	<b>-637,280</b>	<b>66,260</b>	<b>456,180</b>	<b>-389,920</b>	<b>66,995</b>	<b>86,965</b>	<b>-19,970</b>	<b>45,581</b>	<b>69,952</b>	<b>-24,371</b>

**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 <sup>1</sup>	.../..	.../..	.../..	.../..	000	000	000
Bluetongue	.../..	.../..	.../..	.../..			
BSE <sup>2</sup>	000	000	000	000	000	000	000
CBPP <sup>3</sup>	000	000	000	000	000	000	000
Classical swine fever	000	000	000	000	000	000	000
Foot and mouth disease	28,000/340	.../...	724,038/1,077	28,718/334	40,736/1,029	15,577/638	30,406/1,075
Lumpy skin disease	000	000	000	000	000	000	000
Newcastle disease	../287	.../298	.../366	.../151	.../253	.../439	7,577,410/147
Peste des petits ruminants	(1994)	(1994)	23,785/125	13,851/93	182,949/240	10,205/164	10,126/201
Rift Valley fever	000	000	000	000	000	000	000
Rinderpest	(03/1994)	(03/1994)	(03/1994)	(03/1994)	(03/1994)	(03/1994)	(03/1994)
Sheep and goat pox	16,200/157	.../178	10,372/248	14,235/182	9,279/194	5,260/165	403/42
Swine vesicular disease	000	000	000	000	000	000	000
Vesicular stomatitis	-	-	-	-	-	-	-

<sup>1</sup> Highly pathogenic avian influenza

<sup>2</sup> Bovine spongiform encephalopathy

<sup>3</sup> 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 (2001)** Agro-ecological Distributions for Africa, Asia and North and Central America, Consultants' Report. Food and Agriculture Organisation, Rome.

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

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