LIVESTOCK SECTOR BRIEF

CAMBODIA

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.htmx. 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:

Pius Chilonda - Livestock Information Analyst 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 57056691 Fax: 00 39 06 57055749 Email: Pius.Chilonda@fao.org

1. GENERAL INFORMATION

Human population, land and socio-economics

Human population	13.8	million
Population density on total land	78.2	persons/sqkm
Annual growth rate (1990-2000)	2.8	%
Population in agriculture	9.6	million
As proportion of total population	69.3	%
Total land area	176,520	sqkm
Agricultural land	53,070	sqkm
As proportion of total land	30.1	%
Land under pasture	15,000	sqkm
As proportion of total land	28.3	%
Irrigated area	2,700	ha
Agricultural land per 100 people	38.4	ha
Agricultural land per 100 people in agriculture	55.4	ha
Agricultural population density on agricultural land	180.4	persons/sqkm
GDP ¹	5,200	million US\$
GDP annual growth rate (1990-2000)	na	
GDP per capita/year ¹		US\$
GDP per capita annual growth rate (1990-2000)	na	
Agriculture, GDP		million US\$
As proportion of total GDP	36.3	
Livestock, GDP ¹	395	million US\$
As proportion of agricultural GDP	20.9	%
Human development Rank	130	Ranking ²
Human development index	0.568	
Poverty incidence ³		
Total	36.1	%
Urban	21.1	%
Rural	40.1	%

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		Ye	Annual growth rate (%)			
Segment	1980	1990	2000	2002	1980-1990	1990-2000
Total	6,613	9,744	13,147	13,810	4.0	3.0
Rural	5,795	8,516	10,924	11,307	3.9	2.5
Urban	818	1,228	2,223	2,502	4.1	6.1

Source: FAO (2005a)

Cambodia is a low income economy, with livestock contributing 7.6 percent to GDP. The Cambodian economy was centrally planned from the early 1980's until 1991. Economic reforms were initiated in 1985, and since 1992 progress towards a market economy has been substantial, including the liberalization of domestic markets and privatization of state-owned companies. In the second half of the 1990s the transformation process slowed down because of growing macroeconomic imbalances, but measures to reform the public finances have being gradually implemented since February 1999.

Trends in agricultural land

Values expressed in sqkm

Land type		Ye	Annual growth rate (%)			
	1980	1990	2000	2002	1980-1990	1990-2000
Total	26,500	53,490	53,070	53,070	7.3	-0.1
Cropped ²	20,700	37,950	38,070	38,070	6.2	0.0
Pastures	5,800	15,540	15,000	15,000	10.4	-0.4

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

Source: FAO (2005a)

During the People's Republic of Kampuchea (1979-1989) all land belonged to the State and collectives. The government introduced private property rights in 1989 and decreed that all land rights established prior to 1979 were null and void. The 2001 Land Law provides private ownership rights to agricultural land, and has created a single land registry to favour the efficient functioning of the land market. Tenure security, however, is still inadequate and the country is not fully benefiting from a relatively egalitarian land distribution.

²Arable and permanent crops

2. LIVESTOCK RESOURCES

Livestock populations

Values expressed in 1,000

Species		Yea	Annual growth rate (%)			
	1980	1990	2000	2002	1980-1990	1990-2000
Cattle and buffaloes	1,147	2,917	3,686	3,550	9.8	2.4
Sheep and goats						
Pigs	132	1,515	1,934	2,105	27.6	2.5
Poultry	3,842	11,463	20,749	22,978	11.6	6.1
Total LUs	836	2,426	3,122	3,095	11.2	2.6

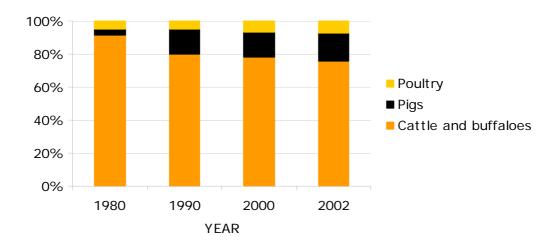
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LU: *Livestock unit*; **conversion factors:** cattle (0.65), buffalo (0.70), sheep and goats (0.10), pigs (0.25) and poultry (0.01)

Source: FAO (2005a)

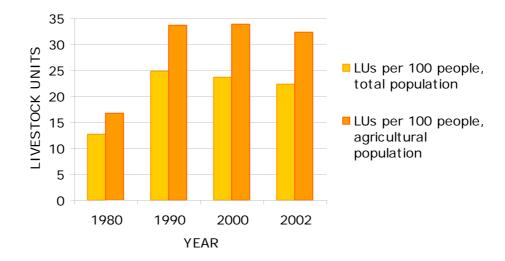
The livestock sector is dominated by smallholders. Poor families commonly have chickens and may raise one or two pigs while richer farmers have usually a pair of draught and breeding cattle. Although few in number and representing less than 1% of livestock owners, there are emerging large scale commercial businesses entering the livestock industry.

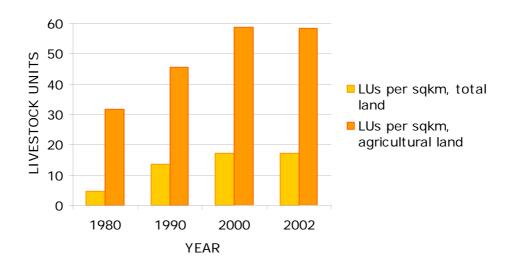
Contribution of different species to total livestock units



Source: FAO (2005a)

Selected indicators of livestock resources

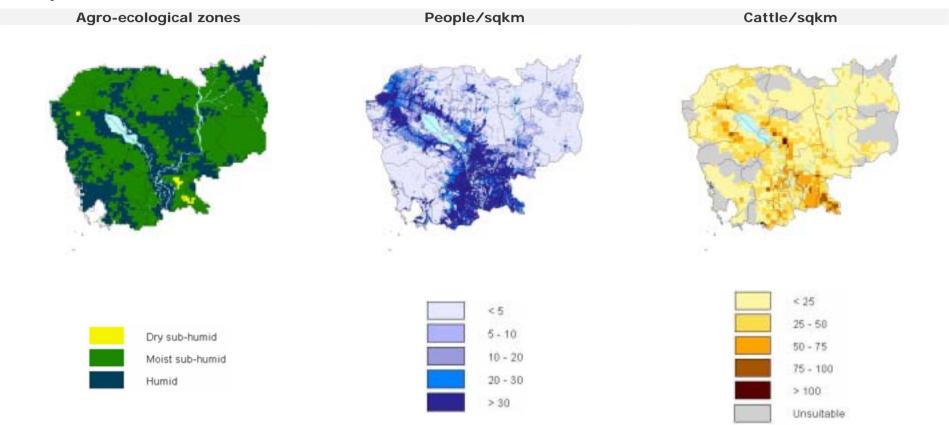




Source: FAO (2005a)

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

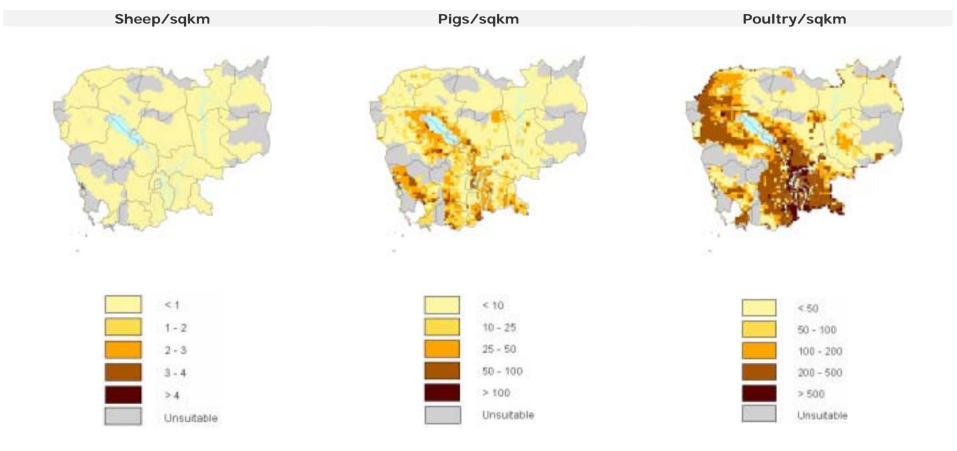
Density calculated on total land area¹



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

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

The dominant mixed livestock farming system is rice based, whereby rice production is heavily dependent on cattle and to a lesser extent buffaloes for draught power and manure. The majority of small farmers raise pigs and poultry. Chicken are kept by 90% to 95% of the households in rural areas. Also milk production is primarily in the hands of small farmers, and the few existing intensive production units are located in areas close to Phnom Penh.



Source: FAO (2005b)

3. LIVESTOCK PRODUCTION

Trends in annual production of meat, milk and eggs

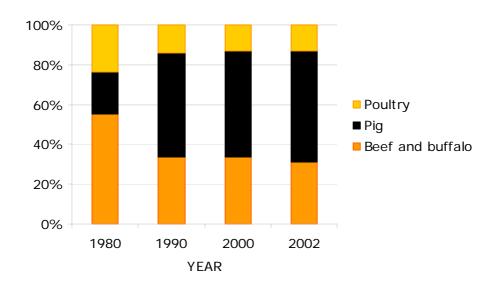
1,000 metric tonnes

Product		Yea	Annual growth rate (%)			
	1980	1990	2000	2002	1980-1990	1990-2000
Meat, total	24.6	115.7	197.4	198.7	16.7	5.5
Beef and buffalo	13.6	38.8	66.3	62.2	11.1	5.5
Mutton and goat						
Pig	5.2	60.6	105.0	110.0	27.7	5.7
Poultry	5.8	16.3	26.1	26.5	10.9	4.8
Milk, total	14.4	17.0	20.4	20.4	1.6	1.8
Eggs, total	7.4	11.0	15.0	16.7	4.0	3.1

Blanks represent no data

Source: FAO (2005a)

Composition of total meat production



Source: FAO (2005a)

Carcass weights and percentage slaughtered by species

Species/year	Carca	ass weigh	t (kg/ani	imal)	Percentage slaughtered/year			
openies, year	1980	1990	2000	2002	1980	1990	2000	2002
Cattle	120.0	120.0	120.0	120.0	8.8	10.8	15.8	15.2
Buffaloes	160.0	160.0	160.0	160.0	9.0	9.0	8.7	8.8
Sheep								
Goat								
Pigs	50.0	50.0	50.0	50.0	79.5	80.0	108.6	104.5
Poultry	1.1	1.1	1.1	1.1	132.7	130.4	115.2	104.5

Blanks represent no data

Source: FAO (2005a)

Milk yields and proportion of dairy animals

Species/year	I.	/lilk yield	(kg/year)	Percentage milked				
species year	1980	1990	2000	2002	1980	1990	2000	2002	
Cattle	170.0	170.0	170.0	170.0	11.0	4.6	4.0	4.1	
Buffaloes									

Blanks represent no data

Source: FAO (2005a)

Egg yields and proportion of laying birds

Species/year		Eggs (k	g/year)		Percentage laying			
opeoles/ year	1980	1990	2000	2002	1980	1990	2000	2002
Chicken	4.3	4.0	3.9	3.9	50.8	25.7	19.7	20.4

Source: FAO (2005a)

Estimated feed used for livestock production

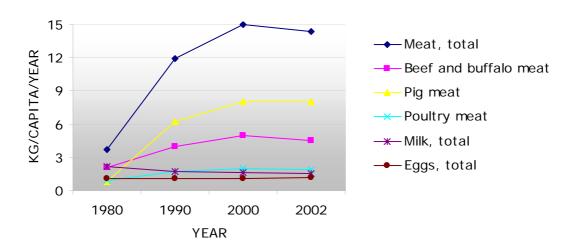
1,000 metric tonnes

Product		Yea	Annual growth rate (%)			
	1980	1990	2000	2002	1980-1990	1990-2000
Maize	1.0	0.9	7.9	7.6	-1.4	24.5
Barley						
Sorghum						
Millet						
Wheat						
Brans	137.6	189.9	305.8	303.3	3.3	4.9
Rice Paddy, equivalent	34.3	50.0	161.0	76.4	3.8	12.4
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)

Over the past two decades meat supply witnessed positive growth; an increase in number of animals is responsible for the growth in output, while productivity remained stagnant. Productivity levels (as defined by carcass weight) are in fact low.

The government plans to increase both livestock production and productivity and has identified the following development objectives: 1) promotion of 'household animal raising'; 2) reduction and elimination of selected animal diseases; 3) increasing feed quality and improvement of breeding and animal husbandry techniques; 4) encouragement of medium-scale businesses and investment in animal raising; 5) development of the meat-processing industry to stimulate exports; 6) promotion of better management and control of animal drugs; 7) development of community-based and private livestock services.

4. CONSUMPTION OF MEAT, MILK AND EGGS

Trends in annual consumption of meat, milk and eggs

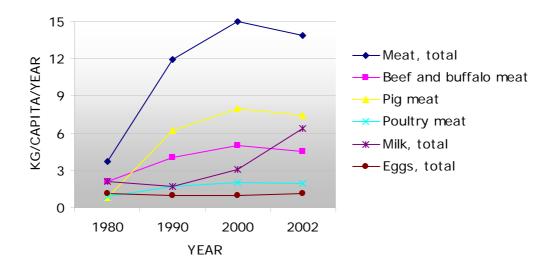
1,000 metric tonnes

Product		Ye	ar		Annual growth rate (%)		
Product	1980	1990	2000	2002	1980-1990	1990-2000	
Meat, total	24.6	115.7	197.5	191.3	16.7	5.5	
Beef and buffalo	13.6	38.8	66.3	62.2	11.1	5.5	
Sheep and goat							
Pig	5.2	60.6	105.0	102.5	27.7	5.7	
Poultry	5.8	16.3	26.2	26.6	10.9	4.9	
Milk, total	13.7	16.2	40.3	87.7	1.7	9.5	
Eggs, total	7.0	10.0	13.4	15.2	3.7	3.0	

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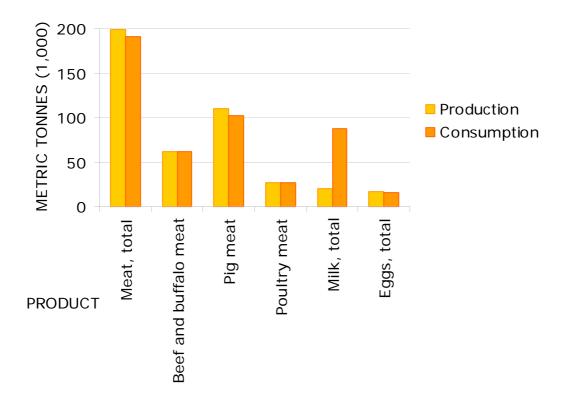
Source: FAO (2005a)

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		Expo	orts		Imports			
	1980	1990	2000	2002	1980	1990	2000	2002
Total		69	1,830	2,371		143	2,264	2,699
Agricultural	0.8	37.7	10.6	36.4	71.9	13.5	454.7	282.1
% agricultural		55.0	0.6	1.5		9.5	20.1	10.5
Livestock	0.0	0.0	0.4	4.0	4.2	0.1	9.1	22.5
% livestock		0.0	0.0	0.2		0.1	0.4	0.8

Blanks represent no data

Export/import 'dependency' for livestock products

Product	Exp	orts as pe produ		e of	Imports as percentage of consumption					
	1980	1990	2000	2002	1980	1990	2000	2002		
Meat, total	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06		
Beef and buffalo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		
Sheep and goat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Pig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01		
Poultry	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.32		
Milk, equivalent	0.00	0.00	0.00	0.00	175.70	4.48	62.07	78.01		
Eggs, total	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.01		

Source: FAO (2005a)

Product	Net ex	ports as	-	age of	Net imports as percentage of consumption				
	1980	1990	2000	2002	1980	1990	2000	2002	
Meat, total	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	
Beef and buffalo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Sheep and goat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Poultry	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.32	
Milk, equivalent	0.00	0.00	0.00	0.00	175.70	4.48	62.07	78.01	
Eggs, total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Source: FAO (2005a)

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)

- Cambodia runs a deficit on its trade balance. The main exports are garments, which accounted for almost 40% of all exports, and forestry products, accounting for 18% of all exports. Livestock trade is minimal: Cambodia just exports some live animals. Principal imports are cigarettes, petroleum products, rice and sugar. It imports 78% of domestic milk consumption, and negligible quantities of other livestock products. Major trading partners of Cambodia are its immediate neighbours in the region as well as Japan and the USA.
- In 1999 Cambodia joined the Association of Southeast Asian Nations (ASEAN), which has been implementing a comprehensive program of regional tariff reduction to enter into force by 2008 (the AFTA, ASEAN Free Trade Agreement). Due to its involvement in ASEAN, Cambodia maintains a commercial and economic cooperation agreement with the European Union; it has also signed bilateral trade agreements with the United States, China and South Korea. Cambodia became a member of WTO in October 2004.

Trade in live animals

Species	1980			1990			2000			2002		
Species			Net trade	Export	Import	Net trade	Export	Import	Net trade	Export	Import	Net trade
				C	Quantitie	s (count)						
Cattle and buffaloes	0		0	0		0	4,000		4,000	10,642		10,642
Sheep and goats												
Pigs	0	0	0	0	0	0	0	86	-86	0	864	-864
Poultry (1,000)		0	0		0	0		35	-35		54	-54
				\	/alue (1,	000 US\$)						
Cattle and buffaloes	0		0	0		0	390		390	1,842		1,842
Sheep and goats												
Pigs	0	0	0	0	0	0	0	60	-60	0	450	-450
Poultry (1,000)	0	0	0	0	0	0	0	60	-60	0	131	-131
Total	0	0	0	0	0	0	390	120	270	1,842	581	1,261

Net trade: Exports less Imports

Blanks represent no data

Source: FAO (2005a)

Trade in livestock products

Product	1980			1990			2000			2002		
Troduct	Export	Import	Net trade	Export	Import	Net trade	Export	Import	Net trade	Export	Import	Net trade
				Qua	ntities (n	netric tonn	es)					
Meat, total	0	0	0	0	0	0	0	124	-124	0	106	-106
Beef and buffalo	0	0	0	0	0	0	0	1	-1	0	7	-7
Mutton and goat												
Pig	0	0	0	0	0	0	0	3	-3	0	13	-13
Poultry	0	0	0	0	0	0	0	120	-120	0	85	-85
Other	0	0	0	0	0	0	0	0	0	0	0	0
Milk, equivalent	0	24,120	-24,120	0	726	-726	0	25,030	-25,030	0	68,416	-68,416
Eggs, total		0	0		0	0		45	-45		1	-1
Hides and skins	0	0	0	0	0	0	78	0	78	2,314	40	2,274
					Value (1	,000 US\$)						
Meat, total	0	0	0	0	0	0	0	124	-124	0	141	-141
Beef and buffalo	0	0	0	0	0	0	0	4	-4	0	22	-22
Mutton and goat												
Pig	0	0	0	0	0	0	0	9	-9	0	52	-52
Poultry	0	0	0	0	0	0	0	110	-110	0	66	-66
Other	0	0	0	0	0	0	0	1	-1	0	1	-1
Milk, equivalent	0	4,200	-4,200	0	115	-115	0	8,690	-8,690	0	21,593	-21,593
Eggs, total		0	0		0	0		80	-80		1	-1
Hides and skins	0	0	0	0	0	0	53	0	53	2,175	81	2,094
Total	0	4,200	-4,200	0	115	-115	53	8,894	-8,841	2,175	21,816	-19,641

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							-
Avian Influenza ¹							-
Bluetongue							000
BSE ²							-
CBPP ³							-
Classical swine fever							/
Foot and mouth disease	/	/	/	849/	/	10,697/	3,902/35
Lumpy skin disease							-
Newcastle disease							/
Peste des petits ruminants							-
Rift Valley fever							-
Rinderpest							000
Sheep and goat pox							000
Swine vesicular disease							-
Vesicular stomatitis							-

¹ Highly pathogenic avian influenza

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)

² Bovine spongiform encephalopathy

³ Contagious bovine pleuropneumonia

- Production of all livestock species is constrained by infectious and parasitic diseases. The Department of Animal Health and Production (DAHP) and Provincial Offices of Animal Health and Production (OAHP) have responsibility for animal health. DAHP, however, has insufficient skilled personnel in its central and provincial offices; furthermore its limited budget is mostly expended on operating public livestock farms and in salaries. Private veterinarians are still very few, constrained by a lack of access to vaccines and drugs, inadequate cold-chain facilities and lack of technical knowledge.
- The government intends to develop appropriate veterinary and animal production technologies with an emphasis on small livestock producers. In particular, it has established the Village Livestock Workers and the Village Animal Health System and Disease control program to support major disease prevention in cattle and buffaloes, and especially swine fever in pigs and Newcastle in poultry. These services are intended to incorporate a cost recovery component.

7. REFERENCES AND FURTHER READING

Asian Development Bank (2003) Report and Recommendation of the President of the Board of Directors on Proposed Loans and Technical Assistance Grant to the Kingdom of Cambodia for the Agriculture Sector Development Program, Manila, Asian Development Bank.

Chandararot, K. (2003) The Development of Micro Finance in Cambodia, Cambodia Development Review, 6 (3).

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).

FAO/PPLPI Pro-poor Livestock Policy Initiative (2004). Livestock Sector Policy Brief: Cambodia. Mimeo, FAO, Rome, Italy.

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).

Royal Government of Cambodia (2001) Agricultural Development Plan 2001-2005, Ministry of Agriculture, Forestry and Fisheries, Phnom Penh.

Royal Government of Cambodia (2001) National Poverty Reduction Strategy 2001-2003, Phnom Penh.

Royal Government of Cambodia (2003) Poverty Reduction Strategy Paper – Joint Staff Assessment, Phnom Penh.

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.