

Appendix 1.1—Growth rates of meat production, consumption and trade, by global region¹

Country	Poultry			Bovine			Pork		
	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99
Production	<i>Growth rates</i>								
World	5.8	4.6	5.3	1.9	1.6	0.7	3.6	3.0	2.8
Developed countries	5.1	3.5	2.4	1.5	0.9	-1.5	2.7	1.1	-0.1
United States	3.7	5.0	4.5	0.0	0.4	1.5	1.5	-0.2	2.2
Transition markets	7.7	2.6	-5.3	2.2	1.9	-7.2	2.4	1.5	-4.9
Developing countries	7.5	6.9	9.1	2.7	2.8	3.7	5.6	6.0	5.6
Asia developed	8.6	2.2	-0.6	4.5	2.8	-0.2	7.1	0.7	-2.1
Asia developing	6.3	8.2	9.7	2.8	4.8	6.4	5.8	7.1	5.8
South Asia	3.4	9.6	6.3	2.4	3.8	2.2	4.0	4.7	3.3
China	5.4	8.8	13.5	5.2	14.8	16.0	6.3	7.3	6.0
East & Southeast Asia	6.5	7.4	5.9	3.0	1.8	3.2	3.6	6.2	4.0
Near East	9.0	7.6	5.3	3.3	2.7	3.2	2.5	6.4	5.7
Latin America & Caribbean	9.9	5.5	9.0	2.7	2.2	2.1	4.9	-0.7	3.9
Africa developing	5.6	6.0	4.6	2.2	1.3	2.4	3.5	6.1	2.5
Imports									
World	11.6	5.3	12.1	4.2	3.4	2.1	3.9	4.8	6.7
Developed countries	6.0	7.7	10.2	3.2	2.8	1.8	3.9	4.5	5.9
United States	-0.7	--	13.0	1.9	1.2	2.4	0.6	5.6	-0.2
Transition markets	11.3	1.2	19.0	13.1	2.3	1.7	3.3	6.0	7.0
Developing countries	25.7	2.2	14.9	12.8	5.9	3.3	5.2	10.1	13.4
Asia developed	15.5	14.9	9.1	11.5	9.1	7.0	17.9	9.9	10.1
Asia developing	28.3	1.6	16.2	16.3	8.1	2.7	6.0	12.9	13.8
South Asia	26.6	11.4	15.9	-4.1	26.5	1.3	-20.2	24.4	13.1
China	9.0	15.0	23.4	8.2	10.6	4.8	5.2	12.4	12.4
East & Southeast Asia	16.6	12.0	22.7	8.9	13.6	7.6	13.0	18.0	18.6
Near East	40.1	-3.8	5.5	26.2	4.1	-1.4	5.4	4.5	6.8
Latin America & Caribbean	19.0	5.7	13.9	9.5	5.7	6.9	5.9	7.7	13.7
Africa developing	32.0	0.2	6.7	14.6	3.2	0.3	1.2	8.2	9.8

See footnote at end of table.

--Continued

Appendix 1.1—Growth rates of meat production, consumption and trade, by global region¹--Continued

Country	Poultry			Bovine			Pork		
	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99
	<i>Growth rates</i>								
Exports									
World	11.6	5.4	13.1	4.8	3.1	2.0	4.1	5.2	6.0
Developed countries	9.8	4.6	12.1	7.3	3.4	2.4	4.3	4.5	6.4
United States	17.9	6.2	18.2	15.6	18.8	8.8	8.3	1.1	18.9
Transition markets	7.4	0.3	2.3	2.3	-5.4	3.0	3.7	0.5	2.0
Developing countries	34.0	8.7	16.0	-0.1	2.4	0.9	0.5	13.5	2.3
Asia developed	39.1	-2.8	-4.8	5.0	17.4	-6.4	6.1	27.8	8.9
Asia developing	19.4	13.6	20.0	20.9	15.5	-0.3	0.6	13.3	-2.4
South Asia	-13.6	35.5	8.6	--	5.2	12.9	-1.5	22.5	19.9
China	12.8	11.2	27.5	20.3	29.5	-10.9	0.5	12.8	-8.1
East & Southeast Asia	--	22.2	9.1	9.8	0.9	3.0	11.3	31.7	22.3
Near East	45.0	-0.9	6.7	0.6	25.3	2.3	10.4	3.1	37.5
Latin America & Caribbean	--	5.7	11.4	-0.5	0.8	0.9	0.7	19.2	29.2
Africa developing	2.3	19.9	7.0	-2.4	-3.7	4.9	-13.1	-10.2	40.9
Consumption									
World	5.7	4.7	5.1	1.8	1.6	0.7	3.7	3.0	2.9
Developed countries	4.8	3.6	1.9	1.2	0.8	-1.7	2.9	1.0	-0.1
United States	3.2	5.0	3.1	0.1	0.1	1.1	1.4	0.1	1.6
Transition markets	7.9	2.6	-2.9	2.6	2.2	-6.7	3.1	1.5	-4.1
Developing countries	7.8	6.5	9.1	3.2	2.9	4.0	5.7	6.0	5.7
Asia developed	8.7	3.6	1.7	5.8	5.5	2.6	7.8	2.0	1.5
Asia developing	7.2	7.5	9.8	3.1	4.7	6.4	5.9	7.1	5.9
South Asia	3.5	9.6	6.3	2.2	3.8	1.9	4.0	4.7	3.3
China	5.4	9.0	13.6	5.1	12.9	17.5	6.4	7.2	6.2
East & Southeast Asia	6.3	6.9	5.9	3.1	2.8	3.9	3.6	6.2	4.0
Near East	12.9	5.0	5.0	5.1	3.2	2.2	2.8	6.0	5.0
Latin America & Caribbean	9.3	5.4	9.1	3.3	2.2	2.6	4.9	-0.5	4.0
Africa developing	6.5	5.5	4.7	3.0	1.7	2.2	3.5	6.2	2.8

See footnote at end of table.

--Continued

Appendix 1.1—Growth rates of meat production, consumption and trade, by global region¹--Continued

Country	Mutton & goat			Fish			Total		
	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99
Production									
World	0.7	2.8	1.6	1.4	3.2	2.4	2.4	2.9	2.6
Developed countries	-0.7	1.5	-2.1	1.6	0.6	-2.7	1.9	1.0	-0.4
United States	-5.4	1.2	-4.1	3.1	4.3	-1.0	1.4	2.2	2.2
Transition markets	-1.1	1.4	-6.2	3.1	0.7	-7.6	2.3	0.6	-5.6
Developing countries	2.3	3.8	3.8	1.2	5.6	5.0	3.3	5.3	5.2
Asia developed	-1.6	4.6	0.2	1.7	-0.2	-5.8	2.3	-0.6	-3.7
Asia developing	3.1	4.6	4.5	4.2	5.7	7.1	4.6	6.4	6.3
South Asia	3.2	4.2	1.4	2.7	4.3	4.2	2.8	4.6	3.1
China	7.2	9.4	10.1	3.1	10.3	11.8	5.1	8.8	8.5
East & Southeast Asia	3.8	2.8	-0.2	5.1	3.2	1.7	4.6	3.9	2.5
Near East	2.0	1.9	2.6	7.3	3.9	5.3	5.1	3.6	4.2
Latin America & Caribbean	-2.2	1.3	-0.8	-3.1	5.6	-0.3	1.5	3.7	2.9
Africa developing	2.7	2.8	3.0	1.6	4.3	2.8	2.2	3.5	2.8
Imports									
World	1.2	0.2	0.5	0.6	5.4	2.0	1.7	4.8	3.3
Developed countries	-1.8	0.6	0.2	-0.8	4.6	2.0	0.2	4.4	2.9
United States	-8.1	2.3	11.3	-0.6	3.0	1.9	-0.9	2.6	2.6
Transition markets	25.2	-1.2	-22.5	-0.8	0.7	4.3	1.4	0.1	6.6
Developing countries	16.6	-0.6	1.3	6.2	7.4	1.9	8.4	6.1	4.1
Asia developed	-2.6	-3.6	-7.8	7.2	8.7	3.1	7.1	10.1	3.9
Asia developing	22.2	-2.8	-0.8	8.9	13.4	1.8	12.7	10.2	4.0
South Asia	8.0	35.7	17.6	-8.3	9.5	12.4	-7.9	13.7	8.7
China	17.6	9.1	9.6	11.6	17.9	0.3	13.1	15.5	3.6
East & Southeast Asia	19.6	2.1	-3.7	4.5	11.2	3.5	5.2	11.8	5.1
Near East	21.6	-4.7	-2.9	22.1	1.9	5.8	26.3	-1.3	3.6
Latin America & Caribbean	-6.8	13.3	9.8	-0.2	-2.3	3.8	0.0	1.0	6.7
Africa developing	7.3	-2.0	0.6	10.8	0.3	1.8	12.2	-1.5	3.0

See footnote at end of table.

--Continued

Appendix 1.1—Growth rates of meat production, consumption and trade, by global region¹--Continued

Country	Mutton & goat			Fish			Total		
	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99	1970-80	1980-90	1990-99
Exports									
World	1.6	0.0	0.8	-0.6	4.8	2.2	1.0	4.3	3.7
Developed countries	1.5	0.0	1.4	2.7	2.3	3.1	3.4	3.1	4.3
United States	0.0	19.2	-5.4	16.7	10.7	-2.5	16.0	9.2	7.4
Transition markets	12.2	-1.4	-10.5	4.2	4.4	6.4	3.4	1.9	4.7
Developing countries	3.1	-0.4	-5.7	-3.8	7.7	1.4	-2.2	6.4	2.9
Asia developed	--	--	--	1.9	0.7	-13.9	2.1	-3.3	-11.4
Asia developing	11.0	-1.2	-9.2	10.8	6.3	5.9	8.0	7.9	5.7
South Asia	--	3.1	4.9	1.4	5.6	6.1	1.8	7.1	6.8
China	31.2	0.9	2.4	9.1	10.9	7.9	5.8	11.8	7.1
East & Southeast Asia	7.9	-2.2	-22.3	14.6	4.6	4.5	11.1	6.0	4.3
Near East	12.6	-1.6	-5.3	-0.4	4.3	4.1	5.9	0.8	2.8
Latin America & Caribbean	-4.1	0.8	-4.7	-6.6	8.4	-1.1	-4.1	5.9	1.2
Africa developing	-0.3	10.7	16.4	-3.9	5.5	6.0	-4.5	5.2	4.9
Consumption									
World	0.7	2.7	1.7	2.6	3.3	3.2	2.8	2.9	2.8
Developed countries	-1.3	1.3	-2.5	1.6	1.7	-0.5	1.8	1.3	-0.1
United States	-5.7	1.1	-1.3	2.6	3.5	1.2	1.1	1.9	1.7
Transition markets	-0.4	1.2	-6.7	2.2	-0.1	-5.4	2.5	0.5	-4.4
Developing countries	2.7	3.7	3.8	3.8	4.8	5.7	4.5	5.0	5.5
Asia developed	-2.5	-3.1	-6.9	1.5	1.4	-0.5	2.3	1.8	0.5
Asia developing	3.7	4.3	4.4	3.2	5.8	6.8	4.5	6.3	6.2
South Asia	3.1	4.2	1.4	2.2	3.9	4.4	2.6	4.4	3.0
China	7.2	9.5	10.1	2.8	9.8	10.3	5.2	8.5	8.1
East & Southeast Asia	4.2	3.4	0.4	3.5	3.5	2.4	3.8	4.2	3.0
Near East	3.1	1.3	2.3	8.3	3.9	5.8	7.1	2.8	3.9
Latin America & Caribbean	-2.3	1.7	0.3	5.5	1.7	1.0	4.6	2.5	4.1
Africa developing	2.7	2.9	2.9	5.4	2.6	2.0	4.4	2.4	2.7

¹Compound annual growth rates between 3-year averages centered on the years indicated.

Source: FAOSTAT database, August 2002.

Appendix table 1.2—Alternative estimates of broiler meat production and consumption in India

Year	Production				Imports	Exports	Consumption ⁵			Industry average
	USDA ¹	FAO ²	USAPEEC ³	Industry average ⁴	USDA ¹	USDA ¹	USDA ¹	FAO	USAPEEC	
<i>1,000 tons</i>										
1980	213	113	--	--	0	0	213	113	--	--
1981	215	120	--	--	0	0	215	120	--	--
1982	230	130	--	--	0	0	230	130	--	--
1983	235	137	--	--	0	0	235	137	--	--
1984	240	150	--	--	0	0	240	150	--	--
1985	251	161	--	--	0	0	251	161	--	--
1986	257	180	--	--	0	0	257	180	--	--
1987	263	194	--	--	0	0	263	194	--	--
1988	330	225	--	--	0	0	330	225	--	--
1989	380	289	--	--	0	0	380	289	--	--
1990	380	342	410	--	0	0	380	342	410	--
1991	420	360	440	--	0	0	420	360	440	--
1992	520	405	430	--	0	0	520	405	430	--
1993	560	454	455	--	0	0	560	454	455	--
1994	507	468	507	--	0	0	507	468	507	--
1995	578	479	580	--	0	0	578	479	580	--
1996	665	479	660	--	0	0	665	479	660	--
1997	596	527	630	596	0	0	596	527	630	596
1998	710	540	730	710	0	0	710	540	730	710
1999	820	559	800	820	0	0	820	559	800	820
2000	1,080	575	--	911	0	0	1,080	575	--	911
2001	1,250	595	--	1,034	0	1	1,249	594	--	1,033
2002	1,400	595	--	--	0	2	1,398	593	--	--
2003	1,500	--	--	--	0	5	1,495	--	--	--
Growth rates:										
1980-90	6.0	11.7	--	--	--	--	6.0	11.7	--	--
1990-2000	11.0	5.3	7.7	--	--	--	11.0	5.3	6.1	--
1990-96	9.8	5.8	8.3	--	--	--	9.8	5.8	5.9	--
1997-2002	18.6	2.5	--	14.8	--	--	18.6	2.4	--	14.8

-- = Not available.

¹USDA PS&D database, January 2003.

²FAOSTAT database, January 2003.

³U.S.A. Poultry and Egg Export Council; reported to be derived from Annual Reports-Department of Animal Husbandry & Dairy, GOI, and FAO data.

⁴Average of production estimates provided by three industry sources during August 2001 ERS field study.

⁵All consumption estimates calculated using USDA trade data and assuming zero stocks.

Appendix table 1.3—Regionwise estimates of population and net state domestic product in India

Region and state	Population, 2001		Net state domestic product, 1999/2000			
	2001	Urban share	Total		Per capita	
	Millions	Percent	Rs billion	Rs	Dollars	Rank
North						
Chandigarh (UT)	0.9	89.8	40.6	45,065	1,003	1
Delhi (UT)	13.8	93.0	490.4	35,580	792	2
Haryana	21.1	29.0	416.3	19,744	439	6
Himachal Pradesh	6.1	9.8	99.7	16,407	365	10
Jammu & Kashmir	10.1	24.9	121.5	12,064	268	18
Punjab	24.3	33.9	549.6	22,627	504	4
Rajasthan	56.5	23.4	666.5	11,801	263	20
Uttar Pradesh & Uttaranchal	174.5	21.0	1,646.3	9,433	210	23
Total	307.2	26.4	4,030.8	13,121	292	--
(National share, percent)	0.3		0.3			
East						
Arunachal Pradesh	1.1	5.5	15.3	14,050	313	15
Assam	26.6	12.7	250.5	9,404	209	24
Bihar & Jharkhand	109.8	13.4	627.6	5,716	127	26
Manipur	2.4	23.9	25.5	10,692	238	21
Meghalaya	2.3	19.6	28.1	12,168	271	17
Mizoram	0.9	49.5	--	--	--	--
Nagaland	2.0	17.7	--	--	--	--
Orissa	36.7	15.0	327.3	8,916	198	25
Sikkim	0.5	11.1	7.4	13,617	303	16
Tripura	3.2	17.0	38.1	11,949	266	19
West Bengal	80.2	28.0	1,223.3	15,249	339	13
Total	265.8	18.3	2,543.1	9,674	215	
(National share, percent)	26.0		18.0			
West						
Dadara & Nagar Haveli (UT)	0.2	22.9	--	--	--	--
Daman & Diu (UT)	0.2	36.3	--	--	--	--
Goa	1.3	49.8	--	--	--	--
Gujarat	50.6	37.4	893.2	17,653	393	9
Madhya Pradesh & Chhatisgarh	81.2	25.0	863.9	10,641	237	22
Maharashtra	96.8	42.4	2,122.2	21,934	488	5
Total	230.3	35.2	3,879.2	16,974	378	
(National share, percent)	22.0		27.0			
South						
Andaman & Nicobar (UT)	0.4	32.7	--	--	--	--
Andhra Pradesh	75.7	27.1	1,105.3	14,595	325	14
Karnataka	52.7	34.0	846.9	16,059	357	12
Kerala	31.8	26.0	587.0	18,438	410	8
Lakshadweep (UT)	0.1	44.5	--	--	--	--
Pondicherry (UT)	1.0	66.6	31.8	32,696	728	3
Tamil Nadu	62.1	43.9	1,178.3	18,970	422	7
Total	223.8	33.4	3,749.2	16,784	374	
(National share, percent)	22.0		26.0			
Total	1,027.0	27.8	14,202.4	13,891	309	

-- = Not available. UT = Union territory.

Note: Population and net state domestic product data are the most recent available. Net domestic product underestimates income as measured by gross national product, but is the only available statewide income measure.

Source: *Economic Survey*, 2001/02, Ministry of Finance, Government of India, 2002.

Appendix table 1.4—Supply and use of corn in India

Year	Area 1,000 ha.	Yield Tons/ha.	Production	Imports	Exports	Consumption			Ending stocks	October/September trade		
						Total	Nonfeed	Feed		Imports	From U.S.	Exports
						----- 1,000 tons -----						
1980	6,005	1.16	6,957	10	10	6,807	6,207	600	500	10	10	10
1981	5,935	1.16	6,897	0	10	6,987	6,287	700	400	0	0	20
1982	5,720	1.14	6,549	0	0	6,649	5,899	750	300	5	5	0
1983	5,859	1.35	7,922	0	5	7,717	6,917	800	500	0	0	5
1984	5,800	1.46	8,442	0	6	8,436	7,586	850	500	0	0	6
1985	5,797	1.15	6,643	0	5	7,038	6,188	850	100	0	0	5
1986	5,873	1.27	7,457	0	5	7,502	6,602	900	50	0	0	5
1987	5,561	1.03	5,721	275	0	5,996	4,917	1,079	50	304	200	0
1988	5,897	1.40	8,229	200	0	8,179	7,079	1,100	300	200	200	0
1989	5,915	1.63	9,651	0	0	9,451	7,151	2,300	500	0	0	0
1990	5,904	1.52	8,962	0	1	9,261	6,961	2,300	200	0	0	1
1991	5,860	1.38	8,060	0	4	8,156	6,406	1,750	100	0	0	4
1992	5,963	1.68	9,992	1	28	9,965	7,065	2,900	100	1	1	28
1993	5,995	1.60	9,600	0	36	9,564	6,964	2,600	100	0	0	36
1994	6,135	1.45	8,884	1	17	8,868	6,968	1,900	100	1	0	17
1995	5,979	1.59	9,530	0	42	9,488	6,988	2,500	100	0	0	42
1996	6,248	1.70	10,612	0	8	10,304	7,004	3,300	400	0	0	8
1997	6,305	1.72	10,852	1	7	10,946	7,046	3,900	300	1	0	7
1998	6,080	1.76	10,680	175	2	10,853	6,953	3,900	300	175	85	2
1999	6,427	1.78	11,470	250	17	11,350	6,800	4,550	653	250	0	13
2000	6,557	1.84	12,068	50	95	11,950	6,800	5,150	726	50	0	92
2001	6,870	1.97	13,510	10	25	13,050	6,750	6,300	1,171	10	0	25
2002	6,200	1.77	11,000	300	50	12,000	6,800	5,200	421	300	0	50

Source: USDA PS&D database; January 2003.

Appendix table 1.5—Supply and use of soybeans in India

Year	Area	Yield	Production	Imports		Exports	Consumption			Ending stocks	
				Total	From U.S.		Total	Crush	Food		Other ¹
		1,000 ha.	Tons/ha	----- 1,000 tons -----							
1980	600	0.74	442	0	0	0	442	383	15	44	0
1981	622	0.75	467	0	0	0	467	405	15	47	0
1982	770	0.64	491	0	0	0	491	421	20	50	0
1983	836	0.73	614	0	0	0	614	528	25	61	0
1984	1,243	0.77	955	0	0	0	955	829	30	96	0
1985	1,340	0.76	1,020	0	0	0	1,020	890	30	100	0
1986	1,527	0.58	891	21	0	0	912	787	35	90	0
1987	1,543	0.58	898	25	25	0	923	750	30	143	0
1988	1,734	0.89	1,547	0	0	0	1,547	1,372	25	150	0
1989	2,253	0.80	1,806	0	0	0	1,806	1,606	30	170	0
1990	2,564	1.01	2,602	0	0	0	2,602	2,362	40	200	0
1991	3,185	0.78	2,492	0	0	0	2,492	2,232	40	220	0
1992	3,627	0.86	3,106	0	0	0	3,106	2,810	50	246	0
1993	4,250	0.94	4,000	0	0	0	4,000	3,600	50	350	0
1994	4,025	0.80	3,236	55	55	0	3,175	2,750	50	375	116
1995	4,817	0.93	4,476	0	0	0	4,476	4,046	50	380	116
1996	5,000	0.82	4,100	0	0	0	4,100	3,650	50	400	116
1997	5,600	0.96	5,350	0	0	0	5,410	4,770	80	560	56
1998	6,350	0.94	6,000	0	0	0	6,056	5,400	100	556	0
1999	5,645	0.92	5,200	0	0	0	5,160	4,400	200	560	40
2000	5,800	0.91	5,250	0	0	0	5,265	4,525	200	540	25
2001	6,000	0.90	5,400	0	0	0	5,400	4,629	202	569	25
2002	5,600	0.89	5,000	0	0	0	5,005	4,265	190	550	20

¹Feed, seed, and waste.

Source: USDA PS&D database; January 2003.

Appendix table 1.6—Supply and use of soybean meal in India

Year	Crush	Extraction rate	Production	Imports		Exports	Consumption			Ending stocks	
				Total	From U.S.		Total	Food	Feed & waste		
	<i>1,000 tons</i>	<i>Percent</i>		----- <i>1,000 tons</i> -----							
1980	383	0.80	306	0	0	107	199	7	192	0	
1981	405	0.80	324	0	0	200	124	10	114	0	
1982	421	0.80	337	0	0	225	112	15	97	0	
1983	528	0.80	422	0	0	250	172	25	147	0	
1984	829	0.80	663	0	0	350	313	35	278	0	
1985	890	0.80	712	0	0	450	262	40	222	0	
1986	787	0.80	628	0	0	450	178	30	148	0	
1987	750	0.80	600	0	0	360	240	30	210	0	
1988	1,372	0.80	1,100	0	0	890	210	30	180	0	
1989	1,606	0.80	1,285	0	0	950	335	30	305	0	
1990	2,362	0.80	1,890	0	0	1,420	470	40	430	0	
1991	2,232	0.80	1,785	0	0	1,180	605	30	575	0	
1992	2,810	0.80	2,250	0	0	2,005	245	30	215	0	
1993	3,600	0.80	2,880	0	0	2,200	680	40	640	0	
1994	2,750	0.80	2,200	0	0	1,580	620	50	570	0	
1995	4,046	0.79	3,200	0	0	2,600	490	40	450	110	
1996	3,650	0.80	2,920	0	0	2,450	580	50	530	0	
1997	4,770	0.80	3,800	0	0	2,600	1,200	74	1,126	0	
1998	5,400	0.80	4,295	0	0	2,800	1,425	84	1,341	70	
1999	4,400	0.80	3,515	0	0	2,375	1,210	80	1,130	0	
2000	4,525	0.80	3,614	0	0	2,350	1,224	79	1,145	40	
2001	4,629	0.80	3,700	0	0	2,450	1,255	80	1,175	35	
2002	4,265	0.80	3,405	0	0	1,800	1,595	90	1,505	45	

Source: USDA PS&D database; January 2003.