

SENEGAL

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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) 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	9.9 million
Population density on total land	51.2 persons/sqkm
Annual growth rate (1990-2000)	2.4 %
Population in agriculture	7.2 million
As proportion of total population	73.1 %
Total land area	192,530 sqkm
Agricultural land	81,560 sqkm
As proportion of total land	42.4 %
Land under pasture	56,500 sqkm
As proportion of total land	69.3 %
Irrigated area	710 ha
Agricultural land per 100 people	83 ha
Agricultural land per 100 people in agriculture	113 ha
Agricultural population density on agricultural land	88.3 persons/sqkm
GDP <sup>1</sup>	6,185 million US\$
GDP annual growth rate (1990-2000)	3.9 %
GDP per capita/year <sup>1</sup>	618 US\$
GDP per capita annual growth rate (1990-2000)	1.2 %
Agriculture, GDP	917 million US\$
As proportion of total GDP	14.8 %
Livestock, GDP <sup>1</sup>	342 million US\$
As proportion of agricultural GDP	37.3 %
Human development Rank	157 Ranking <sup>2</sup>
Human development index	0.437
Poverty incidence <sup>3</sup>	
Total	33.4 %
Urban	na %
Rural	40.4 %

<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)

- Senegal is a low income rural economy, with the livestock sector contributing to about 37% of agricultural value added and 5.5% to national GDP. Since the end of the 1970s the Senegalese government has been implementing a number of stabilisation and structural adjustment programs as well as institutional reforms, which have significantly improved the macroeconomic framework and the quality of governance. However, the economic performance remained below expectations until 1993, entailing the establishment of an “Emergency Plan” for restoring the

State's financial capacities and the devaluation of the CFA franc in 1994. Since then the economy has posted growth, with real GDP growing by 2.9% in 1994 and by over 5% per year on average between 1995 and 2001.

### Human population trends

Values expressed in 1,000

Population segment	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Total	5,538	7,345	9,393	9,855	2.9	2.5
Rural	3,559	4,405	4,937	5,038	2.2	1.1
Urban	1,979	2,940	4,456	4,817	4.0	4.2

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	80,500	80,940	80,500	81,560	0.1	-0.1
Cropped <sup>2</sup>	23,500	23,500	24,000	25,060	0.0	0.2
Pastures	57,000	57,440	56,500	56,500	0.1	-0.2

<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)

- Small farmers dominate the agricultural sector: most landholdings are in fact below 3 ha, even though 33% of all cultivated land belongs to around 9% of farms. The 1964 law on the Domaine National did away with customary rights belonging to lineage and family and allowed the government to acquire land for development projects and infrastructural investment, without having to pay compensation. Responsibility for land allocation was given to rural communities on their establishment in 1972, but the lack of clear rules for attributing and taking back land led to poor accountability and concerns regarding the transparency of such decision-making. In 1996, a Plan d'Action Foncier was initiated to consider various options for improved management of land tenure. Three options were put forward: maintaining the status quo, moving to a market-based system of land rights, and some mix of customary and market. Currently no firm decision has been made, though some variant of the last is most likely, if only by default.

## 2. LIVESTOCK RESOURCES

### Livestock populations

Values expressed in 1,000

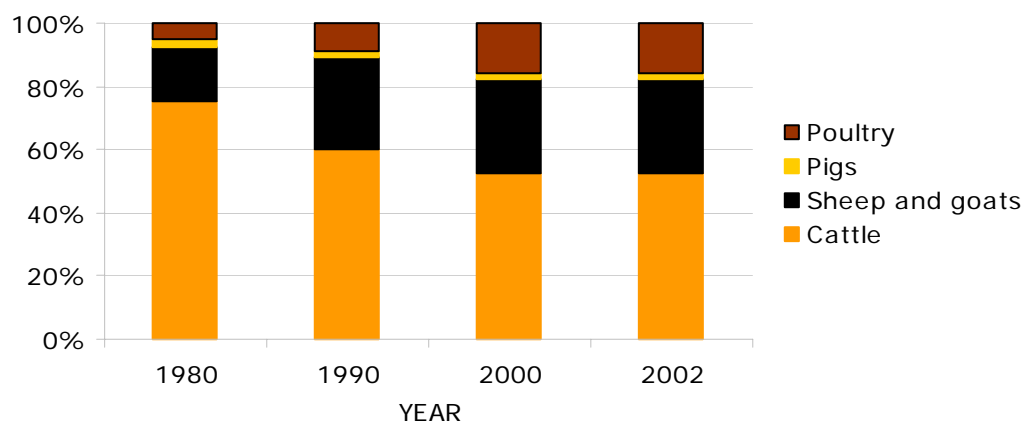
Species	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Cattle	2,500	2,465	2,986	2,997	-0.1	1.9
Sheep and goats	2,920	5,899	8,421	8,440	7.3	3.6
Pigs	180	164	269	291	-0.9	5.1
Poultry	8,423	18,652	45,000	45,000	8.3	9.2
Total LUs	1,662	2,042	2,839	2,851	2.1	3.4

**LU:** *Livestock unit*; **conversion factors:** cattle (0.50), sheep and goats (0.10), pigs (0.20) and poultry (0.01)

Source: FAO (2005a)

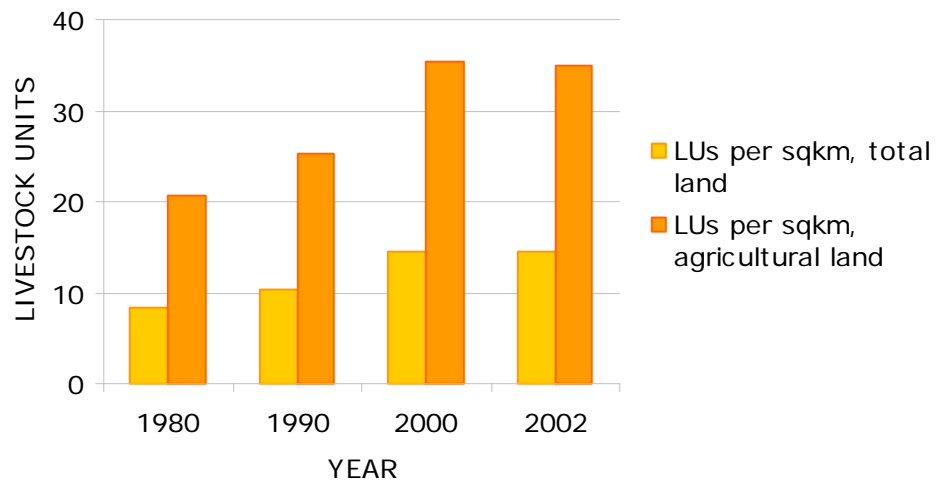
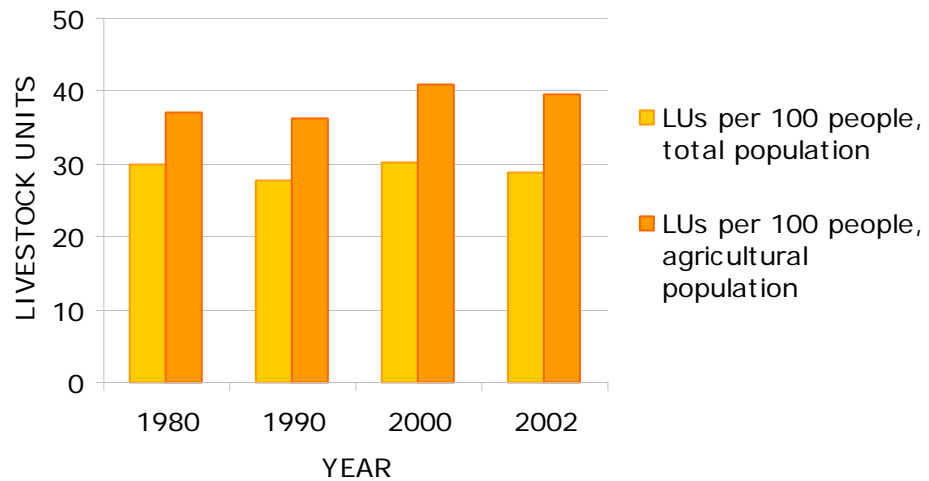
- Livestock contribute to the livelihood of around 30% of Senegalese households. Pastoralists and agro-pastoralists mainly raise cattle, sheep and goats and marginally participate in the meat market; at the same time, most of Senegalese rural households are involved in traditional poultry raising.

### Contribution of different species to total livestock units



Source: FAO (2005a)

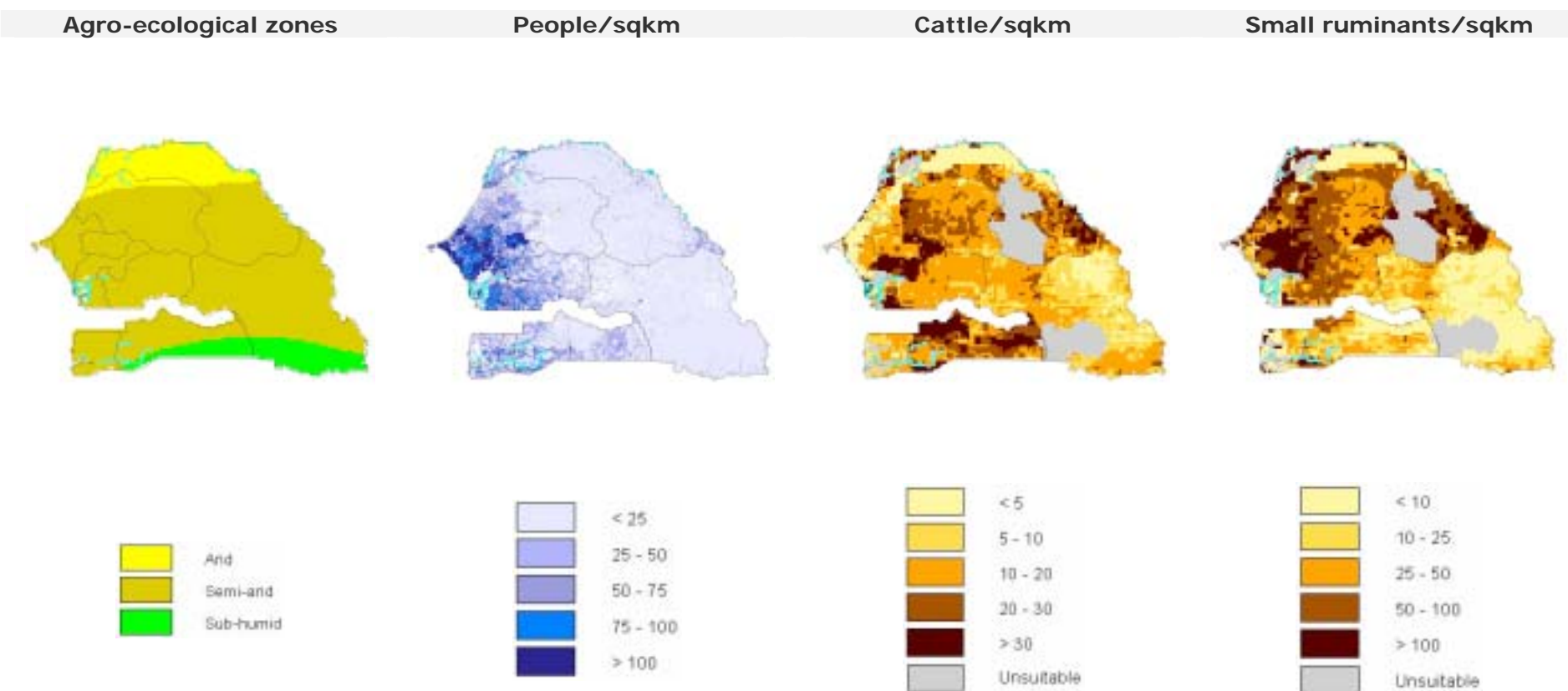
## Selected indicators of livestock resources



Source: FAO (2005a)

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

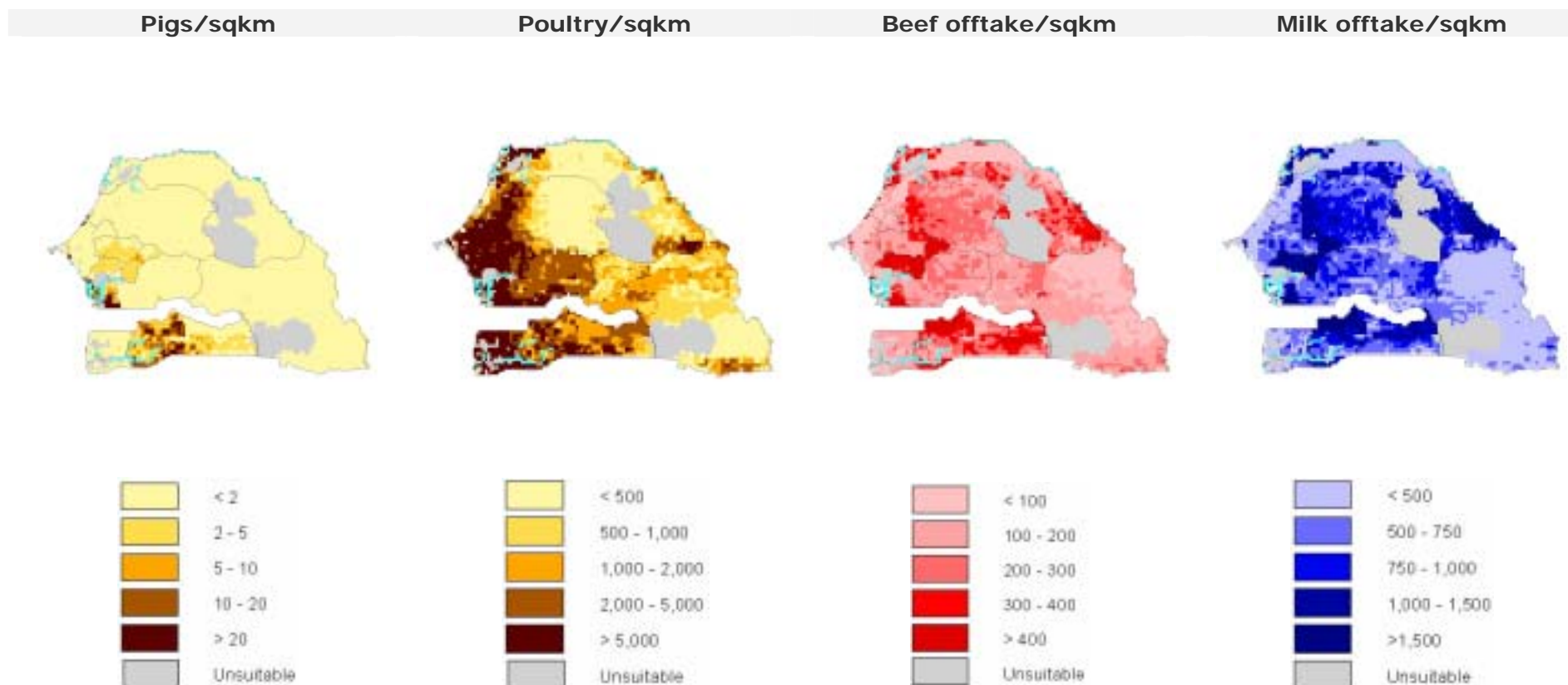
Density calculated on total land area<sup>1</sup>



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

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





Source: FAO (2005b); FAO (2003)

- Pastoralists are located in the northern Ferlo region and in the extreme south-east of the country. They are among the poorest groups of the population and livestock is their main source of wealth. Agro-pastoralists in the groundnut basin are better situated to profit than pastoralists. They are physically closer to Dakar, and have sufficient availability of feed supply from crop residues. Poultry raising is a common activity among the poorest segments of the population; most production is in fact traditional.

### 3. LIVESTOCK PRODUCTION

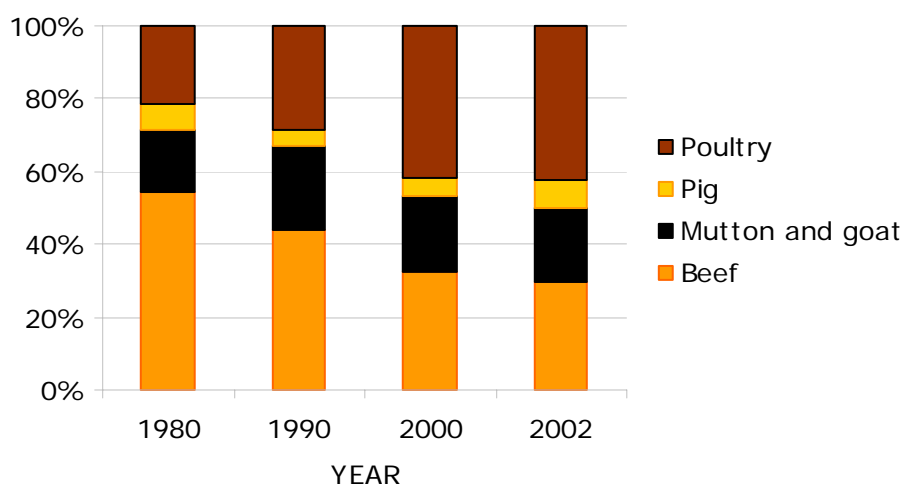
#### Trends in annual production of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	63.7	108.4	165.9	164.8	5.5	4.4
Beef	30.8	42.6	49.8	45.1	3.3	1.6
Mutton and goat	9.8	22.1	31.6	31.2	8.4	3.6
Pig	4.0	4.2	7.8	11.2	0.3	6.4
Poultry	12.1	27.8	64.1	64.1	8.7	8.7
Milk, total	104.6	121.0	133.4	118.0	1.5	1.0
Eggs, total	6.3	14.0	33.0	33.0	8.3	9.0

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	125.0	125.0	125.0	125.0	9.8	13.8	13.3	12.0
Sheep	13.5	14.0	14.0	14.0	24.7	24.2	24.0	23.5
Goat	10.0	12.0	12.0	12.0	34.6	35.1	35.0	34.7
Pigs	30.0	30.0	34.1	45.2	75.0	85.0	85.1	85.0
Poultry	1.0	1.0	1.0	1.0	143.7	149.0	142.4	142.4

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	350	360	340	287	10.0	11.1	10.0	10.0

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	2.0	1.9	1.9	1.9	37.5	39.9	38.9	38.9

Source: FAO (2005a)

- Meat and milk supply increased steadily in the last decades. Increased number of animals made up almost the entire output growth, while productivity growth, as measured by carcass/weight, has remained stagnant. Productivity of the livestock sector is particularly low as compared to both developing and developed countries average.
- The most significant constraints to livestock development are: (i) technical, specifically the persistence of certain epizootic diseases, a shortage of pasture and functioning watering points (because of their high cost, agricultural by-products and stockfeed are impractical as alternatives for pasture), and finally the low milk and meat yields of the local breeds; (ii) financial, owing to the small amount of public investment for the livestock subsector and lack or insufficient credit availability for livestock producers
- The government has identified a number of short and medium-term actions with a view to ensuring the revival of the livestock-meat subsector, mainly through increasing the numbers of short-cycle species (sheep and goats and local poultry), ensuring permanent availability of fodder resources, and the processing of livestock by-products (for example, skins and horns). In addition, appropriate infrastructure facilities (such as regional-level abattoirs) are planned to be established as well as improved monitoring and control of diseases affecting sheep and goat.

## Estimated feed used for livestock production

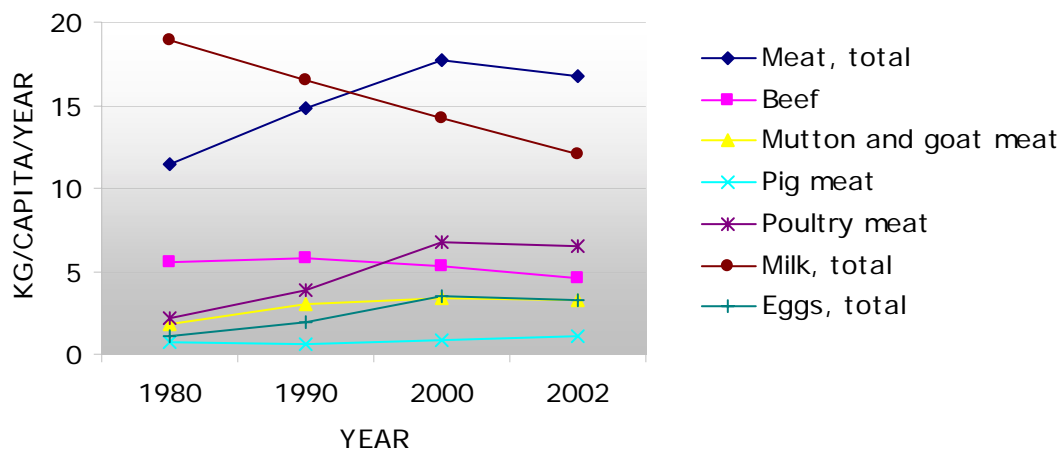
1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Maize	5.0	11.0	7.0	12.0	8.2	-4.4
Barley						
Sorghum						
Millet	34.0	9.5	13.5	13.5	-12.0	3.6
Wheat						
Brans	160.2	221.9	196.2	213.8	3.3	-1.2
Rice Paddy, equivalent						
Roots and Tuber, dry equivalent						
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

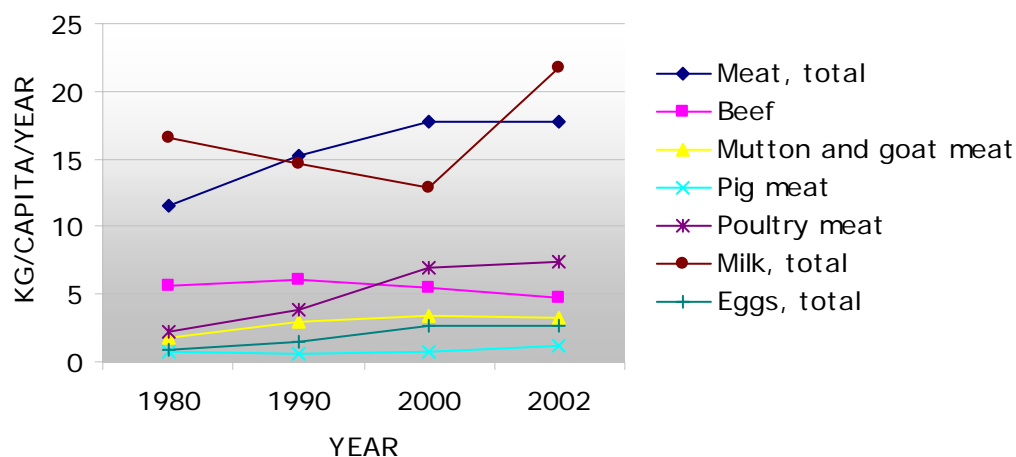
### Trends in annual consumption of meat, milk and eggs

1,000 metric tonnes

Product	Year				Annual growth rate (%)	
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	64.3	111.5	167.6	174.5	5.7	4.2
Beef	31.3	44.2	50.8	46.0	3.5	1.4
Sheep and goat	9.8	22.2	31.6	31.3	8.5	3.6
Pig	4.0	4.4	7.9	11.4	0.9	6.1
Poultry	12.2	29.0	64.6	72.5	9.1	8.3
Milk, total	91.6	108.3	120.0	214.1	1.7	1.0
Eggs, total	5.0	10.9	25.5	25.8	8.1	8.9

Source: FAO (2005a)

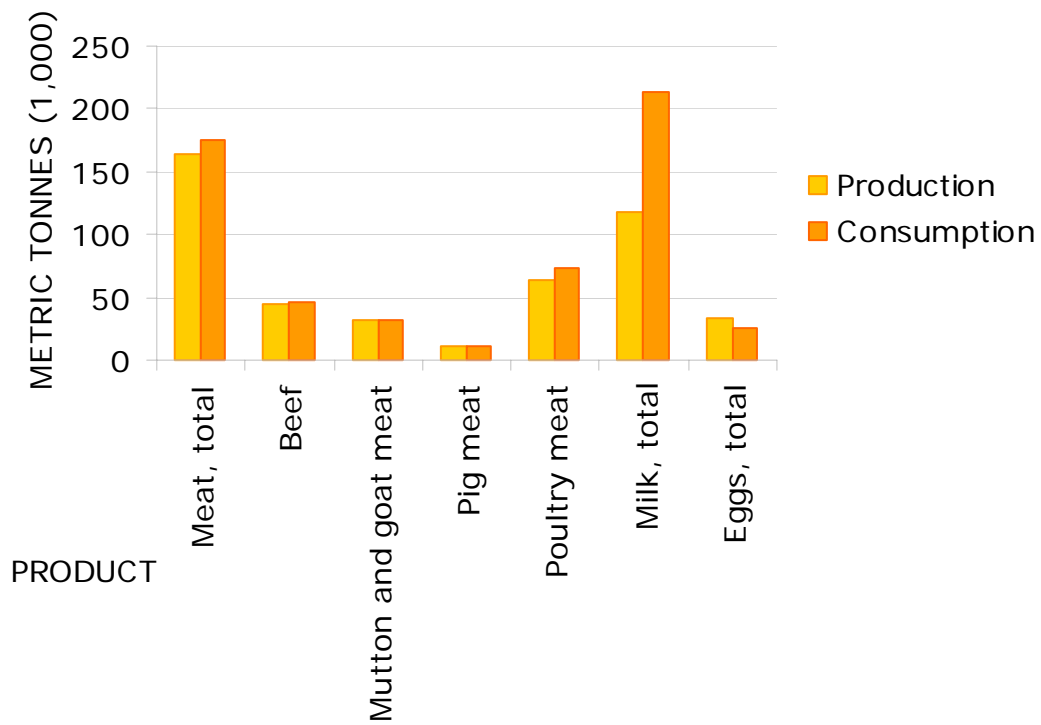
### Trends in annual per capita consumption of meat, milk and eggs



Source: FAO (2005a)

- Meat consumption increased both in aggregate and per capita terms between 1990 and 2002. Increased chicken demand made up almost the entire increase in meat consumption, while per-capita bovine meat consumption decreased. Rather surprisingly, milk demand was stagnant in aggregate terms and lowered in per-capita terms, but has been increasing since 2000.

## 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	803	1,450	1,307	1,571	1,302	1,728	1,742	2,066
Agricultural	112.9	218.7	171.1	128.8	261.9	446.7	407.6	526.2
% agricultural	14.1	15.1	13.1	8.2	20.1	25.8	23.4	25.5
Livestock	3.7	5.7	9.4	8.1	27.6	77.9	73.5	85.5
% livestock	0.5	0.4	0.7	0.5	2.1	4.5	4.2	4.1

<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	0.39	0.07	0.04	0.04	1.27	2.88	1.07	5.57
Beef and buffalo	0.56	0.06	0.01	0.04	2.23	3.63	2.08	2.16
Sheep and goat	0.02	0.00	0.01	0.01	0.00	0.65	0.13	0.26
Pig	1.74	0.08	0.60	0.06	0.50	4.61	2.06	1.76
Poultry	0.02	0.16	0.02	0.06	0.61	4.32	0.78	11.6
Milk, equivalent	0.06	3.55	3.61	9.33	95.08	146.59	101.3	59.75
Eggs, total	0.33	0.01	0.00	0.00	0.00	0.30	0.62	1.65

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	0.88	2.81	1.03	5.53
Beef and buffalo	0.00	0.00	0.00	0.00	1.67	3.57	2.07	2.12
Sheep and goat	0.02	0.00	0.00	0.00	0.00	0.65	0.12	0.24
Pig	1.25	0.00	0.00	0.00	0.00	4.53	1.47	1.70
Poultry	0.00	0.00	0.00	0.00	0.59	4.16	0.76	11.55
Milk, equivalent	0.00	0.00	0.00	0.00	95.01	142.62	97.28	54.60
Eggs, total	0.33	0.00	0.00	0.00	0.00	0.29	0.62	1.65

Source: FAO (2005a)

- Senegal runs a deficit on its trade balance. Main exports are oil of groundnuts and cotton lint, fish and phosphates; major imports are capital goods, fuels, rice and wheat. Major export markets are India, France, Mali and Greece, while the largest imports suppliers are France, Nigeria, Thailand and United States.
- Senegal is member of the Economic Community of West African States (ECOWAS), established in 1975 to promote economic, social and cultural cooperation among

Benin, Burkina-Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea-Bissau, Liberia, Mali, Niger and Nigeria. It is also a member of the West African Economic and Monetary Union (WAEMU), which maintains tariff schedules based on the Harmonized Commodity Description and Coding System, and applies a Common External Tariff (CET) since 1 January 2000. It is member of WTO since 1 January 1995, a member of the Organization of the African Unity (OAU), it has ratified the Treaty establishing the African Economic Community (AEC), and participates in the 2003 Partnership Agreement between African, Caribbean, and Pacific States and the European Union. Finally, it has signed a number of bilateral agreements, such as with Tunisia, Morocco, some Arab countries, France and US.



## 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	140	5,000	-4,860	8	8,000	-7,992	0	10,000	-10,000	5	10,000	-9,995
Sheep and goats	11,000	150,000	-139,000	0	320,000	-320,000	0	380,000	-380,000	0	380,000	-380,000
Pigs	92	10	82	14	0	14	0	0	0	0	0	0
Poultry (1,000)	0	1,067	-1,067	0	351	-351	0	190	-190	0	335	-335
<b>Value (1,000 US\$)</b>												
Cattle	114	1,400	-1,286	2	2,800	-2,798	0	6,500	-6,500	3	6,500	-6,497
Sheep and goats	330	5,800	-5,470	0	25,000	-25,000	0	32,050	-32,050	0	32,050	-32,050
Pigs	24	5	19	20	0	20	0	0	0	0	0	0
Poultry (1,000)	0	736	-736	0	219	-219	0	102	-102	0	111	-111
<b>Total</b>	<b>468</b>	<b>7,941</b>	<b>-7,473</b>	<b>22</b>	<b>28,019</b>	<b>-27,997</b>	<b>0</b>	<b>38,652</b>	<b>-38,652</b>	<b>3</b>	<b>38,661</b>	<b>-38,658</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	250	819	-569	77	3,215	-3,137	68	1,788	-1,721	68	9,724	-9,656
Beef	173	696	-523	26	1,604	-1,578	5	1,059	-1,054	17	993	-976
Mutton and goat	2	0	2	0	144	-144	2	40	-38	4	80	-76
Pig	71	20	51	3	202	-198	47	163	-116	7	201	-194
Poultry	2	74	-72	44	1,252	-1,208	14	505	-490	40	8,408	-8,368
Other	3	29	-31	4	13	-17	0	22	-22	0	41	-41
Milk, equivalent	68	87,083	-87,015	4,299	158,703	-154,403	4,813	121,509	-116,696	11,011	127,904	-116,893
Eggs, total	21	0	21	1	33	-32	0	159	-159	0	425	-425
Hides and skins	925	0	925	1,417	0	1,417	3,016	12	3,004	4,261	29	4,232
<b>Value (1,000 US\$)</b>												
Meat, total	665	903	-238	278	5,668	-5,390	313	2,336	-2,023	185	12,835	-12,650
Beef	446	704	-258	162	2,196	-2,034	8	803	-796	48	1,020	-972
Mutton and goat	12	0	12	0	811	-811	10	109	-100	16	186	-170
Pig	195	110	85	15	603	-588	254	467	-213	33	596	-563
Poultry	11	82	-71	98	2,047	-1,949	42	908	-866	88	10,881	-10,793
Other	1	7	-8	3	11	-14	0	49	-49	0	152	-152
Milk, equivalent	108	18,748	-18,640	1,636	44,136	-42,500	1,258	31,879	-30,620	3,440	32,658	-29,218
Eggs, total	83	1	82	5	34	-29	0	618	-618	0	1,346	-1,346
Hides and skins	2,407	0	2,407	3,785	1	3,784	7,809	9	7,800	4,457	22	4,435
<b>Total</b>	<b>3,263</b>	<b>19,652</b>	<b>-16,389</b>	<b>5,704</b>	<b>49,839</b>	<b>-44,135</b>	<b>9,380</b>	<b>34,841</b>	<b>-25,461</b>	<b>8,082</b>	<b>46,861</b>	<b>-38,779</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	195/1	95/1	78/5	(07/1999)	.../4	386/3	52/3
Avian Influenza <sup>1</sup>	000	000	000	000	000	000	000
Bluetongue	(1995)	(1995)	(1995)	(1995)	(1995)	(1995)	(1995)
BSE <sup>2</sup>	-	-	-	-	000		...
CBPP <sup>3</sup>	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)
Classical swine fever	000	000	000	000	000	000	000
Foot and mouth disease	597/28	314/7	58/4	250/15	140/19	110/11	(04/2002)
Lumpy skin disease	170/4	3/1	(09/1998)	712/12	169/35	87/3	15/1
Newcastle disease	8/1	17/2	47/2	6/2	.../1	480/17	963/4
Peste des petits ruminants	214/14	455/17	64/12	537/12	182/9	553/21	1,620/15
Rift Valley fever			210/3	(10/1999)	109/12	107/3	332/16
Rinderpest	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)
Sheep and goat pox	5/1	7030/15	323/16	78/3	11/7	132/13	150/9
Swine vesicular disease	000	000	000	000	000	000	000
Vesicular stomatitis	000	000	000	000	000	000	000

<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, - disease not reported, 000 disease never reported; (month/year) date of the last reported occurrence of the disease in previous years

Source: OIE (2004)

- The government has been the traditional providers of veterinary services, with private services providers allowed to operate since the 1980s. Currently, private veterinarians supply the majority of vaccinations, which are partly financed by the government. Prices for veterinary services, however, are excessively high for most livestock keepers and many areas of the country are not served. The government, however, maintains that services providers will be soon equipped to perform their health control and inspection functions properly, while it is itself supposed to focus on contagious animal diseases and trade, and establish national guidelines for the homogeneity of veterinary practices.

## 7. REFERENCES AND FURTHER READING

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