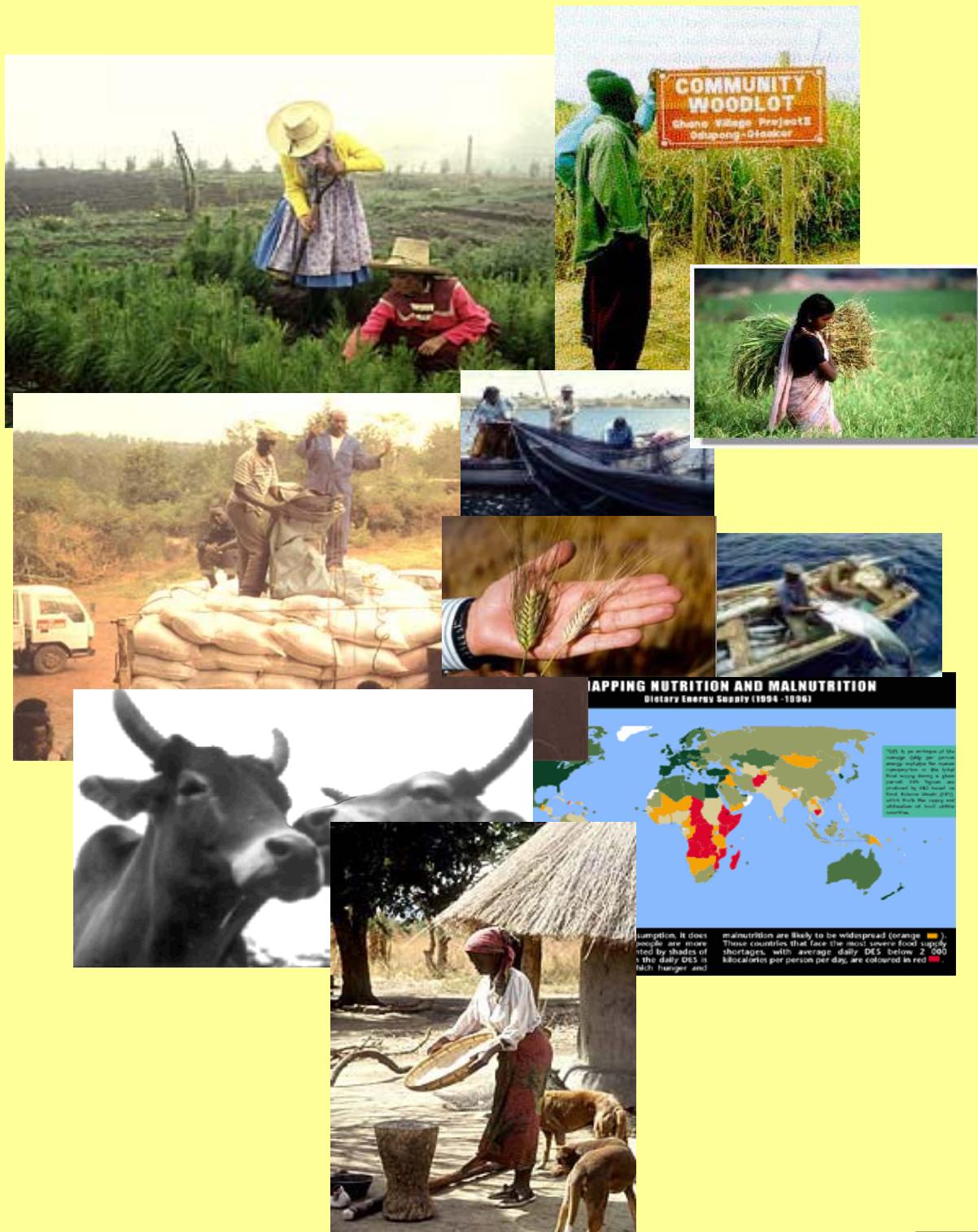




*SUMMARY OF
WORLD FOOD AND AGRICULTURAL STATISTICS
2005*





Summary of World Food and Agricultural Statistics

2005

**Food and Agriculture Organization of the United Nations
Rome, 2005**

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FAO 2005

This is the third edition of the "Summary of the World Food and Agricultural Statistics", a publication which arose following a request of the FAO Director-General to compile a broad range of statistics pertaining to world food and agriculture. These statistics show, wherever appropriate, the differences between the developed and developing countries, the continents and the regions. Initially the related tables were compiled and regularly updated for the personal use of the Director-General. However, as the information presented has become of more general interest, it has been decided to publish the tables in the form of a document. It is hoped that managers and policy makers dealing in international issues relating to food and agriculture will find the document useful.

The tables are organized in sets corresponding to 10 sections entitled as follows:

- 1) Agriculture Macro-Economic Indicators
- 2) Population and Labour Force
- 3) Land Use and Agricultural Inputs
- 4) Water Resources and Irrigation
- 5) Agricultural Production and Trade
- 6) Forestry Production and Trade
- 7) Fishery Production and Trade
- 8) Food Nutrition and Food Security
- 9) Projections
- 10) Selected Food and Agricultural Indicators by Country

Section 10 relating to food and agricultural indicators consists of only one table presenting information at the country level. The tables in section 1 to 8 and 10 are generally based on the statistics compiled and disseminated by FAO as well as other international organizations such as the World Food Programme (WFP), the United Nations (UN) and its regional bodies, the International Monetary Fund (IMF), the World Bank (WB) and its affiliated regional banks, the Organization for Economic Cooperation and Development (OECD) and the World Resources Institute (WRI). The tables in section 9 are based on the demographic projections prepared by the UN, the International Labour Office (ILO), and FAO and the food and agriculture sector projections prepared in connection with the FAO Agriculture study: Towards 2015/2030.

The set of tables contained in each section and the related data sources are listed in Annex II. With the exception of data from special studies, the sources quoted for the tables based on FAO data are generally FAOSTAT or FAO AQUASTAT. It should however be noted that both of the latter databases include information obtained through either collaboration or data exchange with other international organizations. For example the demographic estimates and projections are based on inter-agency collaborative work involving UN Population Division, ILO and FAO. The data on food aid are obtained from WFP and the data on water resources come from WRI.

The data presented in sections 1 to 8 generally refer to the most recent period for which data are available and, wherever pertinent, for selected historical periods. Growth rates are given wherever relevant. In the case of the projections in section 9, the time period indicated varies depending on the underlying studies. As regards the last table on selected food and agriculture indicators (section 10), which presents data by country, the figures refer to the most recent period for which data are available. Explanatory information is provided in five annexes. Annex I explains the symbols and the acronyms used in the tables; Annex II includes the list of sources used for the compilation of this document; Annex III gives the country composition of the regional aggregates shown in the tables; Annex IV refers to the concepts and definitions relating to the data presented and finally Annex V provides technical notes on certain measures and indicators.

The document has been prepared by the Socio-Economic Statistics and Analysis Service of FAO Statistics Division, Economic and Social Department. The preparation of the various tables has been facilitated by access to the statistics in FAO databases maintained not only by the Statistics Division, but also other units in FAO, in particular the Fishery Information, Data and Statistics Unit, Fisheries Department; the Water Resources, Development and Management Service of the Land and Water Development Division, Agriculture Department; and the Forestry Planning and Statistics Branch, Forestry Policy and Planning Division, Forestry Department.

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AGRICULTURE MACRO-ECONOMIC INDICATORS

1.1 Gross Domestic Product (GDP), Agriculture, value added and Gross National Income (GNI)

World/Region	GDP			Agriculture, value added			GNI per caput, Atlas method		
	(US\$ billion)			(US\$ billion)			(current US\$)		
	1983	1993	2003	1983	1993	2003	1983	1993	2003
WORLD	10 758	24 589	35 996	634	1 000	1 237	2 628	4 666	5 570
Developed countries	8 442	20 331	29 230	253	502	501	10 075	16 405	20 824
Industrialized countries	8 404	19 508	28 040	247	418	436	10 271	23 091	28 829
Transition economies	...	823	1 190	...	84	65	...	2 035	2 584
Developing countries	2 316	4 258	6 766	381	498	735	729	1 048	1 368
Latin America and the Caribbean	712	1 426	1 800	66	98	106	1 893	3 034	3 387
Near East and North Africa	601	663	1 068	60	72	93	2 705	2 290	2 599
Sub-Saharan Africa	128	158	272	37	43	69	439	322	364
East and Southeast Asia	602	1 622	2 853	131	183	308	446	1 008	1 526
South Asia	266	373	760	86	101	159	282	329	522
Oceania developing	6	15	13	1	2	1	1 257	2 247	1 607
North America developing	1	2	...	...	...	...	11 264	29 832	...
Continental groupings									
Africa	341	457	668	54	67	103	765	687	712
Asia	2 559	6 961	8 919	304	437	593	1 000	2 115	2 399
Latin America	668	1 358	1 681	63	95	102	1 895	3 067	3 376
Caribbean	44	68	119	3	2	4	1 853	2 419	3 591
North America	3 839	7 161	11 805	81	129	166	13 878	24 948	36 554
Oceania	214	363	615	13	16	17	9 058	13 822	16 022
Europe	3 094	8 222	12 189	116	254	252	8 213	12 287	14 667

1.2 Agriculture, value added Growth and Share in Gross Value Added

World/Region	Share of Agriculture in Gross Value Added (%)			Growth Rate (%)			
				GDP		Agriculture, value added	
	1983	1993	2003	1983-1993	1993-2003	1983-1993	1993-2003
WORLD	6.4	4.4	3.7	3.4	2.9	2.2	1.7
Developed countries	3.3	2.7	1.8	3.1	2.6	1.1	0.1
Industrialized countries	3.2	2.3	1.6	3.1	2.6	1.2	0.0
Transition economies	...	11.1	6.2	...	2.4	...	0.6
Developing countries	18.1	13.1	11.9	4.7	3.9	3.1	2.5
Latin America and the Caribbean	10.2	7.6	6.5	2.5	2.3	2.1	2.5
Near East and North Africa	11.0	12.5	11.3	3.3	3.2	3.4	2.3
Sub-Saharan Africa	31.2	30.3	27.0	2.6	3.7	2.9	3.9
East and Southeast Asia	23.4	12.7	11.1	8.2	5.2	3.5	2.4
South Asia	35.6	29.7	22.9	5.3	5.5	3.1	2.5
Oceania developing	30.6	14.4	14.4	4.3	1.1	2.4	0.2
North America developing	...	...	...	...	...	...	...
Continental groupings							
Africa	16.8	17.1	17.3	2.3	3.6	3.1	3.5
Asia	12.6	6.6	7.0	5.0	2.7	2.4	1.7
Latin America	10.4	7.7	6.7	2.4	2.2	2.2	2.5
Caribbean	6.9	4.3	3.7	3.2	3.7	1.1	1.3
North America	2.3	1.9	1.4	3.1	3.4	2.8	0.1
Oceania	6.9	4.8	2.7	2.8	3.7	2.1	1.8
Europe	4.3	3.5	2.4	2.6	2.4	1.2	0.7

Note: The growth rates are calculated using production data at constant prices in U.S. dollars. Regional sub-totals are obtained by summing values for countries with a complete time series of data for the period. Countries with an incomplete time series are excluded from the aggregate.

1.3 Development Commitments to Agriculture (Broad Definition) by Donors

Total Commitment by Donors (US\$ million)

	1996	1997	1998	1999	2000	2001	2002
Current Prices							
Total commitments (EAA)	11 642	12 340	12 605	10 700	10 172	10 168	10 121
Bilateral	5 203	4 260	4 612	4 150	3 947	4 070	3 818
Japan	2 336	1 797	1 856	1 644	1 265	1 768	825
United States of America	396	389	455	464	519	493	611
Germany	409	402	467	301	379	363	419
United Kingdom	166	102	405	508	511	129	367
Others	1 895	1 569	1 429	1 234	1 272	1 318	1 598
Multilateral	6 439	8 080	7 993	6 550	6 225	6 098	6 302
World Bank	3 100	4 227	4 682	3 034	2 494	2 873	3 706
IBRD	1 853	2 795	3 285	1 603	986	1 413	884
IDA	1 247	1 431	1 397	1 431	1 508	1 460	2 823
IFAD	405	392	431	415	407	375	340
Regional Development Banks	1 991	2 302	1 656	2 083	2 153	1 638	1 216
OPEC multilateral	286	430	507	309	453	363	243
UNDP/CGIAR	491	508	518	508	518	331	452
FAO	166	222	200	200	200	200	200
1995 Constant Prices							
Total commitments (EAA)	12 085	13 834	14 479	12 012	11 904	12 352	11 842
Bilateral	5 401	4 776	5 297	4 659	4 619	4 944	4 468
Japan	2 425	2 015	2 132	1 845	1 481	2 147	965
United States of America	412	436	523	520	607	599	714
Germany	425	451	537	338	444	441	490
United Kingdom	172	115	465	570	598	157	429
Others	1 967	1 759	1 641	1 385	1 489	1 601	1 870
Multilateral	6 684	9 058	9 182	7 353	7 285	7 408	7 375
World Bank	3 218	4 738	5 378	3 406	2 919	3 491	4 337
IBRD	1 923	3 134	3 773	1 800	1 154	1 716	1 034
IDA	1 295	1 604	1 605	1 606	1 765	1 774	3 303
IFAD	421	439	495	466	476	456	398
Regional Development Banks	2 066	2 581	1 902	2 339	2 520	1 990	1 423
OPEC multilateral	297	482	583	347	530	442	284
UNDP/CGIAR	510	569	595	570	606	402	529
FAO	172	249	230	225	234	234	234
Total Assistance	111 886	132 562	138 769	134 676	116 349	125 894	124 706
Share of EAA in total Assistance (%)	10.8	10.4	10.4	8.9	10.2	9.8	9.5

Note: The constant price series has been derived by deflating the current price series using the DAC aggregate deflator (DAC Report, 2001).

1.4 Development Commitments to Agriculture (Broad Definition) by Main Purposes

	Amount in Current Prices (US\$ million)							
	1995	1996	1997	1998	1999	2000	2001	2002
Total commitments	11 042	11 642	12 340	12 605	10 700	10 172	10 168	10 121
Agriculture Services	469	402	220	725	761	521	423	121
Agro-Industries	166	419	93	88	18	47	174	226
Agriculture Others	1 789	2 132	3 018	2 049	3 005	1 810	2 723	2 349
Crop Production	283	522	232	225	160	372	389	613
Environment	861	602	701	1 248	827	744	823	851
Fishery	211	605	312	307	163	305	292	247
Forestry	364	619	748	494	180	667	392	988
Inputs	669	525	262	253	183	148	276	118
Land and Water	2 571	2 809	2 684	1 589	1 628	1 654	1 140	908
Livestock	176	295	123	141	43	218	96	68
Manufacturing of Inputs	101	0	0	0	49	0	12	1
Regional and River Development	471	177	353	599	393	186	16	127
Research/Training Extension	1 170	972	800	1 729	602	572	580	437
Rural Development	1 740	1 563	2 794	3 158	2 688	2 926	2 832	3 066
Share in total commitments (%)								
Total commitments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture Services	4.2	3.5	1.8	5.8	7.1	5.1	4.2	1.2
Agro-Industries	1.5	3.6	0.8	0.7	0.2	0.5	1.7	2.2
Agriculture Others	16.2	18.3	24.5	16.3	28.1	17.8	26.8	23.2
Crop Production	2.6	4.5	1.9	1.8	1.5	3.7	3.8	6.1
Environment	7.8	5.2	5.7	9.9	7.7	7.3	8.1	8.4
Fishery	1.9	5.2	2.5	2.4	1.5	3.0	2.9	2.4
Forestry	3.3	5.3	6.1	3.9	1.7	6.6	3.9	9.8
Inputs	6.1	4.5	2.1	2.0	1.7	1.5	2.7	1.2
Land and Water	23.3	24.1	21.7	12.6	15.2	16.3	11.2	9.0
Livestock	1.6	2.5	1.0	1.1	0.4	2.1	0.9	0.7
Manufacturing of Inputs	0.9	0.0	0.0	0.0	0.5	0.0	0.1	0.0
Regional and River Development	4.3	1.5	2.9	4.8	3.7	1.8	0.2	1.3
Research/Training Extension	10.6	8.3	6.5	13.7	5.6	5.6	5.7	4.3
Rural Development	15.8	13.4	22.6	25.1	25.1	28.8	27.9	30.3

1.5 Main Recipient Countries of Development Commitments to Agriculture, 2002

Country	Amount in Current Prices (US\$ million)
India	1 352
Congo, Dem. Republic of	457
Indonesia	448
China, Mainland	448
Pakistan	394
Ethiopia	315
Uganda	259
Viet Nam	250
Côte D'Ivoire	234
Mexico	229

1.6 Share of government expenditure on agriculture in total government expenditure

Region	Country	1990	1993	1996	1997	1998	1999	2000
(%)								
Latin America and the Caribbean								
	Argentina	...	1.4	1.3	1.2	1.2	0.8	0.7
	Bahamas	...	1.7	1.5	1.4	1.5	1.3	1.5
	Belize	12.8	6.8	4.8	6.2	...	...	...
	Bolivia	...	1.4	0.8	1.5	2.6	3.1	3.7
	Brazil	0.9	1.0	...	1.7	1.7	...	...
	Colombia	8.1	5.3	1.7	2.2	1.4	1.2	
	Costa Rica	...	4.5	1.6	2.7	2.4	2.5	2.9
	Dominican Republic	14.5	12.4	8.9	9.1	9.2	9.8	...
	Ecuador	4.0	...	...	...	...	...	...
	El Salvador	...	3.4	2.9	2.2	2.6	1.5	5.6
	Grenada	...	9.1	...	...	...	...	...
	Guatemala	...	3.9	...	...	...	...	...
	Jamaica	...	3.1	1.7	1.5	1.9	1.6	1.7
	Mexico	2.5	3.3	3.1	3.4	2.8	3.1	...
	Netherlands Antilles	0.9	0.5	...	...	...	...	...
	Nicaragua	...	4.8	...	...	...	...	...
	Panama	2.5	2.1	1.5	1.8	2.0	2.0	...
	Paraguay	1.3	5.3	...	...	...	...	...
	St. Vincent and the Grenadines	...	4.6	3.2	5.0	2.9	2.9	3.3
	Trinidad and Tobago	...	4.7	...	...	...	...	...
	Uruguay	...	1.2	...	...	...	1.6	1.3
Near East and North Africa								
	Bahrain	...	0.2	0.7	0.7	0.6	0.5	0.4
	Cyprus	8.6	7.9	6.8	5.8	5.6	...	...
	Egypt	4.7	4.2	4.5	5.3	...	...	...
	Iran, Islamic Rep.	...	4.8	2.2	2.2	1.9	1.8	2.0
	Jordan	...	2.7	4.3	3.8	2.9	3.7	3.2
	Kuwait	...	...	0.6	0.7	0.8	0.7	...
	Lebanon	...	0.9	0.6	0.5	0.7	0.2	...
	Oman	...	2.3	1.7	1.5	1.3	1.3	1.1
	Sudan	...	...	...	...	1.1	0.9	...
	Syrian Arab Republic	11.0	9.9	10.0	9.7	9.0	...	...
	Turkey	...	1.3	0.8	6.6	3.4	4.1	3.4
	United Arab Emirates	0.7	0.8	0.7	0.7	0.8	0.7	...
	Yemen	2.2	2.6	20.0	26.9	17.5	7.8	...
Sub-Saharan Africa								
	Botswana	6.7	6.8	10.0	...	...	...	...
	Burkina Faso	6.5	...	...	...	...	...	...
	Burundi	...	7.9	4.8	...	1.5	1.8	...
	Cameroon	4.1	5.1	...	...	2.9	2.8	...
	Congo, Dem. Rep.	...	...	50.7	0.4	...	...	...
	Ethiopia	6.9	13.0	10.5	...	...	...	...
	Gambia	6.4	...	...	...	...	...	...
	Ghana	4.1	3.5	...	...	...	...	...
	Kenya	5.9	6.9	5.0	5.4	5.7	...	...
	Lesotho	9.8	0.0	...	10.0	5.1	...	...
	Madagascar	...	3.7	11.6	13.1	13.1	11.0	...
	Mauritius	...	6.1	6.1	4.9	5.3	6.0	5.0

1.6 Share of government expenditure on agriculture in total government expenditure

Region	Country	1990	1993	1996	1997	1998	1999	2000
(%)								
	Seychelles	...	1.9	1.8	1.6	1.6	2.7	5.6
	Sierra Leone	3.0	...	...	...	...	...	...
	Sudan	...	...	...	...	1.1	0.9	...
	Swaziland	...	...	...	...	...	6.2	6.6
	Zambia	3.2	2.4	2.7	4.1	5.1	5.5	...
	Zimbabwe	...	9.1	2.5	2.8	...	...	...
East and Southeast Asia								
	China (Mainland)	5.4	7.2	8.5	8.9	9.7	9.2	...
	Indonesia	8.9	8.3	15.8	8.4	7.6	4.3	...
	Korea, Rep.	14.3	11.2	14.0	12.8	...	...	...
	Malaysia	5.6	4.9	4.1	3.9	...	...	...
	Mongolia	...	3.3	2.4	2.4	1.9	0.2	1.9
	Myanmar	9.3	7.5	13.1	13.4	14.4	12.7	
	Philippines	...	9.3	7.1	6.5	6.1	5.5	5.7
	Singapore	...	0.3	0.2	0.3	0.2	0.3	0.8
	Thailand	...	9.8	9.7	8.2	5.7	5.9	8.3
South Asia								
	Bhutan	...	18.0	18.7	14.9	8.9	8.9	8.0
	India	...	12.3	11.1	11.4	10.4	7.7	7.4
	Maldives	...	9.3	4.9	1.1	1.0	0.9	1.3
	Nepal	...	10.5	7.2	6.1	6.1	5.9	5.8
	Sri Lanka	...	5.1	4.3	3.6	4.9	4.6	4.4
Oceania								
	Australia	2.4	2.2	2.0	1.9	2.0	...	...
	Fiji Islands	6.7	4.7	3.6	...	...	...	...
	New Zealand	...	0.9	0.9	1.0	1.1	0.9	0.7
	Papua New Guinea	7.7	7.5	4.5	3.4	...	3.4	...
	Vanuatu	4.7	...	2.3	3.3	...	...	...

POPULATION AND LABOUR FORCE

2.1 Total and Agricultural Population and Related Growth Rates

World/Region	Population								Average annual rate of growth		
	(million)				Share in total World (%)				()		
	1980	1990	2000	2004	1980	1990	2000	2004	1980-1990	1990-2000	2000-2004
Population											
WORLD	4 442.3	5 279.5	6 085.6	6 389.3					1.7	1.4	1.2
Developed countries	1 171.1	1 256.4	1 316.2	1 334.9	26.4	23.8	21.6	20.9	0.7	0.5	0.4
Industrialized countries	788.9	844.9	907.1	929.6	17.8	16.0	14.9	14.5	0.7	0.7	0.6
Transition economies	382.1	411.6	409.1	405.3	8.6	7.8	6.7	6.3	0.7	-0.1	-0.2
Developing countries	3 271.2	4 023.1	4 769.3	5 054.3	73.6	76.2	78.4	79.1	2.1	1.7	1.5
Latin America and the Caribbean	362.2	443.7	522.9	553.7	8.2	8.4	8.6	8.7	2.0	1.6	1.4
Near East and North Africa	244.6	322.3	403.0	436.7	5.5	6.1	6.6	6.8	2.8	2.2	2.0
Sub-Saharan Africa	357.9	480.6	625.0	687.8	8.1	9.1	10.3	10.8	2.9	2.6	2.4
East and Southeast Asia	1 419.1	1 666.0	1 871.1	1 936.6	31.9	31.6	30.7	30.3	1.6	1.2	0.9
South Asia	882.2	1 103.9	1 339.2	1 430.7	19.9	20.9	22.0	22.4	2.2	1.9	1.7
Oceania developing	5.1	6.4	8.1	8.7	0.1	0.1	0.1	0.1	2.2	2.2	1.9
North America developing	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.8	0.3	0.3
Continental groupings											
Africa	478.8	635.7	812.5	886.7	10.8	12.0	13.4	13.9	2.8	2.5	2.2
Asia	2 630.4	3 168.6	3 675.8	3 860.1	59.2	60.0	60.4	60.4	1.9	1.5	1.2
Latin America	333.0	409.9	485.5	514.9	7.5	7.8	8.0	8.1	2.1	1.7	1.5
Caribbean	29.2	33.8	37.5	38.8	0.7	0.6	0.6	0.6	1.5	1.0	0.9
North America	255.5	283.4	315.0	327.5	5.8	5.4	5.2	5.1	1.0	1.1	1.0
Oceania	22.9	26.7	30.9	32.6	0.5	0.5	0.5	0.5	1.5	1.5	1.3
Europe	692.4	721.4	728.5	728.6	15.6	13.7	12.0	11.4	0.4	0.1	0.0
Agricultural population											
WORLD	2 223.1	2 452.4	2 581.7	2 605.9					1.0	0.5	0.2
Developed countries	158.9	133.9	99.6	88.1	7.1	5.5	3.9	3.4	-1.7	-3.0	-3.0
Industrialized countries	67.0	51.1	37.0	32.5	3.0	2.1	1.4	1.2	-2.7	-3.2	-3.3
Transition economies	91.8	82.8	62.5	55.7	4.1	3.4	2.4	2.1	-1.0	-2.8	-2.9
Developing countries	2 064.2	2 318.5	2 482.2	2 517.8	92.9	94.5	96.1	96.6	1.2	0.7	0.4
Latin America and the Caribbean	127.4	117.5	108.6	104.2	5.7	4.8	4.2	4.0	-0.8	-0.8	-1.0
Near East and North Africa	113.7	114.6	120.6	121.7	5.1	4.7	4.7	4.7	0.1	0.5	0.2
Sub-Saharan Africa	265.4	335.0	400.9	425.9	11.9	13.7	15.5	16.3	2.3	1.8	1.5
East and Southeast Asia	976.0	1 093.8	1 120.5	1 113.8	43.9	44.6	43.4	42.7	1.1	0.2	-0.2
South Asia	577.9	653.1	726.3	746.6	26.0	26.6	28.1	28.7	1.2	1.1	0.7
Oceania developing	3.7	4.4	5.2	5.5	0.2	0.2	0.2	0.2	1.8	1.6	1.2
North America developing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9	-2.9	-2.8
Continental groupings											
Africa	320.2	387.2	452.8	476.9	14.4	15.8	17.5	18.3	1.9	1.6	1.3
Asia	1 651.5	1 845.8	1 945.2	1 958.4	74.3	75.3	75.3	75.2	1.1	0.5	0.2
Latin America	117.6	107.6	99.4	95.2	5.3	4.4	3.8	3.7	-0.9	-0.8	-1.1
Caribbean	9.8	9.9	9.2	9.0	0.4	0.4	0.4	0.3	0.1	-0.7	-0.7
North America	10.3	8.7	7.1	6.5	0.5	0.4	0.3	0.3	-1.7	-2.1	-2.1
Oceania	5.0	5.7	6.4	6.7	0.2	0.2	0.2	0.3	1.3	1.2	0.9
Europe	108.7	87.4	61.6	53.3	4.9	3.6	2.4	2.0	-2.2	-3.5	-3.6

2.2 Total and Agricultural Labour Force and Related Growth Rates

World/Region	Labour Force								Average annual rate of growth		
	(million)				Share in total World (%)				()		
	1980	1990	2000	2004	1980	1990	2000	2004	1980-1990	1990-2000	2000-2004
Total labour force											
WORLD	2 054.5	2 502.1	2 955.9	3 136.9					2.0	1.7	1.5
Developed countries	559.4	610.6	654.6	666.6	27.2	24.4	22.1	21.2	0.9	0.7	0.5
Industrialized countries	363.6	408.4	447.9	457.7	17.7	16.3	15.2	14.6	1.2	0.9	0.5
Transition economies	195.8	202.2	206.7	208.8	9.5	8.1	7.0	6.7	0.3	0.2	0.3
Developing countries	1 495.2	1 891.5	2 301.2	2 470.3	72.8	75.6	77.9	78.8	2.4	2.0	1.8
Latin America and the Caribbean	130.6	176.1	222.4	240.8	6.4	7.0	7.5	7.7	3.0	2.3	2.0
Near East and North Africa	82.4	108.7	150.8	170.8	4.0	4.3	5.1	5.4	2.8	3.3	3.1
Sub-Saharan Africa	163.7	214.2	278.5	308.1	8.0	8.6	9.4	9.8	2.7	2.6	2.5
East and Southeast Asia	732.8	922.3	1 061.8	1 109.8	35.7	36.9	35.9	35.4	2.3	1.4	1.1
South Asia	383.3	467.2	584.0	636.7	18.7	18.7	19.8	20.3	2.0	2.2	2.2
Oceania developing	2.3	2.9	3.7	4.1	0.1	0.1	0.1	0.1	2.5	2.4	2.5
North America developing	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.6	0.1	0.3
Continental groupings											
Africa	204.5	267.5	350.4	386.9	10.0	10.7	11.9	12.3	2.7	2.7	2.5
Asia	1 251.7	1 553.6	1 846.6	1 963.3	60.9	62.1	62.5	62.6	2.2	1.7	1.5
Latin America	119.1	161.9	205.6	223.0	5.8	6.5	7.0	7.1	3.1	2.4	2.0
Caribbean	11.5	14.2	16.9	17.8	0.6	0.6	0.6	0.6	2.1	1.7	1.3
North America	124.1	143.8	162.3	168.8	6.0	5.7	5.5	5.4	1.5	1.2	1.0
Oceania	10.3	13.0	15.2	16.2	0.5	0.5	0.5	0.5	2.3	1.6	1.6
Europe	333.2	348.1	359.0	360.8	16.2	13.9	12.1	11.5	0.4	0.3	0.1
Labour force in agriculture											
WORLD	1 069.8	1 224.5	1 323.5	1 353.3					1.4	0.8	0.6
Developed countries	74.6	62.3	47.5	42.6	7.0	5.1	3.6	3.1	-1.8	-2.7	-2.7
Industrialized countries	28.7	22.7	16.7	14.5	2.7	1.9	1.3	1.1	-2.4	-3.1	-3.5
Transition economies	45.9	39.6	30.8	28.1	4.3	3.2	2.3	2.1	-1.5	-2.5	-2.3
Developing countries	995.2	1 162.2	1 276.0	1 310.7	93.0	94.9	96.4	96.9	1.6	0.9	0.7
Latin America and the Caribbean	44.7	44.7	43.9	43.0	4.2	3.7	3.3	3.2	0.0	-0.2	-0.5
Near East and North Africa	41.7	42.9	49.8	52.3	3.9	3.5	3.8	3.9	0.3	1.5	1.2
Sub-Saharan Africa	123.8	153.1	184.0	196.8	11.6	12.5	13.9	14.5	2.1	1.8	1.7
East and Southeast Asia	516.5	622.7	654.0	656.6	48.3	50.9	49.4	48.5	1.9	0.5	0.1
South Asia	266.9	296.8	341.9	359.5	25.0	24.2	25.8	26.6	1.1	1.4	1.3
Oceania developing	1.7	2.0	2.4	2.5	0.2	0.2	0.2	0.2	1.9	1.6	1.7
North America developing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-3.1	-2.8
Continental groupings											
Africa	140.9	169.5	202.0	215.2	13.2	13.8	15.3	15.9	1.8	1.8	1.6
Asia	824.2	961.0	1 040.2	1 061.7	77.0	78.5	78.6	78.5	1.5	0.8	0.5
Latin America	40.8	40.7	39.9	39.1	3.8	3.3	3.0	2.9	0.0	-0.2	-0.6
Caribbean	3.9	4.0	4.0	3.9	0.4	0.3	0.3	0.3	0.3	-0.1	-0.2
North America	4.7	4.1	3.4	3.2	0.4	0.3	0.3	0.2	-1.3	-1.9	-2.0
Oceania	2.2	2.6	3.0	3.1	0.2	0.2	0.2	0.2	1.6	1.2	1.3
Europe	53.0	42.5	31.0	27.2	5.0	3.5	2.3	2.0	-2.2	-3.2	-3.2

2.3 Selected Indicators Relating to Rural Population and Agricultural Labour Force

World/Region	1980	1990	2000	2004
 (%)			
Rural population as a percentage of total population				
WORLD	61	57	53	51
Developed countries	32	30	28	28
Industrialized countries	29	27	24	23
Transition economies	40	37	37	37
Developing countries	71	65	60	58
Latin America and the Caribbean	35	29	24	23
Near East and North Africa	54	46	43	42
Sub-Saharan Africa	79	74	67	65
East and Southeast Asia	77	70	62	58
South Asia	78	75	73	72
Oceania developing	78	77	76	76
North America developing	11	10	9	8
Continental groupings				
Africa	73	68	63	61
Asia	74	68	63	61
Latin America	34	28	23	22
Caribbean	46	41	37	35
North America	26	25	21	19
Oceania	29	30	27	26
Europe	31	28	27	27
Labour force in agriculture as a percentage of total labour force				
WORLD	52	49	45	43
Developed countries	13	10	7	6
Industrialized countries	8	6	4	3
Transition economies	23	20	15	13
Developing countries	67	61	55	53
Latin America and the Caribbean	34	25	20	18
Near East and North Africa	51	39	33	31
Sub-Saharan Africa	76	71	66	64
East and Southeast Asia	70	68	62	59
South Asia	70	64	59	56
Oceania developing	73	69	64	62
North America developing	4	3	2	2
Continental groupings				
Africa	69	63	58	56
Asia	66	62	56	54
Latin America	34	25	19	18
Caribbean	34	28	23	22
North America	4	3	2	2
Oceania	22	20	19	19
Europe	16	12	9	8

2.3 Selected Indicators Relating to Rural Population and Agricultural Labour Force

World/Region	1980	1990	2000	2004
 (%)			
Females in agriculture labour force as a percentage of total agricultural labour force				
WORLD	42	43	44	44
Developed countries	43	38	36	35
Industrialized countries	36	35	35	35
Transition economies	47	41	37	36
Developing countries	42	43	44	44
Latin America and the Caribbean	17	17	17	17
Near East and North Africa	41	43	50	52
Sub-Saharan Africa	47	47	48	48
East and Southeast Asia	45	46	47	47
South Asia	40	37	39	40
Oceania developing	44	43	46	47
North America developing	21	21	25	26
Continental groupings				
Africa	46	47	48	48
Asia	43	44	44	45
Latin America	16	16	16	16
Caribbean	26	26	28	28
North America	22	23	26	28
Oceania	38	40	44	45
Europe	43	39	36	34

LAND USE AND AGRICULTURAL INPUTS

3.1 Total area, arable land and land under permanent crops

World/Region	Year	Total Area	Arable land	Land under permanent crops	Arable land over total area	Total Area	Arable land	Land under permanent crops
		(million ha)		(%)		Share in total World (%)		
WORLD								
	1980	13 434	1 342.0	102.3	10.0			
	1990	13 434	1 391.2	119.7	10.4			
	2002	13 428	1 404.1	136.6	10.5			
Developed countries								
	1980	5 652	650.5	29.7	11.5	42.1	48.5	29.1
	1990	5 652	649.2	29.8	11.5	42.1	46.7	24.9
	2002	5 640	611.4	30.1	10.8	42.0	43.5	22.1
Industrialized countries								
	1980	3 294	378.0	22.0	11.5	24.5	28.2	21.5
	1990	3 294	379.5	22.9	11.5	24.5	27.3	19.1
	2002	3 294	366.4	23.2	11.1	24.5	26.1	17.0
Transition economies								
	1980	2 358	272.5	7.7	11.6	17.6	20.3	7.6
	1990	2 358	269.7	7.0	11.4	17.6	19.4	5.8
	2002	2 345	245.0	6.9	10.4	17.5	17.4	5.1
Developing countries								
	1980	7 781	691.5	72.5	8.9	57.9	51.5	70.9
	1990	7 781	742.1	89.9	9.5	57.9	53.3	75.1
	2002	7 788	792.7	106.4	10.2	58.0	56.5	77.9
Latin America & the Caribbean								
	1980	2 055	127.8	17.7	6.2	15.3	9.5	17.3
	1990	2 055	134.5	18.2	6.5	15.3	9.7	15.2
	2002	2 055	148.2	20.5	7.2	15.3	10.6	15.0
Near East & North Africa								
	1980	1 267	82.4	8.3	6.5	9.4	6.1	8.1
	1990	1 267	86.4	10.1	6.8	9.4	6.2	8.4
	2002	1 267	88.7	11.4	7.0	9.4	6.3	8.3
Sub-Saharan Africa								
	1980	2 334	124.3	15.8	5.3	17.4	9.3	15.5
	1990	2 334	130.9	18.1	5.6	17.4	9.4	15.1
	2002	2 334	146.6	20.4	6.3	17.4	10.4	14.9
East & Southeast Asia								
	1980	1 588	161.6	22.8	10.2	11.8	12.0	22.3
	1990	1 588	193.7	34.3	12.2	11.8	13.9	28.6
	2002	1 588	213.1	42.4	13.4	11.8	15.2	31.1
South Asia								
	1980	449	195.1	7.0	43.5	3.3	14.5	6.8
	1990	449	196.0	8.2	43.7	3.3	14.1	6.8
	2002	449	195.4	10.6	43.6	3.3	13.9	7.8
Oceania developing								
	1980	55	0.4	0.9	0.7	0.4	0.0	0.9
	1990	55	0.5	1.0	0.9	0.4	0.0	0.9
	2002	55	0.6	1.1	1.1	0.4	0.0	0.8
North America developing								
	1980	34	0.0	...	0.0	0.3	...	...
	1990	34	0.0	...	0.0	0.3	...	...
	2002	41	0.0	...	0.0	0.3	...	...

3.1 Total area, arable land and land under permanent crops

World/Region	Year	Total Area (million ha)	Arable land	Land under permanent crops	Arable land over total area (%)	Total Area	Arable land	Land under permanent crops
Continental groupings								
Africa								
	1980	3 031	158.4	19.8	5.2	22.6	11.8	19.3
	1990	3 031	167.1	22.9	5.5	22.6	12.0	19.2
	2002	3 031	184.9	25.8	6.1	22.6	13.2	18.9
Asia								
	1980	2 768	422.6	35.6	15.3	20.6	31.5	34.8
	1990	2 768	458.5	49.2	16.6	20.6	33.0	41.1
	2002	3 187	511.7	61.7	16.1	23.7	36.4	45.2
Caribbean								
	1980	23	4.9	1.7	20.8	0.2	0.4	1.6
	1990	23	5.4	1.8	23.2	0.2	0.4	1.5
	2002	23	4.9	2.2	21.0	0.2	0.4	1.6
Latin America								
	1980	2 031	122.9	16.1	6.1	15.1	9.2	15.7
	1990	2 031	129.1	16.3	6.4	15.1	9.3	13.6
	2002	2 031	143.3	18.3	7.1	15.1	10.2	13.4
North America								
	1980	1 994	233.5	7.6	11.7	14.8	17.4	7.5
	1990	1 994	231.3	8.4	11.6	14.8	16.6	7.0
	2002	2 001	221.7	8.5	11.1	14.9	15.8	6.2
Oceania								
	1980	856	47.1	2.0	5.5	6.4	3.5	2.0
	1990	856	50.9	2.6	5.9	6.4	3.7	2.1
	2002	856	50.4	3.3	5.9	6.4	3.6	2.4
Europe								
	1980	488	126.3	14.4	25.9	3.6	9.4	14.1
	1990	488	124.6	14.0	25.5	3.6	9.0	11.7
	2002	2 298	287.2	16.8	12.5	17.1	20.5	12.3

Note: Data in 2002 exclude the portion of land under Azov Sea and White Sea

3.2 Per Person Land Availability Ratios

World/Region	Year	Per person ratio		
		In total population	Dependent on agriculture	Economically active in agriculture
		(ha)		
WORLD				
	1980	0.33	0.65	1.35
	1990	0.29	0.62	1.24
	2002	0.25	0.60	1.16
Developed countries				
	1980	0.58	4.28	9.12
	1990	0.54	5.07	10.89
	2002	0.48	6.84	14.17
Industrialized countries				
	1980	0.51	5.97	13.94
	1990	0.48	7.88	17.76
	2002	0.43	11.35	25.29
Transition economies				
	1980	0.73	3.05	6.11
	1990	0.67	3.34	6.97
	2002	0.62	4.24	8.44
Developing countries				
	1980	0.23	0.37	0.77
	1990	0.21	0.36	0.72
	2002	0.18	0.36	0.70
Latin America & the Caribbean				
	1980	0.40	1.14	3.26
	1990	0.35	1.30	3.41
	2002	0.32	1.59	3.88
Near East & North Africa				
	1980	0.37	0.80	2.19
	1990	0.30	0.85	2.27
	2002	0.24	0.84	1.99
Sub-Saharan Africa				
	1980	0.40	0.54	1.16
	1990	0.32	0.46	1.00
	2002	0.26	0.41	0.90
East & Southeast Asia				
	1980	0.13	0.19	0.36
	1990	0.14	0.21	0.37
	2002	0.13	0.23	0.39
South Asia				
	1980	0.23	0.35	0.75
	1990	0.18	0.31	0.69
	2002	0.15	0.28	0.59
Oceania developing				
	1980	0.26	0.36	0.80
	1990	0.24	0.35	0.77
	2002	0.20	0.31	0.69
North America developing				
	1980	0.03	0.80	2.00
	1990	0.03	1.00	2.00
	2002	0.03	1.33	2.00

3.2 Per Person Land Availability Ratios

World/Region	Year	Per person ratio		
		In total population	Dependent on agriculture	Economically active in agriculture (ha)
Continental groupings				
Africa	1980	0.38	0.57	1.29
	1990	0.31	0.50	1.15
	2002	0.25	0.46	1.03
Asia	1980	0.18	0.28	0.56
	1990	0.16	0.28	0.53
	2002	0.15	0.29	0.55
Caribbean	1980	0.22	0.67	1.67
	1990	0.22	0.73	1.80
	2002	0.19	0.78	1.80
Latin America	1980	0.42	1.18	3.41
	1990	0.36	1.36	3.57
	2002	0.33	1.67	4.09
North America	1980	0.94	23.37	51.22
	1990	0.85	27.55	57.84
	2002	0.71	33.79	70.20
Oceania	1980	2.15	9.83	21.87
	1990	2.00	9.36	20.24
	2002	1.69	8.12	17.47
Europe	1980	0.29	2.10	4.50
	1990	0.28	2.73	5.72
	2002	0.42	5.30	10.42

Note: Land availability refers to arable land plus land under permanent crops

3.3 Change in Forest Cover

World/Region	Total area	Forest Cover		Annual Change	
	2005	2000 (million ha)	2005	2000-2005 (million ha) (% per year)	
WORLD	13 418.5	3 988.6	3 952.1	-7.3	-0.2
				0.0	
Developed countries	5 639.6	1 833.6	1 836.9	0.7	0.0
Industrialized countries	3 294.3	948.4	951.2	0.6	0.1
Transition economies	2 345.2	885.3	885.7	0.1	0.0
Developing countries	7 779.0	2 155.0	2 115.2	-8.0	-0.4
Latin America and the Caribbean	2 055.2	947.9	924.2	-4.7	-0.5
Near East and North Africa	1 257.0	35.1	35.4	0.1	0.2
Sub-Saharan Africa	2 333.8	638.7	618.2	-4.1	-0.6
East and Southeast Asia	1 587.9	418.5	423.9	1.1	0.3
South Asia	448.7	79.7	79.2	-0.1	-0.1
Oceania developing	55.2	35.2	34.3	-0.2	-0.5
North America developing	41.1	0.0	0.0	0.0	0.0
Continental groupings					
Africa	3 031.0	655.6	635.4	-4.0	-0.6
Asia	3 177.1	566.6	571.6	1.0	0.2
Latin America	2 031.3	942.2	918.2	-4.8	-0.5
Caribbean	23.5	5.7	6.0	0.1	0.9
North America	2 001.0	612.4	613.2	0.2	0.0
Oceania	856.4	208.0	206.3	-0.4	-0.2
Europe	2 297.7	998.1	1 001.4	0.7	0.1

3.4 World Fertilizer Production and Consumption

Fertilizer	Production			Consumption		
	1980/1981	1990/1991	2002/03	1980/1981	1990/1991	2002/03
	(million tonnes)					
Nitrogen	63	82	88	61	77	85
Phosphate	35	39	34	32	36	34
Potash	27	27	26	24	25	23
Total	125	148	148	117	138	142

3.5 Leading Fertilizer Producing and Consuming Countries

Producers	Production		% of World	Consumption		% of World
	(million tonnes)	production	2002/2003	(million tonnes)	consumption	2002/2003
	2002/2003					
China	32	22	China	40	28	
United States of America	18	12	United States of America	19	13	
India	14	9	India	16	11	
Russian Federation	13	8	Brazil	8	6	
Canada	12	8	France	4	3	
Rest of the World	59	41	Rest of the World	55	39	

3.6 Fertilizer Consumption to Arable Land Ratio

(kg nutrients/ha)

Region/Country	1980/1981	1990/1991	2002/2003
WORLD	87	99	101
Developed countries	120	112	82
Industrialized countries	131	118	116
Transition economies	104	104	32
Developing countries	56	87	115
Latin America & the Caribbean	59	59	89
Near East & North Africa	45	67	73
Sub-Saharan Africa	8	10	9
East & Southeast Asia	120	180	231
South Asia	37	77	107
Oceania developing	59	73	51
North America developing	83	-	25
Continental groupings			
Africa	20	22	23
Asia	73	122	151
Latin America	56	56	90
Caribbean	132	137	60
North America	100	89	99
Oceania	35	30	63
Europe	247	212	76

3.7 Production of Pesticides (insecticides, fungicides, disinfectants, etc.)

Country	1990	1995	2000	Country	1990	1995	2000
	(thousand tonnes)				(thousand tonnes)		
Total	2 318	2 045	2 254	Europe ^{6/}	1 377	1 042	718
Africa	60	73	106	Albania	9	0	0
Algeria	8	...	...	Austria	17	12	16
Burundi	4	...	...	Belgium ^{7/}	100	3	...
Egypt	21	25	55	Bulgaria	10	8	6
Kenya	3	1	...	Croatia	...	7	7
South Africa ^{1/}	23	36	...	Czech Republic	...	22	19
Tanzania, United Rep	1	...	...	Czechoslovakia (former)	17	...	...
North America	127	169	244	Denmark ^{8/}	...	18	21
Mexico	127	169	244	Finland	14	14	4
South America	24	23	25	France	326	...	...
Colombia	...	21	...	Germany	...	128	84
Ecuador	...	2	2	Germany (Fed.Rep.) ^{9/}	281	...	...
Asia ^{2/}	461	691	862	Germany D.R. (former)	62	...	...
Bangladesh ^{3/}	...	9.1		Greece ^{10/}	7	11	11
China ^{4/}	228	607	625	Hungary	56	19	15
Cyprus	...	0	...	Latvia	0	0	0
Indonesia	19	18	...	Lithuania	...	1	0
Iran, Islamic Rep of ^{5/}	...	16		Poland	20	24	30
Korea, Rep. of	182	168	164	Portugal	25	15	22
Turkey	23	32	30	Romania	24	15	4
Uzbekistan	...	15	...	Russian Federation	...	16	11
Viet Nam ^{6/}	9	16	22	Serbia and Montenegro	...	7	7
USSR (former)	205	...	...	Slovakia	...	...	3
				Slovenia	...	6	1
				Spain ^{11/}	83	91	105
				Sweden	...	9	2
				T.F.Yug.Rep.Macedonia	...	0	0
				Ukraine	...	4	1
				United Kingdom	...	307	41

^{1/} Excluding products usually measured in units of volume.

^{2/} 1990 total excludes data for Bangladesh and Iran.

^{3/} Insecticides only.

^{4/} Data exclude those for Taiwan Province.

^{5/} Production by establishments employing 10 or more persons.

Note: Global and regional totals refer to the countries shown only, and include estimates for missing data.

^{6/} 1990 total excludes data for Latvia.

^{7/} 1995 and 2000, incomplete coverage.

^{8/} Sales.

^{9/} Excluding disinfectants.

^{10/} Insecticides for household use in 1990.

^{11/} Including insecticides for household use in 1990.

3.8 Imports and Exports of Pesticides

World/Region	Value (US\$ million)			
	1980	1990	2000	2003
Imports				
WORLD	4 475	8 298	10 894	12 921
Developed countries	2 938	6 097	7 094	8 822
Industrialized countries	2 308	4 937	5 989	7 332
Transition economies	630	1 159	1 104	1 490
Developing countries	1 537	2 201	3 800	4 099
Latin America & the Caribbean	406	670	1 595	1 941
Near East & North Africa	321	463	667	587
Sub-Saharan Africa	400	306	334	384
East & Southeast Asia	334	645	1 027	965
South Asia	65	102	159	208
Oceania developing	12	14	16	13
North America developing	1	1	2	2
Continental groupings				
Africa	567	484	573	680
Asia	733	1 294	2 083	1 961
Latin America	324	508	134	1 809
Caribbean	82	162	1 461	132
North America	449	511	991	1 245
Oceania	45	88	275	281
Europe	1 906	4 559	5 377	6 812
Exports				
WORLD	4 063	7 433	11 128	12 574
Developed countries	3 775	6 839	9 165	10 176
Industrialized countries	3 633	6 656	9 007	9 761
Transition economies	142	183	158	415
Developing countries	288	594	1 963	2 397
Latin America & the Caribbean	112	218	639	779
Near East & North Africa	9	24	50	60
Sub-Saharan Africa	32	21	28	33
East & Southeast Asia	130	270	973	1 146
South Asia	6	60	273	376
Oceania developing	0	0	0	3
North America developing	...	...	...	...
Continental groupings				
Africa	54	59	141	170
Asia	325	648	1 686	1 878
Latin America	104	214	18	760
Caribbean	8	3	621	19
North America	569	1 179	1 621	1 573
Oceania	10	27	110	122
Europe	2 968	5 235	6 931	8 052

3.9 Agricultural Tractors and Harvesters/Threshers in Use per 1000 ha of Arable Land

World/Region	Agricultural Tractors				Harvesters Threshers			
	1980	1990	2000	2002	1980	1990	2000	2002
(number/1000 ha)								
WORLD	16.3	19.2	19.1	19.0	2.6	2.9	3.0	2.9
Developed countries	28.6	32.7	31.4	31.7	5.1	5.5	4.8	4.8
Industrialized countries	38.3	42.0	41.3	41.6	6.6	7.2	6.6	6.6
Transition economies	15.1	19.5	16.7	17.0	3.1	3.1	2.2	2.2
Developing countries	4.8	7.3	9.4	9.2	0.3	0.6	1.5	1.5
Latin America & the Caribbean	8.6	12.0	11.9	11.9	1.0	1.1	1.1	1.1
Near East & North Africa	9.1	15.0	19.6	19.6	0.5	0.5	0.6	0.6
Sub-Saharan Africa	0.9	1.1	1.1	1.1	0.0	0.0	0.0	0.0
East & Southeast Asia	5.5	5.7	8.7	8.2	0.4	1.3	4.5	4.4
South Asia	2.6	6.5	9.5	9.5	0.0	0.0	0.0	0.0
Oceania developing	18.0	19.2	19.2	18.8	0.9	0.9	0.9	0.8
North America developing	29.0	33.8	32.5	32.5	...	...	...	...
Continental groupings								
Africa	2.8	3.2	2.9	2.9	0.3	0.3	0.2	0.2
Asia	8.2	12.2	14.9	14.6	2.3	3.3	4.1	4.0
Latin America	16.9	16.9	15.7	18.8	1.2	1.3	1.3	1.5
Caribbean	8.3	11.8	11.8	11.7	1.0	1.1	1.1	1.1
North America	23.1	24.0	24.8	25.0	3.6	3.5	3.5	3.5
Oceania	9.1	7.9	7.7	8.0	1.3	1.2	1.1	1.2
Europe	67.0	83.1	37.8	38.2	6.4	6.4	3.6	3.5

WATER RESOURCES AND IRRIGATION

4.1 Large Rivers of the World

Continent/River	Average runoff (km ³ /year)	Area of basin (10 ³ km ²)	Length (km)
Africa			
Congo	1 460	3 820	4 370
Niger	320	2 090	4 160
Nile	202	2 870	6 670
North and Central America			
Mississippi	580	3 220	5 985
St. Lawrence	439	1 290	3 060
Mackenzie	350	1 800	4 240
Columbia	267	669	1 950
Yukon	207	852	3 000
South America			
Amazon	6 930	6 915	6 280
Orinoco	914	1 000	2 740
Paraná	725	2 970	4 700
Magdalena	260	260	1 530
Asia			
Ganges (with Brahmaputra)	1 400	1 730	3 000
Yangtze	995	1 800	5 520
Yenisei	610	2 580	3 490
Mekong	510	810	4 500
Irrawaddy	486	410	2 300
Chutyan	363	437	2 130
Indus	220	960	3 180
Salween	211	325	2 820
Europe			
Danube	214	817	2 860
Former USSR			
Lena	532	2 490	4 400
Ob	395	2 990	3 650
Amur	355	1 855	2 820
Volga	254	1 360	3 350

4.2 Distribution of World Water Resources

Location	Water volume (10 ³ km ³)	As % of fresh water	As % of total water
Total Water	1 385 984.5		100
Fresh Water	35 029.1	100	2.5274
Glaciers and ice caps	24 064.0	68.6972	1.7362
Groundwater	10 530.0	30.0607	0.7597
Underground ice (permafrost)	300.0	0.8564	0.0216
Fresh water lakes	91.0	0.2598	0.0066
Vadose (incl. soil moisture)	16.5	0.0471	0.0012
Atmospheric water	12.9	0.0368	0.0009
Swamps	11.5	0.0328	0.0008
Stream channels	2.1	0.0060	0.0002
Biological water	1.1	0.0031	0.0001
Saline Water	1 350 955.4		97.4726
Oceans	1 338 000.0		96.5379
Saline groundwater	12 870.0		0.9286
Saline lakes and inland seas	85.4		0.0062

4.3 Freshwater Availability

World/Continent	Internal renewable freshwater resources		
	Volume per year (km ³)	% of world freshwater resources	2000* per caput (1000 m ³)
WORLD	43 764	100.0	7.2
Developed countries	13 863	31.7	10.5
Industrialized countries (a)	8 816	20.1	9.8
Transition economies	5 047	11.5	12.3
Developing countries	29 901	68.3	6.3
Latin America and the Caribbean	13 570	31.0	26.2
Near East and North Africa (b)	516	1.2	1.3
Sub-Saharan Africa (c)	3 856	8.8	6.3
East and Southeast Asia (d)	8 720	19.9	4.6
South Asia	1 761	4.0	1.3
Oceania developing	874	2.0	126.1
North America developing	603	1.4	5 067.2
Continental groupings	43 764	100.0	7.2
Africa	3 950	9.0	5.0
Asia	11 660	26.6	3.2
Latin America	13 477	30.8	28.0
Caribbean	93	0.2	2.5
North America	6 271	14.3	20.0
Oceania	1 693	3.9	56.7
Europe	6 619	15.1	9.0

* Volume of internal renewable freshwater resources divided by total population in 2000.

(a) Including Japan, South Africa, Israel

(b) Excluding Israel

(c) Excluding South Africa

(d) Excluding Japan

Source: FAO-AQUASTAT database

4.4 Freshwater Utilization by Purpose, 2000

World/Continent	Total volume of freshwater utilization km ³ /year	Freshwater utilization by purpose						Utilization* as % of resources
		Domestic use		Industrial use		Agricultural use		
		km ³ /year	%	km ³ /year	%	km ³ /year	%	
WORLD	3 811.3	376.2	9.9	783.0	20.5	2 652.1	69.6	8.7
Developed countries	1 230.2	164.0	13.3	501.4	40.8	564.8	45.9	8.9
Industrialized countries (a)	884.5	130.1	14.7	387.9	43.9	366.5	41.4	10.0
Transition economies	345.7	33.9	9.8	113.5	32.8	198.3	57.4	6.8
Developing countries	2 581.1	212.2	8.2	281.6	10.9	2 087.3	80.9	8.6
Latin America and the Caribbean	265.1	50.4	19.0	27.4	10.3	187.3	70.7	2.0
Near East and North Africa (b)	322.6	25.1	7.8	19.5	6.0	278.0	86.2	62.5
Sub-Saharan Africa (c)	98.1	6.9	7.0	2.8	2.9	88.3	90.1	2.5
East and Southeast Asia (d)	977.4	71.2	7.3	192.3	19.7	714.0	73.0	11.2
South Asia	917.8	58.7	6.4	39.6	4.3	819.6	89.3	52.1
Oceania developing	0.1	0.1	35.5	0.0	28.4	0.1	36.2	0.0
North America developing	...	...	...	...	...	...	...	...
Continental groupings	3 811.3	376.2	9.9	783.0	20.5	2 652.1	69.6	8.7
Africa	208.4	18.0	8.6	15.2	7.3	175.2	84.1	5.3
Asia	2 377.1	171.5	7.2	270.2	11.4	1 935.5	81.4	20.4
Latin America	251.7	47.3	18.8	26.1	10.4	178.3	70.8	1.9
Caribbean	13.4	3.1	22.9	1.3	9.4	9.1	67.6	14.4
North America	525.3	69.9	13.3	252.3	48.0	203.2	38.7	8.4
Oceania	26.2	4.6	17.6	2.6	10.1	19.0	72.4	1.5
Europe	409.3	62.0	15.1	215.4	52.6	131.9	32.2	6.2

* Freshwater utilization as percent of renewable fresh water resources given in Table 4.3.

(a) Including Japan, South Africa, Israel

(b) Excluding Israel

(c) Excluding South Africa

(d) Excluding Japan

4.5 Irrigated Land and Percentage of Irrigated Arable Land

World/Continent	Irrigated Land							
	Area (1000 ha)			As % of arable land				
	1980	1990	2002	1980	1990	2002		
WORLD	210 222	244 988	276 719	15.7	17.6	19.7		
Developed countries	58 926	66 286	68 060	9.1	10.2	11.1		
Industrialized countries	37 355	39 935	43 669	9.9	10.5	11.9		
Transition economies	21 571	26 351	24 391	7.9	9.8	10.0		
Developing countries	151 296	178 702	208 659	21.9	24.1	26.3		
Latin America & the Caribbean	13 811	16 794	18 622	10.8	12.5	12.6		
Near East & North Africa	17 982	24 864	28 642	21.8	28.8	32.3		
Sub-Saharan Africa	3 980	4 885	5 225	3.2	3.7	3.6		
East & Southeast Asia	59 722	65 624	74 748	37.0	33.9	35.1		
South Asia	55 798	66 529	81 408	28.6	33.9	41.7		
Oceania developing	3	6	14	0.7	1.2	2.4		
North America developing	...	...	...	...	...	...
Continental groupings								
Africa	9 491	11 235	12 879	6.0	6.7	7.0		
Asia	132 377	155 009	193 869	31.3	33.8	37.9		
Caribbean	1 074	1 269	1 308	22.0	23.3	26.5		
Latin America	12 737	15 525	17 314	10.4	12.0	12.1		
North America	21 178	21 618	23 285	9.1	9.3	10.5		
Oceania	1 686	2 118	2 844	3.6	4.2	5.6		
Europe	14 479	17 414	25 220	11.5	14.0	8.8		

AGRICULTURAL PRODUCTION AND TRADE

5.1 Average Annual Rate of Growth of Total Agricultural Production

World/Region	Total Agricultural Production			
	1970- 1980	1980- 1990	1990- 2000	2000- 2003
	(%)			
WORLD	2.4	2.4	2.3	1.9
Developed countries	2.0	1.0	0.1	-0.4
Industrialized countries	2.2	0.7	1.4	-0.9
Transition economies	1.5	1.7	-3.7	1.7
Developing countries	2.8	3.6	3.8	3.1
Latin America and the Caribbean	3.4	2.3	3.1	3.5
Near East and North Africa	2.8	3.4	2.9	3.1
Sub-Saharan Africa	1.0	3.0	3.1	1.7
East and Southeast Asia	3.3	4.3	4.8	3.9
South Asia	2.6	3.8	3.1	1.4
Oceania developing	2.4	1.7	2.0	0.9
North America developing	-2.4	1.2	-0.9	0.4
Continental groupings				
Africa	1.2	2.9	3.0	2.2
Asia	...	...	4.1	3.0
Latin America	3.5	2.4	3.3	3.6
Caribbean	1.3	1.0	-1.0	1.1
North America	2.7	0.6	2.1	-0.3
Oceania	1.8	1.7	3.3	-1.2
Europe	...	...	1.4	-0.5

Note: Production aggregates are calculated using constant 1999-2001 international commodity prices.

5.2 Average Annual Rate of Growth of Food Production and Per Caput Food Production

World/Region	Food Production				Per caput			
	1970- 1980	1980- 1990	1990- 2000	2000- 2003	1970- 1980	1980- 1990	1990- 2000	2000- 2003
	(%)				(%)			
WORLD	2.5	2.4	2.5	2.0	0.6	0.6	1.0	0.7
Developed countries	2.0	1.0	0.2	-0.3	1.2	0.3	-0.3	-0.6
Industrialized countries	2.3	0.7	1.4	-0.8	1.4	0.0	0.7	-1.3
Transition economies	1.5	1.8	-3.6	1.8	0.6	1.0	-3.5	2.0
Developing countries	3.0	3.6	4.0	3.2	0.7	1.5	2.3	1.6
Latin America and the Caribbean	3.6	2.5	3.4	3.7	1.1	0.4	1.7	2.2
Near East and North Africa	3.1	3.5	2.9	3.4	0.3	0.7	0.7	1.3
Sub-Saharan Africa	1.1	2.9	3.1	1.9	-1.7	-0.1	0.4	-0.5
East and Southeast Asia	3.3	4.4	5.2	4.0	1.4	2.7	3.9	3.0
South Asia	2.7	3.8	3.3	1.3	0.4	1.5	1.3	-0.4
Oceania developing	2.2	1.7	1.9	1.2	-0.1	-0.6	-0.5	-0.9
North America developing	-2.3	1.2	-0.9	0.5	-3.5	0.3	-1.3	-0.2
Continental groupings								
Africa	1.4	3.0	3.1	2.4	-1.4	0.1	0.6	0.1
Asia	...	...	4.3	3.1	...	...	2.6	1.8
Latin America	3.7	2.6	3.6	3.8	1.2	0.5	1.9	2.2
Caribbean	1.3	1.1	-1.1	1.1	-0.4	-0.5	-2.1	0.2
North America	2.8	0.6	2.2	-0.3	1.8	-0.4	1.1	-1.3
Oceania	2.2	1.4	3.8	0.0	0.6	-0.2	2.3	-1.3
Europe	...	...	1.4	-0.5	...	...	-1.7	-0.4

Note: Production aggregates are calculated using constant 1999-2001 international commodity prices.

5.3 Agricultural Production per Agricultural Worker

World/Region	Agricultural production (1999-2001 Int. \$) per agricultural worker			
	1980	1990	2000	2003
WORLD	787	881	1 013	1 053
Developed countries	5 685	7 646	9 996	10 726
Industrialized countries	10 568	14 861	22 837	24 675
Transition economies	2 627	3 521	3 056	3 440
Developing countries	420	519	678	728
Latin America and the Caribbean	1 965	2 478	3 422	3 857
Near East and North Africa	973	1 318	1 468	1 531
Sub-Saharan Africa	332	355	401	404
East and Southeast Asia	300	391	588	655
South Asia	347	458	532	541
Oceania developing	758	735	759	734
North America developing	1 025	1 350	1 701	1 870
Continental groupings				
Africa	418	456	513	524
Asia	...	...	623	670
Latin America	2 027	2 579	3 626	4 102
Caribbean	1 323	1 454	1 360	1 410
North America	25 918	33 656	49 428	52 182
Oceania	8 031	8 256	9 739	9 404
Europe	...	...	7 751	8 353

Note: The aggregate "agricultural production", expressed in international dollars, is the sum of crop and livestock commodities after deduction of seed and feed utilization. Practically all products are covered, with the exception of fodder crops. Production quantities are valued by constant 1999-2001 average international commodity prices. This method assigns a single constant price to each commodity regardless of the country where it was produced.

"Agricultural worker" refers to the estimates of agricultural labour force in 1980, 1990 and 2000 and the projections for 2003.

5.4 Crop Production per ha of Land in Use

World/Region	Crop production (1999-2001 Int. \$) per ha of land in use			
	1980	1990	2000	2002
WORLD	398	488	592	599
Developed countries	366	411	439	426
Industrialized countries	430	481	565	524
Transition economies	275	310	244	275
Developing countries	426	550	704	721
Latin America and the Caribbean	381	455	533	570
Near East and North Africa	340	445	562	583
Sub-Saharan Africa	218	281	359	359
East and Southeast Asia	753	898	1 175	1 228
South Asia	343	479	611	580
Oceania developing	651	633	701	676
North America developing	125	183	174	177
Continental groupings				
Africa	243	304	382	386
Asia	...	...	844	861
Latin America	372	448	535	570
Caribbean	587	597	490	573
North America	321	379	461	418
Oceania	108	144	210	155
Europe	...	...	469	481

Notes: The aggregate "crop production", expressed in international dollars, is the sum of crop commodities after deduction of seed utilization. Practically all products are covered, with the exception of fodder crops. Production quantities are valued by constant prices for each commodity regardless of the country of production.

"Land in use" refers to arable land and land under permanent crops.

5.5 Value of Total Merchandise Trade, Agriculture Trade and Share of Agriculture Trade in Total Merchandise Trade

World/Region	Total Merchandise				Agricultural Products				Share of Agricultural Products in Total Merchandise			
	1980	1990	2000	2003	1980	1990	2000	2003	1980	1990	2000	2003
	(US\$ billion)								(%)			
Imports												
WORLD	2 042.0	3 608.8	6 539.4	7 646.6	255.4	353.2	435.3	548.5	12.5	9.8	6.7	7.2
Developed countries	1 563.1	2 829.7	4 723.8	5 489.6	186.4	266.6	302.8	394.9	11.9	9.4	6.4	7.2
Industrialized countries	1 412.9	2 634.8	4 467.3	5 071.7	158.7	239.2	279.0	359.7	11.2	9.1	6.2	7.1
Transition economies	150.2	194.9	256.5	418.0	27.7	27.5	23.9	35.2	18.4	14.1	9.3	8.4
Developing countries	478.8	779.0	1 815.6	2 157.0	69.0	86.6	132.5	153.6	14.4	11.1	7.3	7.1
Latin America and the Caribbean	125.6	120.4	316.5	308.0	14.6	14.8	28.6	31.6	11.6	12.3	9.0	10.3
Near East and North Africa	126.5	144.7	249.1	312.8	21.7	25.8	34.0	35.7	17.1	17.9	13.6	11.4
Sub-Saharan Africa	46.3	41.2	52.5	66.2	7.1	6.7	9.0	11.9	15.4	16.3	17.1	17.9
East and Southeast Asia	152.9	428.5	1 106.1	1 355.0	21.7	34.4	52.6	63.7	14.2	8.0	4.8	4.7
South Asia	23.3	38.1	80.1	102.7	3.2	3.9	7.5	9.6	13.8	10.3	9.3	9.3
Oceania developing	3.7	5.2	6.8	7.8	0.6	0.8	0.8	0.9	17.2	14.9	11.2	12.1
North America developing	0.7	1.1	4.4	4.4	0.1	0.2	0.1	.2	18.7	14.7	3.3	3.8
Continental groupings												
Africa	94.7	95.1	132.8	166.5	15.2	16.0	20.2	22.7	16.0	16.8	15.2	13.6
Asia	...	...	1 814.0	2 149.3	...	...	124.1	141.0	...	...	6.8	6.6
Latin America	92.0	97.1	286.5	277.8	11.6	11.3	25.0	27.7	12.6	11.7	8.7	10.0
Caribbean	33.6	23.2	30.0	30.2	3.0	3.4	3.5	4.0	9.0	14.8	11.8	13.1
North America	301.1	634.3	1 502.9	1 549.5	23.1	34.4	56.5	67.9	7.7	5.4	3.8	4.4
Oceania	26.8	54.0	84.2	113.4	1.9	3.2	4.9	6.4	7.2	5.9	5.8	5.6
Europe	...	...	2 689.0	3 360.0	...	...	201.0	279.0	...	...	7.5	8.3
Exports												
WORLD	2 025.1	3 495.6	6 380.8	7 465.8	234.2	326.3	412.2	522.2	11.6	9.3	6.5	7.0
Developed countries	1 434.6	2 687.1	4 413.8	5 133.0	161.4	236.6	291.3	368.8	11.2	8.8	6.6	7.2
Industrialized countries	1 286.6	2 513.5	4 126.5	4 707.5	150.2	226.3	276.1	345.3	11.7	9.0	6.7	7.3
Transition economies	148.0	173.7	287.2	425.5	11.2	10.3	15.3	23.5	7.6	5.9	5.3	5.5
Developing countries	590.5	808.5	1 967.1	2 332.8	72.9	89.7	120.9	153.4	12.3	11.1	6.1	6.6
Latin America and the Caribbean	115.2	134.0	281.9	307.9	32.0	35.0	49.1	63.4	27.8	26.1	17.4	20.6
Near East and North Africa	257.0	175.1	345.1	399.5	5.5	7.8	9.8	12.4	2.1	4.5	2.8	3.1
Sub-Saharan Africa	51.2	44.0	64.5	71.2	10.2	8.8	9.8	12.0	19.8	20.0	15.2	16.9
East and Southeast Asia	151.7	425.0	1 203.7	1 467.6	20.2	32.6	44.4	56.4	13.3	7.7	3.7	3.8
South Asia	12.7	27.0	66.1	80.5	4.3	5.0	7.2	8.5	33.8	18.6	10.8	10.6
Oceania developing	2.3	2.8	4.8	4.6	0.7	0.5	0.6	0.6	30.8	16.8	12.0	14.1
North America developing	0.2	0.6	1.1	1.4	0.0	0.0	0.0	.0	1.8	0.1	0.1	2.1
Continental groupings												
Africa	122.2	105.6	145.4	165.5	14.1	12.2	13.8	17.5	11.6	11.5	9.5	10.6
Asia	...	...	2 093.3	2 417.7	...	...	64.5	80.1	...	...	3.1	3.3
Latin America	86.4	119.0	264.6	287.7	26.0	28.9	47.0	61.0	30.1	24.3	17.7	21.2
Caribbean	28.9	15.1	17.2	20.2	6.0	6.1	2.1	2.4	20.9	40.4	12.2	11.6
North America	282.0	521.8	1 059.7	997.8	50.0	54.4	72.2	79.9	17.7	10.4	6.8	8.0
Oceania	28.4	49.6	73.2	96.9	13.2	17.0	21.9	23.6	46.7	34.3	29.9	24.4
Europe	...	...	2 727.4	3 480.1	...	...	190.8	257.7	...	...	7.0	7.4

5.6 Average Annual Rate of Growth of Merchandise and Agricultural Trade

World/Region	Total merchandise			Agricultural products		
	1980-1990	1990-2000	2000-2003	1980-1990	1990-2000	2000-2003
	(Percentage)					
Imports						
WORLD	5.9	6.1	5.4	3.3	2.1	8.0
Developed countries	6.1	5.3	5.1	3.6	1.3	9.3
Industrialized countries	6.4	5.4	4.3	4.2	1.6	8.8
Transition economies	2.6	2.8	17.7	-0.1	-1.4	13.9
Developing countries	5.0	8.8	5.9	2.3	4.3	5.1
Latin America and the Caribbean	-0.4	10.2	-0.9	0.1	6.8	3.5
Near East and North Africa	1.4	5.6	7.9	1.8	2.8	1.7
Sub-Saharan Africa	-1.2	2.4	8.0	-0.6	3.0	9.7
East and Southeast Asia	10.9	9.9	7.0	4.7	4.3	6.6
South Asia	5.0	7.7	8.6	2.0	6.7	8.7
Oceania developing	3.5	2.8	4.6	2.1	-0.1	7.2
North America developing	5.1	14.7	-0.4	2.6	-1.2	5.0
Continental groupings						
Africa	0.0	3.4	7.8	0.5	2.4	3.9
Asia	...	...	5.8	...	...	4.4
Latin America	0.5	11.4	-1.0	-0.2	8.2	3.4
Caribbean	-3.6	2.6	0.3	1.3	0.3	3.7
North America	7.7	9.0	1.0	4.0	5.1	6.3
Oceania	7.2	4.5	10.4	5.0	4.4	9.4
Europe	...	...	7.7	...	...	11.5
Exports						
WORLD	5.6	6.2	5.4	3.4	2.4	8.2
Developed countries	6.5	5.1	5.2	3.9	2.1	8.2
Industrialized countries	6.9	5.1	4.5	4.2	2.0	7.7
Transition economies	1.6	5.2	14.0	-0.8	4.0	15.4
Developing countries	3.2	9.3	5.8	2.1	3.0	8.3
Latin America and the Caribbean	1.5	7.7	3.0	0.9	3.4	8.9
Near East and North Africa	-3.8	7.0	5.0	3.6	2.3	8.2
Sub-Saharan Africa	-1.5	3.9	3.3	-1.4	1.1	6.9
East and Southeast Asia	10.8	11.0	6.8	4.9	3.2	8.3
South Asia	7.8	9.4	6.8	1.6	3.6	5.9
Oceania developing	2.3	5.3	-1.2	-3.7	1.8	4.2
North America developing	8.3	6.9	9.4	-17.6	8.7	172.1
Continental groupings						
Africa	-1.4	3.2	4.4	-1.5	1.3	8.4
Asia	...	...	4.9	...	...	7.5
Latin America	3.3	8.3	2.8	1.1	5.0	9.1
Caribbean	-6.3	1.3	5.5	0.1	-10.1	3.7
North America	6.3	7.3	-2.0	0.8	2.9	3.5
Oceania	5.7	4.0	9.8	2.5	2.6	2.5
Europe	...	...	8.5	...	...	10.5

5.7 Exports of Agricultural Commodities by Major Group

Main Groups	Value (billion US\$)				% of all groups			
	1980	1990	2000	2003	1980	1990	2000	2003
World								
Live animals	6	9	9	10	2.6	2.7	2.2	1.9
Meat and meat preparations	21	34	44	55	9.1	10.6	10.7	10.5
Dairy products and Eggs	14	21	27	34	5.8	6.5	6.5	6.4
Cereals and preparations	44	46	53	65	18.9	14.1	12.8	12.4
Fruit and Vegetables	27	51	67	90	11.5	15.6	16.4	17.2
Sugar and Honey	17	17	15	19	7.2	5.2	3.7	3.6
Coffee, Tea, Cocoa and Spices	23	21	29	33	9.9	6.5	6.9	6.4
Beverages	11	22	36	47	4.6	6.7	8.7	8.9
Tobacco	8	18	22	22	3.4	5.6	5.4	4.1
Crude materials	39	51	54	71	16.8	15.6	13.0	13.5
Animal and Vegetable Oils	11	13	19	30	4.6	4.0	4.7	5.7
Other agricultural exports	13	23	37	49	5.6	7.0	9.0	9.4
All groups	234	326	412	522	100.0	100.0	100.0	100.0
Developed countries								
Live animals	5	7	7	8	3.0	2.8	2.5	2.1
Meat and meat preparations	18	30	37	45	11.3	12.6	12.6	12.2
Dairy products and Eggs	13	21	25	32	8.3	8.7	8.6	8.6
Cereals and preparations	39	40	41	50	23.9	16.9	14.2	13.5
Fruit and Vegetables	18	33	42	59	10.9	13.8	14.6	15.9
Sugar and Honey	6	8	9	10	4.0	3.3	3.0	2.7
Coffee, Tea, Cocoa and Spices	5	8	12	17	2.8	3.2	4.2	4.6
Beverages	10	20	31	41	6.3	8.5	10.7	11.0
Tobacco	6	14	16	15	3.8	5.7	5.4	4.0
Crude materials	26	34	35	45	16.0	14.3	12.1	12.2
Animal and Vegetable Oils	6	7	9	13	3.7	2.9	3.1	3.5
Other agricultural exports	10	17	27	35	6.1	7.1	9.1	9.6
All groups	161	237	291	369	100.0	100.0	100.0	100.0
Developing countries								
Live animals	1	2	2	2	1.8	2.3	1.5	1.2
Meat and meat preparations	3	5	7	10	4.1	5.2	6.2	6.5
Dairy products and Eggs	0	1	2	2	0.4	0.7	1.3	1.3
Cereals and preparations	6	6	12	15	7.7	6.6	9.5	9.9
Fruit and Vegetables	9	18	25	31	13.0	20.5	20.7	20.2
Sugar and Honey	11	9	6	9	14.4	10.2	5.4	5.6
Coffee, Tea, Cocoa and Spices	19	13	16	16	25.5	15.0	13.6	10.5
Beverages	1	2	5	6	0.8	1.8	3.8	3.9
Tobacco	2	5	7	7	2.6	5.3	5.5	4.4
Crude materials	14	17	19	26	18.5	18.8	15.3	16.7
Animal and Vegetable Oils	5	6	10	17	6.5	6.8	8.5	10.9
Other agricultural exports	3	6	10	14	4.5	6.7	8.6	9.0
All groups	73	90	121	153	100.0	100.0	100.0	100.0

5.8 Quantities of Exports of Selected Agricultural Commodities

Commodity	Exports				Average Annual Rate of Growth		
	1980	1990	2000	2003	1980-1990	1990-2000	2000-2003
	..... (thousand tonnes) .....				..... (Percentage)		
World							
Wheat	99 632	108 251	129 748	122 140	0.8	1.8	-2.0
Rice	12 940	12 471	23 561	27 537	-0.4	6.6	5.3
Coarse Grain	110 620	105 513	119 554	121 420	-0.5	1.3	0.5
Coffee	3 747	5 043	5 927	5 693	3.0	1.6	-1.3
Meat	8 102	11 571	21 907	24 700	3.6	6.6	4.1
Cocoa Beans	1 065	1 896	2 504	2 425	5.9	2.8	-1.1
Developed countries							
Wheat	93 948	99 455	112 173	101 968	0.6	1.2	-3.1
Rice	5 171	4 025	4 900	5 449	-2.5	2.0	3.6
Coarse Grain	101 437	94 457	95 829	87 895	-0.7	0.1	-2.8
Coffee	185	365	739	801	7.0	7.3	2.7
Meat	6 931	9 589	17 526	18 292	3.3	6.2	1.4
Cocoa Beans	51	39	265	266	-2.5	21.0	0.1
Developing countries							
Wheat	5 684	8 796	17 575	20 172	4.5	7.2	4.7
Rice	7 769	8 446	18 661	22 089	0.8	8.3	5.8
Coarse Grain	9 182	11 055	23 725	33 526	1.9	7.9	12.2
Coffee	3 561	4 678	5 187	4 893	2.8	1.0	-1.9
Meat	1 170	1 982	4 381	6 407	5.4	8.3	13.5
Cocoa Beans	1 014	1 857	2 239	2 160	6.2	1.9	-1.2

Notes:

Exports of wheat consist of wheat and wheat flour (wheat flour is included in terms of wheat equivalent).

Exports of rice consist of paddy rice, husked rice, milled/husked rice, milled/paddy rice and broken rice, all in milled rice equivalent.

Coarse grain: data refer to all cereals except wheat and rice.

Exports of meat consist of fresh, frozen and chilled meat.

Exports of coffee consist of green coffee, roasted coffee and coffee substitutes containing coffee.

5.9 Cereal Production

World/Region	Production (million tonnes)					Average Annual Rate of growth (%)			
	1970	1980	1990	2000	2003	1970- 1980	1980- 1990	1990- 2000	2000- 2003
WORLD	1 192.5	1 549.9	1 951.7	2 060.5	2 081.0	2.7	2.3	0.5	0.3
Developed countries	605.6	783.7	913.4	863.1	846.1	2.6	1.5	-0.6	-0.7
Industrialized countries	377.9	526.7	610.7	676.2	653.9	3.4	1.5	1.0	-1.1
Transition economies	227.8	257.0	302.7	187.0	192.2	1.2	1.7	-4.7	0.9
Developing countries	586.9	766.2	1 038.3	1 197.4	1 234.9	2.7	3.1	1.4	1.0
Latin America and the Caribbean	71.4	88.4	99.1	138.0	160.3	2.2	1.1	3.4	5.1
Near East and North Africa	45.0	60.7	81.2	78.9	105.9	3.0	2.9	-0.3	10.3
Sub-Saharan Africa	37.8	42.8	58.6	73.2	83.2	1.2	3.2	2.3	4.4
East and Southeast Asia	284.5	388.8	548.2	592.3	571.5	3.2	3.5	0.8	-1.2
South Asia	148.2	185.4	251.2	315.0	313.9	2.3	3.1	2.3	-0.1
Oceania developing	0.0	0.0	0.0	0.0	0.0	3.7	-1.6	0.3	2.9
North America developing	...	...	...	...	...	...	...	...	...
Continental groupings									
Africa	60.5	72.6	93.0	112.1	129.6	1.8	2.5	1.9	5.0
Asia	...	...	...	996.2	996.9	...	...	...	0.0
Latin America	70.1	87.0	97.7	136.2	158.2	2.2	1.2	3.4	5.1
Caribbean	1.3	1.5	1.4	1.9	2.1	1.4	-0.4	2.9	4.4
North America	215.4	311.2	369.2	393.8	399.1	3.7	1.7	0.6	0.4
Oceania	13.5	17.2	23.9	35.3	39.9	2.4	3.4	4.0	4.1
Europe	...	...	...	385.0	355.2	...	...	...	-2.6

5.10 Exports and Imports of Cereals and Preparation

World/Region	Quantity (thousand tonnes)					Average Annual Rate of Growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
						Exports			
WORLD	115 830	226 410	233 174	287 968	291 989	6.9	0.3	2.1	0.5
Developed countries	94 908	203 356	204 108	226 242	213 423	7.9	0.0	1.0	-1.9
Industrialized countries	85 706	197 053	199 480	211 524	182 852	8.7	0.1	0.6	-4.7
Transition economies	9 202	6 302	4 629	14 717	30 571	-3.7	-3.0	12.3	27.6
Developing countries	20 921	23 054	29 066	61 727	78 566	1.0	2.3	7.8	8.4
Latin America and the Caribbean	12 229	10 736	11 874	27 124	24 261	-1.3	1.0	8.6	-3.7
Near East and North Africa	1 261	1 194	1 966	3 967	5 014	-0.5	5.1	7.3	8.1
Sub-Saharan Africa	752	474	1 422	633	891	-4.5	11.6	-7.8	12.1
East and Southeast Asia	5 904	8 748	12 391	25 152	36 165	4.0	3.5	7.3	12.9
South Asia	775	1 892	1 409	4 840	12 220	9.3	-2.9	13.1	36.2
Oceania developing	1	8	4	12	15	20.6	-6.7	11.5	8.7
North America developing	...	...	...	...	...	...	...	...	...
Continental groupings									
Africa	3 019	4 418	3 784	2 210	2 766	3.9	-1.5	-5.2	7.8
Asia	...	...	...	39 702	59 333	...	...	...	14.3
Latin America	12 225	10 691	11 819	27 052	24 181	-1.3	1.0	8.6	-3.7
Caribbean	4	45	55	71	79	27.1	2.1	2.6	3.8
North America	55 463	135 483	116 877	113 359	99 357	9.3	-1.5	-0.3	-4.3
Oceania	8 442	19 989	15 505	22 442	12 878	9.0	-2.5	3.8	-16.9
Europe	...	...	...	83 133	93 394	...	...	...	4.0
Imports									
WORLD	113 721	223 124	229 996	285 271	289 260	7.0	0.3	2.2	0.5
Developed countries	71 751	125 700	111 681	108 271	119 100	5.8	-1.2	-0.3	3.2
Industrialized countries	64 010	80 080	73 308	90 008	102 352	2.3	-0.9	2.1	4.4
Transition economies	7 741	45 620	38 373	18 263	16 748	19.4	-1.7	-7.2	-2.8
Developing countries	41 970	97 424	118 315	177 000	170 160	8.8	2.0	4.1	-1.3
Latin America and the Caribbean	8 052	26 600	22 423	46 203	47 639	12.7	-1.7	7.5	1.0
Near East and North Africa	6 940	24 804	42 068	64 759	54 492	13.6	5.4	4.4	-5.6
Sub-Saharan Africa	3 368	8 844	8 942	16 043	18 558	10.1	0.1	6.0	5.0
East and Southeast Asia	16 201	32 752	39 528	44 441	43 523	7.3	1.9	1.2	-0.7
South Asia	7 229	4 068	4 893	4 956	5 373	-5.6	1.9	0.1	2.7
Oceania developing	173	347	453	590	567	7.2	2.7	2.7	-1.3
North America developing	8	9	8	9	8	1.9	-1.4	0.8	-2.2
Continental groupings									
Africa	6 582	21 323	28 011	45 139	41 885	12.5	2.8	4.9	-2.5
Asia	...	...	...	122 237	116 367	...	...	...	-1.6
Latin America	6 246	22 741	18 202	41 756	42 803	13.8	-2.2	8.7	0.8
Caribbean	1 806	3 859	4 221	4 447	4 837	7.9	0.9	0.5	2.8
North America	1 141	1 912	3 760	8 965	10 755	5.3	7.0	9.1	6.3
Oceania	216	425	823	1 054	1 535	7.0	6.8	2.5	13.4
Europe	...	...	...	61 673	71 079	...	...	...	4.8

5.11 Wheat Production

World/Region	Production (million tonnes)					Average Annual Rates of growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	310.7	440.2	592.3	586.1	560.0	3.5	3.0	-0.1	-1.5
Developed countries	216.4	289.4	357.7	313.9	292.9	3.0	2.1	-1.3	-2.3
Industrialized countries	101.7	165.6	214.4	219.5	207.8	5.0	2.6	0.2	-1.8
Transition economies	114.7	123.8	143.4	94.3	85.1	0.8	1.5	-4.1	-3.4
Developing countries	94.3	150.8	234.6	272.2	267.1	4.8	4.5	1.5	-0.6
Latin America and the Caribbean	11.5	15.1	20.8	23.7	26.3	2.7	3.2	1.3	3.5
Near East and North Africa	23.9	34.6	46.7	45.9	64.0	3.8	3.0	-0.2	11.7
Sub-Saharan Africa	1.4	1.4	2.1	2.3	2.7	0.0	4.3	0.8	6.3
East and Southeast Asia	29.8	55.7	99.1	99.9	87.0	6.5	5.9	0.1	-4.5
South Asia	27.8	44.0	65.9	100.5	87.1	4.7	4.1	4.3	-4.6
Oceania developing	...	...	...	...	...	...	...	...	...
North America developing	...	...	...	...	...	...	...	...	...
Continental groupings									
Africa	8.1	8.9	13.7	14.4	21.4	1.0	4.4	0.5	14.1
Asia	...	...	...	254.5	245.1	...	...	...	-1.3
Latin America	11.5	15.1	20.8	23.7	26.3	2.7	3.2	1.3	3.5
Caribbean	...	...	...	...	...	...	...	...	...
North America	45.8	84.1	106.4	87.3	87.4	6.3	2.4	-2.0	0.0
Oceania	8.2	11.2	15.3	22.4	26.0	3.2	3.2	3.9	5.1
Europe	...	...	...	183.8	153.9	...	...	...	-5.7

5.12 Leading Wheat Producing Countries, 2003

Country	Production (million tonnes)	Country	Production (million tonnes)
China	86	Australia	26
India	65	Canada	24
United States of America	64	Germany	19
Russian Federation	34	Pakistan	19
France	30	Turkey	19

5.13 Leading Wheat Exporting Countries, 2003

Country	Quantity (million tonnes)	Value (million US\$)
United States of America	26	4 043
France	18	2 550
Canada	12	2 106

Note: Exports of wheat consist of wheat and wheat flour (wheat flour is included in terms of wheat equivalent)

5.14 Paddy Rice Production

World/Region	Production (million tonnes)					Average Annual Rates of Growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	316.4	396.9	518.2	599.0	583.1	2.3	2.7	1.5	-0.9
Developed countries	23.5	23.9	25.7	25.3	23.2	0.1	0.7	-0.1	-2.9
Industrialized countries	22.1	21.1	23.4	24.1	21.9	-0.5	1.0	0.3	-3.1
Transition economies	1.4	2.8	2.3	1.2	1.3	7.0	-1.7	-6.1	0.9
Developing countries	292.9	373.0	492.5	573.7	559.9	2.4	2.8	1.5	-0.8
Latin America and the Caribbean	11.9	16.4	15.6	23.0	22.8	3.3	-0.5	4.0	-0.3
Near East and North Africa	4.5	4.5	5.9	8.6	10.1	0.1	2.7	3.7	5.5
Sub-Saharan Africa	4.7	6.2	9.2	11.6	12.1	2.8	4.0	2.4	1.4
East and Southeast Asia	184.4	235.3	312.5	351.1	330.6	2.5	2.9	1.2	-2.0
South Asia	87.3	110.5	149.3	179.4	184.4	2.4	3.1	1.9	0.9
Oceania developing	0.0	0.0	0.0	0.0	0.0	3.1	-1.8	-3.7	4.3
North America developing	...	...	...	...	...	...	...	...	...
Continental groupings									
Africa	7.3	8.6	12.4	17.7	18.3	1.6	3.7	3.6	1.2
Asia	...	...	...	545.4	529.3	...	...	...	-1.0
Latin America	11.2	15.4	14.5	21.7	21.4	3.2	-0.6	4.1	-0.6
Caribbean	0.7	1.0	1.0	1.3	1.4	4.1	0.3	2.0	4.1
North America	3.8	6.6	7.1	8.7	9.0	5.7	0.7	2.0	1.4
Oceania	0.3	0.6	1.0	1.1	0.5	9.0	3.9	1.6	-25.7
Europe	...	...	...	3.2	3.3	...	...	...	0.7

5.15 Leading Rice Producing Countries, 2003

Country	Production (million tonnes)	Country	Production (million tonnes)
China	162	Thailand	27
India	131	Myanmar	23
Indonesia	52	Philippines	13
Bangladesh	39	Brazil	10
Viet Nam	35	Japan	10

5.16 Leading Rice Exporting Countries, 2003

Country	Quantity (million tonnes)	Value (million US\$)
Thailand	8	1 578
Viet Nam	4	625
United States of America	3	717

Note: Exports of rice consist of paddy rice, husked rice, milled/husked rice, milled/paddy rice and broken rice, all in milled rice equivalent

5.17 Coarse Grain Production

World/Region	Production (million tonnes)					Average Annual Rates of Growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	565.5	713.1	841.1	875.5	938.0	2.3	1.7	0.4	2.3
Developed countries	365.8	470.7	529.9	524.0	530.0	2.6	1.2	-0.1	0.4
Industrialized countries	254.1	340.3	373.0	432.6	424.2	3.0	0.9	1.5	-0.7
Transition economies	111.7	130.4	157.0	91.4	105.9	1.6	1.9	-5.3	5.0
Developing countries	199.7	242.5	311.2	351.5	407.9	2.0	2.5	1.2	5.1
Latin America and the Caribbean	47.9	56.9	62.7	91.3	111.3	1.7	1.0	3.8	6.8
Near East and North Africa	16.6	21.6	28.6	24.5	31.9	2.7	2.8	-1.5	9.2
Sub-Saharan Africa	31.7	35.2	47.3	59.3	68.4	1.0	3.0	2.3	4.9
East and Southeast Asia	70.3	97.8	136.6	141.2	154.0	3.4	3.4	0.3	2.9
South Asia	33.2	31.0	36.0	35.2	42.4	-0.7	1.5	-0.2	6.4
Oceania developing	0.0	0.0	0.0	0.0	0.0	6.6	-0.6	8.8	1.2
North America developing	...	...	...	...	...	...	...	...	...
Continental groupings									
Africa	45.1	55.1	66.9	80.1	90.0	2.0	2.0	1.8	4.0
Asia	...	...	...	196.3	222.5	...	...	...	4.3
Latin America	47.3	56.4	62.4	90.7	110.6	1.8	1.0	3.8	6.8
Caribbean	0.6	0.5	0.4	0.6	0.7	-2.7	-2.2	5.1	5.2
North America	165.9	220.8	255.7	297.9	302.7	2.9	1.5	1.5	0.5
Oceania	5.1	5.4	7.7	11.8	13.4	0.6	3.7	4.3	4.3
Europe	...	...	...	198.1	198.1	...	...	...	0.0

Note: Coarse grain: data refer to all cereals except wheat and rice.

5.18 Leading Coarse Grain Producing Countries, 2003

Country	Production (million tonnes)	Country	Production (million tonnes)
United States of America	276	Mexico	27
China	127	Canada	27
Brazil	51	France	24
India	38	Germany	20
Russian Federation	31	Nigeria	19

Note: Coarse grain: data refer to all cereals except wheat and rice

5.19 Leading Coarse Grain Exporting Countries, 2003

Country	Quantity (million tonnes)	Value (million US\$)
United States of America	49	5 690
China	17	1 829
France	13	2 162

Note: Coarse grain: data refer to all cereals except wheat and rice

5.20 Meat Production

World/Region	Production (million tonnes)					Average Annual Rates of growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	100.7	136.8	180.1	235.0	253.4	3.1	2.8	2.7	2.6
Developed countries	69.8	89.9	104.8	105.6	109.0	2.6	1.5	0.1	1.1
Industrialized countries	51.1	65.1	74.5	88.7	90.8	2.4	1.4	1.8	0.8
Transition economies	18.7	24.8	30.3	17.0	18.2	2.8	2.0	-5.6	2.4
Developing countries	30.8	47.0	75.3	129.3	144.4	4.3	4.8	5.6	3.7
Latin America and the Caribbean	11.1	15.9	20.2	32.3	35.5	3.6	2.4	4.8	3.3
Near East and North Africa	2.3	3.2	5.5	7.9	8.2	3.3	5.7	3.7	1.2
Sub-Saharan Africa	3.6	4.5	5.4	6.6	7.1	2.4	1.8	2.1	2.2
East and Southeast Asia	10.8	19.4	38.1	74.4	84.6	6.0	7.0	6.9	4.4
South Asia	2.9	3.7	5.8	7.8	8.6	2.7	4.5	3.0	3.5
Oceania developing	0.2	0.2	0.3	0.4	0.4	2.4	2.6	2.2	3.6
North America developing	0.0	0.0	0.0	0.0	0.0	-2.4	1.4	0.1	0.0
Continental groupings									
Africa	5.0	6.5	8.7	11.1	11.7	2.7	2.8	2.5	1.8
Asia	...	...	...	92.5	104.0	...	...	...	4.0
Latin America	10.6	15.2	19.3	31.3	34.7	3.7	2.4	5.0	3.5
Caribbean	0.5	0.6	0.9	0.9	0.9	2.1	3.0	1.0	-2.8
North America	23.4	27.0	31.4	41.6	43.0	1.4	1.5	2.8	1.1
Oceania	3.3	4.2	4.6	5.7	6.0	2.4	1.1	2.1	1.6
Europe	...	...	...	51.8	53.2	...	...	...	0.8

Note: Data related to total meat production refer to both commercial and farm slaughter. Data are given in terms of dressed carcass weight, excluding offal and slaughter fats. Pig meat includes bacon and ham in fresh equivalent.

5.21 Leading Meat Producing Countries, 2003

Country	Production (million tonnes)	Country	Production (million tonnes)
China	71	India	6
United States of America	38	Spain	5
Brazil	18	Russian Federation	5
France	7	Mexico	5
Germany	7	Canada	5

5.22 Leading Meat Exporting Countries, 2003

Country	Quantity (million tonnes)	Value (million US\$)
United States of America	4	6 639
Brazil	3	3 625
Netherlands	2	3 821

Note: Exports of meat consists of fresh, frozen and chilled meat

5.23 Oil Crop Production (in oil equivalent)

World/Region	Production (million tonnes)					Average Annual Rates of Growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	34.9	49.3	75.4	110.0	123.2	3.5	4.3	3.9	3.8
Developed countries	14.9	20.1	25.7	34.5	34.3	3.1	2.5	3.0	-0.2
Industrialized countries	10.3	15.8	20.1	28.6	26.9	4.3	2.4	3.6	-2.0
Transition economies	4.5	4.4	5.6	5.9	7.3	-0.4	2.6	0.4	7.8
Developing countries	20.1	29.2	49.7	75.6	88.9	3.8	5.5	4.3	5.6
Latin America and the Caribbean	3.0	6.5	10.1	15.9	21.6	7.9	4.6	4.7	10.6
Near East and North Africa	1.0	1.5	1.8	2.1	2.0	4.1	1.5	1.8	-2.5
Sub-Saharan Africa	3.8	3.7	4.5	6.2	6.5	-0.3	1.9	3.3	1.5
East and Southeast Asia	7.4	12.7	24.7	41.4	48.5	5.6	6.9	5.3	5.4
South Asia	4.6	4.4	8.2	9.3	9.8	-0.4	6.5	1.2	1.9
Oceania developing	0.3	0.4	0.5	0.7	0.6	3.5	2.1	3.8	-3.9
North America developing	...	...	...	...	...	...	...	...	...
Continental groupings									
Africa	4.4	4.5	5.4	7.1	7.5	0.3	1.9	2.7	2.1
Asia	...	...	...	52.8	60.2	...	...	...	4.5
Latin America	2.9	6.4	10.0	15.8	21.5	8.0	4.6	4.7	10.7
Caribbean	0.1	0.1	0.1	0.1	0.1	0.8	0.0	1.4	3.2
North America	8.0	11.9	13.3	19.6	17.9	4.0	1.1	4.0	-3.1
Oceania	0.3	0.5	0.7	1.6	1.3	4.5	2.9	9.5	-6.9
Europe	...	...	...	12.9	14.6	...	...	...	4.2

Note: Oil crops, or oilbearing crops, are those crops yielding seeds, nuts or fruits which are used mainly for the extraction of culinary or industrial oils, excluding essential oils.

5.24 Leading Soyabean and Groundnut Producing Countries, 2003

Country	Production (million tonnes)	Country	Production (million tonnes)
<u>Soyabean (in beans)</u>			
United States of America	67	China	13
Brazil	51	India	8
Argentina	35	Nigeria	3
China	15	United States of America	2
India	7	Indonesia	1

5.25 Leading Soyabean and Groundnut Products Exporting Countries, 2003

Country	Value (million US\$)	Country	Value (million US\$)
<u>Soyabean & products</u>			
United States of America	9 682	China	563
Brazil	8 126	Argentina	188
Argentina	7 184	United States of America	181

Note: Exporting data for soyabean and products refer to oil, cake, sauce, paste and curd. Exporting data for groundnut and products refer to groundnuts in shell, shelled, oil, cake and prepared groundnuts.

5.26 Coffee Production

World/Region	Production (thousand tonnes)					Average Annual Rates of growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	3849.6	4836.9	6072.1	7550.0	7175.2	2.3	2.3	2.2	-1.7
Developed countries	1.6	0.5	1.0	4.0	3.8	-10.3	6.8	14.4	-1.6
Industrialized countries	1.6	0.5	1.0	4.0	3.8	-10.3	6.8	14.4	-1.6
Transition economies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Developing countries	3848.1	4836.4	6071.0	7546.1	7171.5	2.3	2.3	2.2	-1.7
Latin America and the Caribbean	2189.4	2986.6	3883.0	4258.6	4145.0	3.2	2.7	0.9	-0.9
Near East and North Africa	4.9	4.7	7.4	11.4	11.6	-0.6	4.8	4.4	0.7
Sub-Saharan Africa	1295.0	1161.3	1255.3	1185.4	902.7	-1.1	0.8	-0.6	-8.7
East and Southeast Asia	259.1	466.6	738.7	1705.6	1758.7	6.1	4.7	8.7	1.0
South Asia	70.9	161.5	125.7	301.9	284.3	8.6	-2.5	9.2	-2.0
Oceania developing	28.7	55.7	61.0	83.1	69.1	6.9	0.9	3.1	-6.0
North America developing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Continental groupings									
Africa	1295.0	1161.3	1255.3	1185.4	902.7	-1.1	0.8	-0.6	-8.7
Asia	...	...	...	2018.9	2054.6	...	...	...	0.6
Latin America	2074.1	2848.0	3744.7	4154.5	4036.8	3.2	2.8	1.0	-1.0
Caribbean	115.4	138.6	138.3	104.2	108.1	1.9	0.0	-2.8	1.3
North America	1.6	0.5	1.0	4.0	3.8	-10.4	6.9	14.5	-1.6
Oceania	28.7	55.7	61.0	83.1	69.1	6.9	0.9	3.1	-6.0
Europe	...	...	...	0.0	0.0	...	...	...	...

Note: Production figures for coffee refer to green coffee beans.

5.27 Leading Coffee Producing Countries, 2003

Country	Production (thousand tonnes)	Country	Production (thousand tonnes)
Brazil	1997	India	275
Viet Nam	794	Guatemala	244
Indonesia	702	Ethiopia	222
Colombia	694	Peru	170
Mexico	311	Honduras	152

5.28 Leading Coffee Exporting Countries, 2003

Country	Quantity (thousand tonnes)	Value (million US\$)
Brazil	1375	1 316
Viet Nam	749	330
Colombia	579	814

Note: Coffee exports consist of green coffee, roasted coffee and coffee substitutes containing coffee

5.29 Cocoa Beans Production

World/Region	Production (thousand tonnes)					Average Annual Rates of growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	1 543.4	1 670.7	2 531.9	3 374.5	3 414.6	0.8	4.2	2.9	0.4
Developed countries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Industrialized countries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transition economies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Developing countries	1 543.4	1 670.7	2 531.9	3 374.5	3 414.6	0.8	4.2	2.9	0.4
Latin America and the Caribbean	381.4	552.7	555.1	470.2	469.6	3.8	0.0	-1.6	0.0
Near East and North Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub-Saharan Africa	1 120.8	1 025.8	1 521.8	2 344.6	2 389.2	-0.9	4.0	4.4	0.6
East and Southeast Asia	9.3	50.1	399.6	498.4	495.8	18.4	23.1	2.2	-0.2
South Asia	2.3	8.4	10.2	10.1	10.9	13.8	1.9	-0.1	2.7
Oceania developing	29.6	33.7	45.2	51.2	49.1	1.3	3.0	1.3	-1.4
North America developing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Continental groupings									
Africa	1 120.8	1 025.8	1 521.8	2 344.6	2 389.2	-0.9	4.0	4.4	0.6
Asia	...	...	...	508.5	506.7	...	...	...	-0.1
Latin America	327.6	513.6	497.9	421.4	409.7	4.6	-0.3	-1.7	-0.9
Caribbean	53.9	39.1	57.2	48.8	59.9	-3.1	3.9	-1.6	7.1
North America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oceania	29.6	33.7	45.2	51.2	49.1	1.3	3.0	1.3	-1.4
Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

5.30 Leading Cocoa Bean Producing Countries, 2003

Country	Production (thousand tonnes)	Country	Production (thousand tonnes)
Côte d'Ivoire	1352	Cameroon	130
Ghana	497	Ecuador	88
Indonesia	453	Colombia	54
Nigeria	361	Dominican Rp	50
Brazil	170	Mexico	48

5.31 Leading Cocoa Bean Exporting Countries, 2003

Country	Quantity (thousand tonnes)	Value (million US\$)
Côte d'Ivoire	948	1 733
Ghana	359	715
Indonesia	266	410

FORESTRY PRODUCTION AND TRADE

6.1 Roundwood Production

World/Region	Production (million m ³)					Average Annual Rate of Growth (%)			
	1970	1980	1990	2000	2003	1970-1980	1980-1990	1990-2000	2000-2003
WORLD	2 644	2 978	3 382	3 357	3 348	1.2	1.3	-0.1	-0.1
Developed countries	1 255	1 340	1 534	1 359	1 347	0.7	1.4	-1.2	-0.3
Industrialized countries	785	901	1 074	1 070	1 028	1.4	1.8	0.0	-1.3
Transition economies	470	440	460	289	319	-0.7	0.4	-4.5	3.3
Developing countries	1 389	1 638	1 848	1 997	2 001	1.7	1.2	0.8	0.1
Latin America and the Caribbean	229	303	357	425	433	2.8	1.6	1.8	0.6
Near East and North Africa	68	55	50	49	49	-2.1	-1.1	-0.2	0.2
Sub-Saharan Africa	301	359	441	534	547	1.8	2.1	1.9	0.8
East and Southeast Asia	529	593	616	597	562	1.2	0.4	-0.3	-2.0
South Asia	257	319	377	383	402	2.2	1.7	0.2	1.6
Oceania developing	5	8	9	9	9	4.2	1.4	0.2	-2.8
North America developing	0	0	0	0	0	0.0	0.0	0.0	0.0
Continental groupings									
Africa	339	404	495	593	609	1.8	2.1	1.8	0.9
Asia	...	...	...	1 020	1 000	...	...	...	-0.6
Latin America	224	297	350	419	426	2.8	1.6	1.8	0.5
Caribbean	5	6	7	6	6	2.2	1.4	-2.0	4.6
North America	450	571	672	668	639	2.4	1.7	-0.1	-1.5
Oceania	26	35	42	59	60	3.0	1.9	3.5	0.5
Europe	...	...	...	592	608	...	...	...	0.9

6.2 Exports and Imports of Roundwood

World/Region	Quantity (thousand m ³)					Average Annual Rate of Growth (%)			
	1970	1980	1990	2000	2003	1970- 1980	1980- 1990	1990- 2000	2000- 2003
Exports									
WORLD	87 016	93 845	83 880	118 051	120 351	0.8	-1.1	3.5	0.6
Developed countries	49 267	52 325	54 666	96 819	102 446	0.6	0.4	5.9	1.9
Industrialized countries	30 103	32 638	40 628	45 121	43 034	0.8	2.2	1.1	-1.6
Transition economies	19 164	19 687	14 039	51 698	59 412	0.3	-3.3	13.9	4.7
Developing countries	37 749	41 520	29 213	21 232	17 905	1.0	-3.5	-3.1	-5.5
Latin America and the Caribbean	781	1 198	3 015	2 744	2 821	4.4	9.7	-0.9	0.9
Near East and North Africa	33	9	19	6	30	-12.1	7.6	-10.7	69.6
Sub-Saharan Africa	6 848	6 140	4 143	5 757	4 000	-1.1	-3.9	3.3	-11.4
East and Southeast Asia	29 554	33 086	20 633	10 591	8 572	1.1	-4.6	-6.5	-6.8
South Asia	112	164	48	137	27	3.9	-11.6	11.0	-42.1
Oceania developing	422	923	1 356	1 997	2 455	8.1	3.9	4.0	7.1
North America developing	0	0	0	0	0	0.0	0.0	0.0	0.0
Continental groupings									
Africa	6 864	6 183	4 164	6 058	4 294	-1.0	-3.9	3.8	-10.8
Asia	29 724	33 280	20 725	11 356	8 697	...	...	...	-8.5
Latin America	399	1 198	3 013	2 744	2 814	11.6	9.7	-0.9	0.8
Caribbean	382	0	3	0	7	-100.0	-	-100.0	-
North America	16 945	18 121	22 863	15 205	15 686	0.7	2.4	-4.0	1.0
Oceania	2 255	1 971	3 054	9 033	11 365	-1.3	4.5	11.5	8.0
Europe	...	...	...	73 655	77 487	...	...	...	1.7
Imports									
WORLD	84 183	96 459	83 430	117 356	123 207	1.4	-1.4	3.5	1.6
Developed countries	75 904	79 110	60 790	87 399	82 176	0.4	-2.6	3.7	-2.0
Industrialized countries	72 705	74 424	58 997	83 117	76 684	0.2	-2.3	3.5	-2.6
Transition economies	3 200	4 686	1 793	4 282	5 492	3.9	-9.2	9.1	8.6
Developing countries	8 279	17 349	22 641	29 957	41 031	7.7	2.7	2.8	11.1
Latin America and the Caribbean	372	267	174	145	172	-3.3	-4.2	-1.9	6.0
Near East and North Africa	609	1 059	1 180	2 622	2 126	5.7	1.1	8.3	-6.8
Sub-Saharan Africa	87	96	46	126	122	1.0	-7.2	10.7	-1.0
East and Southeast Asia	7 114	15 830	19 822	24 457	36 100	8.3	2.3	2.1	13.9
South Asia	97	94	1 417	2 602	2 484	-0.3	31.2	6.3	-1.5
Oceania developing	0	4	1	4	27	33.9	-9.2	12.2	81.7
North America developing	0	0	0	1	1	0.0	0.0	19.7	0.0
Continental groupings									
Africa	517	793	301	785	741	4.4	-9.2	10.1	-1.9
Asia	...	...	...	45 203	53 066	...	...	...	5.5
Latin America	342	188	68	82	101	-5.8	-9.6	1.8	7.4
Caribbean	30	80	106	63	71	10.4	2.9	-5.1	4.0
North America	4 695	4 939	1 795	9 112	9 375	0.5	-9.6	17.6	1.0
Oceania	145	9	10	13	33	-24.7	2.0	2.1	37.3
Europe	...	...	...	62 098	59 820	...	...	...	-1.2

FISHERY PRODUCTION AND TRADE

7.1 Fish Production

World/Region	Production (million tonnes)					Average annual rate of growth (%)			
	1970	1980	1990	2000	2003	1970- 1980	1980- 1990	1990- 2000	2000- 2003
WORLD									
Marine	59.2	64.2	83.3	101.0	98.3	0.8	2.6	1.9	- 0.9
Inland	6.0	7.7	14.5	30.0	34.2	2.4	6.6	7.5	4.5
Total	65.2	71.9	97.9	131.0	132.5	1.0	3.1	3.0	0.4
Developed countries									
Marine	32.3	37.5	39.0	30.6	29.5	1.5	0.4	- 2.4	- 1.2
Inland	1.5	1.7	2.1	1.5	1.5	1.3	2.2	- 3.0	- 1.2
Total	33.7	39.2	41.1	32.1	31.0	1.5	0.5	- 2.4	- 1.2
Industrialized countries									
Marine	25.3	27.9	29.0	25.9	25.6	1.0	0.4	- 1.1	- 0.4
Inland	0.5	0.7	0.9	0.9	0.9	3.9	2.4	0.1	0.5
Total	25.8	28.6	29.8	26.8	26.6	1.0	0.4	- 1.1	- 0.4
Transition economies									
Marine	7.0	9.6	10.1	4.6	3.8	3.3	0.5	- 7.5	- 6.0
Inland	1.0	1.0	1.2	0.6	0.6	- 0.2	2.1	- 6.1	- 3.7
Total	7.9	10.6	11.3	5.3	4.4	2.9	0.6	- 7.3	- 5.7
Developing countries									
Marine	26.9	26.7	44.3	70.4	68.9	- 0.1	5.2	4.7	- 0.8
Inland	4.6	6.0	12.5	28.4	32.7	2.8	7.5	8.6	4.8
Total	31.5	32.7	56.7	98.9	101.6	0.4	5.7	5.7	0.9
Latin America and the Caribbean									
Marine	15.2	9.2	15.8	20.0	15.1	- 4.9	5.5	2.4	- 8.9
Inland	0.2	0.3	0.5	0.7	0.8	8.1	4.3	3.9	4.7
Total	15.4	9.6	16.3	20.7	16.0	- 4.6	5.5	2.4	- 8.4
Near East & North Africa									
Marine	0.7	1.2	1.8	2.6	2.6	5.9	3.5	3.9	0.9
Inland	0.1	0.2	0.4	0.8	1.0	5.1	8.0	8.1	5.4
Total	0.8	1.4	2.1	3.4	3.6	5.8	4.1	4.8	2.1
Sub-Saharan Africa									
Marine	1.0	1.1	1.8	2.7	2.8	0.0	5.7	3.8	1.8
Inland	1.0	1.2	1.7	1.8	1.9	1.4	3.6	0.9	0.8
Total	2.1	2.2	3.5	4.5	4.7	0.7	4.7	2.5	1.4
East & Southeast Asia									
Marine	8.4	12.8	21.5	40.6	43.3	4.3	5.3	6.6	2.1
Inland	2.0	2.8	7.5	20.7	24.3	3.7	10.3	10.6	5.5
Total	10.4	15.7	29.1	61.3	67.6	4.2	6.4	7.8	3.3
South Asia									
Marine	1.4	2.1	3.1	4.1	4.3	3.8	3.8	2.8	2.0
Inland	1.3	1.5	2.3	4.3	4.6	1.3	4.5	6.4	2.7
Total	2.8	3.6	5.4	8.4	9.0	2.7	4.1	4.5	2.3
Oceania developing									
Marine	0.1	0.1	0.2	0.3	0.4	8.7	2.9	6.4	11.3
Inland	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.2	- 8.9
Total	0.1	0.1	0.2	0.3	0.4	9.4	3.4	5.9	10.3
North America developing									
Marine	0.0	0.1	0.2	0.2	0.2	9.5	3.7	- 0.0	13.3
Inland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.1	0.2	0.2	0.2	9.5	3.7	- 0.0	13.3

7.1 Fish Production

World/Region	Production (million tonnes)					Average annual rate of growth (%)			
	1970	1980	1990	2000	2003	1970- 1980	1980- 1990	1990- 2000	2000- 2003
Continental groupings									
Africa									
Marine	2.6	2.4	3.2	4.6	5.0	- 0.8	3.0	3.6	2.5
Inland	1.1	1.3	1.9	2.4	2.6	1.8	4.1	2.2	2.8
Total	3.7	3.7	5.2	7.0	7.6	0.0	3.4	3.1	2.6
Asia									
Marine	18.9	25.9	35.8	51.6	54.3	3.2	3.3	3.7	1.7
Inland	3.5	4.6	10.4	25.5	29.4	2.8	8.5	9.3	4.9
Total	22.4	30.6	46.2	77.1	83.7	3.1	4.2	5.3	2.8
Latin America									
Marine	15.1	9.0	15.5	19.8	14.9	- 5.0	5.6	2.5	- 9.0
Inland	0.2	0.3	0.5	0.7	0.8	7.9	4.0	4.0	5.2
Total	15.2	9.3	16.0	20.5	15.8	- 4.8	5.6	2.5	- 8.4
Caribbean									
Marine	0.1	0.2	0.3	0.2	0.2	5.2	0.5	- 2.7	- 6.7
Inland	0.0	0.0	0.0	0.0	0.0	26.3	11.7	3.4	- 3.9
Total	0.2	0.3	0.3	0.2	0.2	5.5	1.2	- 2.0	- 6.2
North America									
Marine	4.1	5.0	7.4	6.1	6.5	2.0	4.1	- 2.0	2.4
Inland	0.2	0.2	0.3	0.4	0.5	2.2	5.0	2.3	3.7
Total	4.2	5.2	7.7	6.5	7.0	2.0	4.1	- 1.8	2.5
Oceania									
Marine	0.2	0.4	0.8	1.2	1.3	6.8	6.3	4.4	3.8
Inland	0.0	0.0	0.0	0.0	0.0	25.9	8.1	0.1	- 7.4
Total	0.2	0.4	0.8	1.2	1.3	7.1	6.3	4.3	3.6
Europe									
Marine	18.0	21.0	20.3	17.3	15.9	1.5	- 0.3	- 1.6	- 2.8
Inland	1.1	1.2	1.3	0.9	0.8	0.9	0.6	- 3.7	- 2.1
Total	19.1	22.2	21.6	18.2	16.8	1.5	- 0.3	- 1.7	- 2.8

Note: Including aquaculture production; excluding aquatic plants

7.2 Capture Fisheries

World/Region	Production (thousand tonnes)				Average annual rate of growth (%)		
	1980	1990	2000	2003	1980-1990	1990-2000	2000-2003
WORLD	67 204	84 772	95 475	90 220	2.3	1.2	- 1.9
Developed countries	37 478	38 235	28 558	27 053	0.2	- 2.9	- 1.8
Industrialized countries	27 170	27 511	23 514	22 898	0.1	- 1.6	- 0.9
Transition economies	10 308	10 724	5 044	4 155	0.4	- 7.3	- 6.3
Developing countries	29 726	46 537	66 917	63 167	4.6	3.7	- 1.9
Latin America & the Caribbean	9 534	16 094	19 907	14 773	5.4	2.1	- 9.5
Near East & North Africa	1 387	2 026	2 907	2 954	3.9	3.7	0.5
Sub-Saharan Africa	2 234	3 517	4 464	4 644	4.6	2.4	1.3
East & Southeast Asia	13 186	20 392	33 424	34 265	4.5	5.1	0.8
South Asia	3 136	4 157	5 723	5 849	2.9	3.3	0.7
Oceania developing	133	184	326	440	3.3	5.9	10.5
North America developing	116	167	166	242	3.7	- 0.0	13.3
Continental groupings							
Africa	3 663	5 075	6 609	7 048	3.3	2.7	2.2
Asia	27 012	35 390	45 620	46 137	2.7	2.6	0.4
Latin America	9 279	15 818	19 710	14 611	5.5	2.2	- 9.5
Caribbean	255	276	197	161	0.8	- 3.3	- 6.5
North America	5 001	7 366	5 882	6 260	3.9	- 2.2	2.1
Oceania	411	741	1 069	1 200	6.1	3.7	3.9
Europe	21 287	20 029	16 173	14 551	- 0.6	- 2.1	- 3.5

Note: Production excludes aquatic plants

7.3 Aquaculture

World/Region	Production (thousand tonnes)				Average annual rate of growth (%)		
	1980	1990	2000	2003	1980-1990	1990-2000	2000-2003
WORLD	4 707	13 080	35 481	42 304	10.8	10.5	6.0
Developed countries	1 685	2 867	3 546	3 915	5.5	2.1	3.4
Industrialized countries	1 419	2 327	3 328	3 661	5.1	3.6	3.2
Transition economies	266	540	218	254	7.3	- 8.7	5.3
Developing countries	3 022	10 213	31 935	38 389	12.9	12.1	6.3
Latin America & the Caribbean	27	193	838	1 181	21.7	15.8	12.1
Near East & North Africa	34	103	481	648	11.8	16.6	10.4
Sub-Saharan Africa	7	14	53	67	6.8	14.6	7.9
East & Southeast Asia	2 490	8 668	27 921	33 380	13.3	12.4	6.1
South Asia	464	1 235	2 638	3 112	10.3	7.9	5.7
Oceania developing	0	1	4	2	0.0	14.5	- 19.3
North America developing	0	0	0	0	0.0	0.0	0.0
Continental groupings							
Africa	26	81	401	521	11.9	17.3	9.1
Asia	3 553	10 806	31 487	37 578	11.8	11.3	6.1
Latin America	25	179	798	1 147	22.0	16.1	12.8
Caribbean	2	13	40	34	18.9	11.7	- 5.1
North America	172	357	584	696	7.6	5.0	6.0
Oceania	12	42	121	125	13.1	11.2	1.1
Europe	916	1 602	2 051	2 204	5.7	2.5	2.4

Note: Production excludes aquatic plants

7.4 Capture Fisheries - Leading Countries in 2003

Country	Production (thousand tonnes)	% of World production
China*	16 756	18.6
Peru	6 090	6.7
United States of America	4 939	5.5
Indonesia	4 675	5.2
Japan	4 596	5.1
India	3 689	4.1
Chile	3 622	4.0
Russian Federation	3 281	3.6
Thailand	2 817	3.1
Norway	2 550	2.8
Rest of the World	37 205	41.2

* China Mainland

7.5 Aquaculture - Leading Countries in 2003

Country	Production (thousand tonnes)	% of World production
China*	28 892	68.3
India	2 216	5.2
Indonesia	997	2.4
Viet Nam	938	2.2
Japan	860	2.0
Bangladesh	857	2.0
Thailand	773	1.8
Norway	582	1.4
Chile	563	1.3
United States of America	544	1.3
Rest of the World	5 083	12.0

* China Mainland

7.6 Capture Fisheries - Leading Species in 2003

Species	Production (thousand tonnes)	% of World production
Anchoveta(=Peruvian anchovy)	6 202	6.9
Alaska pollock(=Walleye poll.)	2 888	3.2
Blue whiting(=Poutassou)	2 385	2.6
Skipjack tuna	2 111	2.3
Japanese anchovy	2 089	2.3
Atlantic herring	1 959	2.2
Chub mackerel	1 852	2.1
Chilean jack mackerel	1 736	1.9
Yellowfin tuna	1 485	1.6
Largehead hairtail	1 451	1.6
Other species	66 063	73.2

7.7 Aquaculture - Leading Species in 2003

Species	Production (thousand tonnes)	% of World production
Pacific cupped oyster	4 377	10.3
Silver carp	3 828	9.0
Grass carp(=White amur)	3 683	8.7
Common carp	3 240	7.7
Japanese carpet shell	2 604	6.2
Bighead carp	1 929	4.6
Crucian carp	1 794	4.2
Nile tilapia	1 368	3.2
Yesso scallop	1 157	2.7
Atlantic salmon	1 131	2.7
Other species	17 194	40.6

7.8 Fish and Fishery Products-Value of Exports and Imports

World/Region	Value (US\$ million)				Average annual rate of growth (%)		
	1980	1990	2000	2003	1980-1990	1990-2000	2000-2003
Exports							
WORLD	15 398	35 487	55 512	63 276	8.7	4.6	4.5
Developed countries	9 225	20 132	27 337	32 839	8.1	3.1	6.3
Industrialized countries	8 794	18 940	25 230	30 365	8.0	2.9	6.4
Transition economies	431	1 192	2 107	2 474	10.7	5.9	5.5
Developing countries	6 173	15 355	28 175	30 437	9.5	6.3	2.6
Latin America & the Caribbean	2 127	3 305	6 684	7 339	4.5	7.3	3.2
Near East & North Africa	243	868	1 372	1 598	13.6	4.7	5.2
Sub-Saharan Africa	289	720	1 387	1 731	9.6	6.8	7.7
East & Southeast Asia	2 861	9 191	16 239	17 234	12.4	5.9	2.0
South Asia	383	790	2 066	1 943	7.5	10.1	- 2.0
Oceania developing	119	80	159	256	- 3.9	7.1	17.2
North America developing	151	401	268	337	10.3	- 3.9	7.9
Continental groupings							
Africa	541	1 482	2 711	3 238	10.6	6.2	6.1
Asia	4 247	11 018	19 449	20 624	10.0	5.8	2.0
Latin America	1 980	3 111	6 445	7 135	4.6	7.6	3.4
Caribbean	147	194	239	204	2.8	2.1	- 5.1
North America	2 247	5 691	6 142	7 036	9.7	0.8	4.6
Oceania	545	1 044	1 828	1 853	6.7	5.8	0.5
Europe	5 691	12 947	18 698	23 186	8.6	3.7	7.4
Imports							
WORLD	15 981	39 477	60 070	67 250	9.5	4.3	3.8
Developed countries	13 525	34 306	49 920	55 117	9.8	3.8	3.4
Industrialized countries	13 084	33 830	48 767	53 197	10.0	3.7	2.9
Transition economies	442	475	1 153	1 919	0.7	9.3	18.5
Developing countries	2 456	5 171	10 151	12 133	7.7	7.0	6.1
Latin America & the Caribbean	470	552	1 073	1 002	1.6	6.9	- 2.3
Near East and North Africa	282	274	679	870	- 0.3	9.5	8.6
Sub-Saharan Africa	737	644	677	1 120	- 1.3	0.5	18.2
East and Southeast Asia	859	3 568	7 570	8 913	15.3	7.8	5.6
South Asia	24	46	92	132	6.5	7.2	12.8
Oceania developing	78	75	49	86	- 0.3	- 4.3	20.9
North America developing	5	12	11	11	8.5	- 0.7	0.4
Continental groupings							
Africa	879	883	950	1 420	0.1	0.7	14.4
Asia	4 271	14 531	23 799	22 253	13.0	5.1	- 2.2
Latin America	291	365	858	810	2.3	8.9	- 1.9
Caribbean	179	186	215	192	0.4	1.4	- 3.7
North America	2 940	6 206	11 851	13 093	7.8	6.7	3.4
Oceania	272	455	621	782	5.3	3.2	8.0
Europe	7 149	16 851	21 778	28 701	9.0	2.6	9.6

7.9 Leading Fishery Exporters and Importers, 2003

Country	Exporters		Country	Importers	
	Value of exports (US\$ million)	% of World exports		Value of imports (US\$ million)	% of World imports
China (Mainland)	5 243	8.3	Japan	12 396	18.4
Thailand	3 906	6.2	United States of America	11 655	17.3
Norway	3 624	5.7	Spain	4 904	7.3
United States of America	3 399	5.4	France	3 771	5.6
Canada	3 300	5.2	Italy	3 559	5.3
Denmark	3 213	5.1	Germany	2 635	3.9
Spain	2 227	3.5	United Kingdom	2 508	3.7
Viet Nam	2 208	3.5	China (Mainland)	2 389	3.6
Netherlands	2 183	3.4	Denmark	2 085	3.1
Chile	2 134	3.4	Korea, Republic of	1 935	2.9
United Kingdom	1 670	2.6	China, Hong Kong SAR	1 752	2.6
Indonesia	1 551	2.5	Netherlands	1 701	2.5
Rest of the World	28 618	45.2	Rest of the World	15 960	23.7

7.10 Fish Utilization

World/Region	Total fish production	Utilization	
		Human consumption	Other purposes
(million tonnes)			
WORLD			
1970	65.2	40.7	24.5
1980	71.9	51.9	20.0
1990	97.9	70.1	27.8
2003	132.5	104.2	28.3
Developed countries			
1970	33.7	24.4	9.3
1980	39.2	26.8	12.4
1990	41.1	28.9	12.2
2003	31.0	24.4	6.6
Developing countries			
1970	31.5	16.3	15.2
1980	32.7	25.1	7.6
1990	56.7	41.2	15.6
2003	101.6	79.8	21.7

Note: Production excludes aquatic plants

FOOD, NUTRITION AND FOOD SECURITY

8.1 Per Person Food Availability

World/Region	1969-1971	1979-1981	1989-1991	2000-2002
	..... (kcals/day)			
WORLD	2 410	2 550	2 700	2 790
Developed countries	3 140	3 220	3 290	3 280
Industrialized countries	3 050	3 130	3 290	3 450
Transition economies	3 320	3 390	3 280	2 920
Developing countries	2 110	2 310	2 520	2 660
Latin America and the Caribbean	2 470	2 700	2 690	2 840
Near East and North Africa	2 380	2 830	3 010	2 970
Sub-Saharan Africa	2 100	2 080	2 110	2 200
East and Southeast Asia	2 010	2 320	2 630	2 870
South Asia	2 070	2 080	2 330	2 400
Oceania developing	2 220	2 390	2 460	2 520
North America developing	2 550	2 420	2 300	2 280
Continental groupings				
Africa	2 180	2 270	2 340	2 420
Asia	2 090	2 290	2 550	2 690
Latin America	2 480	2 710	2 710	2 860
Caribbean	2 340	2 530	2 430	2 520
North America	3 020	3 160	3 420	3 750
Oceania	3 010	2 930	3 040	2 960
Europe	3 210	3 320	3 390	3 290

8.2 Contribution of Food Groups to Food Availability in Calorie Terms

World/Region	Period	Cereals	Roots and Tubers	Meat and Offals	Vegetable Oils and Fats	Sugar and Products	Milk and Products	Other	All Food
(%)									
World									
	1979-1981	51	6	6	7	9	4	16	100
	1989-1991	51	5	7	8	9	4	16	100
	2000-2002	48	5	8	9	9	4	17	100
Developed countries									
	1979-1981	31	4	11	10	13	9	22	100
	1989-1991	31	4	11	11	13	9	22	100
	2000-2002	31	4	10	13	13	9	20	100
Industrialized countries									
	1979-1981	27	4	11	12	14	9	24	100
	1989-1991	27	4	11	13	13	9	23	100
	2000-2002	27	3	11	14	13	9	22	100
Transition economies									
	1979-1981	39	6	9	6	13	7	20	100
	1989-1991	38	5	11	7	13	7	19	100
	2000-2002	41	6	8	8	11	9	16	100
Developing countries									
	1979-1981	61	7	4	6	7	2	13	100
	1989-1991	59	5	5	7	7	3	13	100
	2000-2002	53	6	7	8	7	3	16	100
Latin America and the Caribbean									
	1979-1981	39	5	8	9	17	5	17	100
	1989-1991	38	4	8	11	16	5	17	100
	2000-2002	36	4	10	9	17	6	17	100
Near East and North Africa									
	1979-1981	58	2	3	9	10	5	14	100
	1989-1991	58	2	3	10	9	4	14	100
	2000-2002	57	2	4	10	9	4	15	100
Sub-Saharan Africa									
	1979-1981	45	19	3	8	4	3	19	100
	1989-1991	47	20	3	8	4	3	17	100
	2000-2002	46	20	3	8	4	2	16	100
East and Southeast Asia									
	1979-1981	69	9	5	4	3	0	11	100
	1989-1991	65	5	7	6	4	1	12	100
	2000-2002	55	5	11	7	4	1	17	100
South Asia									
	1979-1981	66	2	1	6	9	4	12	100
	1989-1991	65	2	1	7	9	4	13	100
	2000-2002	60	2	1	9	9	5	14	100
Oceania developing									
	1979-1981	22	27	12	4	6	1	27	100
	1989-1991	24	24	12	6	5	1	28	100
	2000-2002	29	20	12	6	5	1	26	100
North America developing									
	1979-1981	20	2	19	7	12	8	32	100
	1989-1991	20	3	19	10	10	6	31	100
	2000-2002	22	3	15	14	12	5	29	100

8.2 Contribution of Food Groups to Food Availability in Calorie Terms

World/Region	Period	Cereals	Roots and Tubers	Meat and Offals	Vegetable Oils and Fats	Sugar and Products	Milk and Products	Other	All Food
						(%)			
Continental groupings									
Africa									
	1979-1981	49	13	3	8	7	3	16	100
	1989-1991	51	14	3	8	6	3	15	100
	2000-2002	50	14	3	8	6	3	15	100
Asia									
	1979-1981	66	6	4	5	6	2	12	100
	1989-1991	63	4	5	6	6	2	13	100
	2000-2002	56	4	7	8	6	3	16	100
Latin America									
	1979-1981	39	5	8	9	17	5	17	100
	1989-1991	38	4	8	11	16	5	16	100
	2000-2002	36	4	10	9	17	6	17	100
Caribbean									
	1979-1981	35	6	6	7	17	6	23	100
	1989-1991	35	5	6	10	17	5	22	100
	2000-2002	36	6	6	10	18	4	21	100
North America									
	1979-1981	20	3	12	15	17	11	22	100
	1989-1991	23	3	12	16	17	11	20	100
	2000-2002	23	3	12	16	17	10	19	100
Oceania									
	1979-1981	23	7	15	8	15	9	23	100
	1989-1991	22	7	15	11	13	10	23	100
	2000-2002	24	7	15	12	12	9	21	100
Europe									
	1979-1981	29	5	12	10	11	9	25	100
	1989-1991	28	4	12	12	11	9	24	100
	2000-2002	31	5	11	12	11	9	21	100

8.3 Prevalence of Undernutrition in Developing Regions

World/Region	Undernourished							
	Percentage of Population				Number (million)			
	1969-1971	1979-1981	1990-1992	2000-2002	1969-1971	1979-1981	1990-1992	2000-2002
WORLD	...	...	...	14	...	...	...	852
Developed countries	...	...	...	3	...	...	...	38
Industrialized countries	...	...	...	1	...	...	...	9
Transition economies	...	...	...	7	...	...	...	28
Developing countries	37	29	20	17	961	925	824	815
Latin America and the Caribbean	20	13	13	10	55	46	59	53
Near East and North Africa	23	9	8	10	42	20	25	39
Sub-Saharan Africa	36	37	36	33	93	128	170	203
East and Southeast Asia	43	28	16	12	504	401	277	217
South Asia	37	37	26	22	265	329	291	301
Oceania developing	...	...	...	...	...	...	...	...
North America developing	...	...	...	...	...	...	...	...
Continental groupings								
Africa	32	29	28	26	114	137	178	212
Asia 1/	40	30	20	16	793	744	588	551
Latin America	19	12	12	9	50	41	52	46
Caribbean	26	20	27	21	5	5	8	7
North America	...	...	...	...	...	...	...	...
Oceania 1/	...	...	...	...	...	...	...	...
Europe	...	...	...	...	...	...	...	...

1/ Developing

8.4 Food Aid Received (Shipments) - Cereals

World/Region	1970/71	1980/81	1990/91	1999/00	2000/01	2001/02	2002/03	2003/04
	(thousand tonnes)							
WORLD 1/	12 938	8 942	12 269	10 650	8 924	7 524	9 239	7 398
Developed countries	948	270	1 164	3 378	1 071	1 009	465	745
Industrialized countries	819	270	1	0	18	9	72	130
Transition economies	128	0	1 163	3 378	1 053	1 001	394	615
Developing countries	11 776	8 652	11 105	7 272	7 853	6 514	8 773	6 652
Latin America and the Caribbean	1 008	583	1 919	787	596	758	723	359
Near East and North Africa	2 548	2 442	3 874	689	1 204	884	2 454	1 660
Sub-Saharan Africa	606	2 399	3 190	2 522	3 132	2 025	3 507	3 011
East and Southeast Asia	3 865	1 499	345	1 836	2 144	1 781	1 460	1 255
South Asia	3 735	1 722	1 774	1 437	776	1 067	628	367
Oceania developing	14	7	3	0	0	0	0	0
North America developing	0	0	0	0	0	0	0	0
Continental groupings								
Africa	1 737	4 512	6 174	2 626	3 467	2 097	3 581	3 127
Asia	9 824	3 560	3 011	4 193	4 280	4 151	4 764	3 570
Latin America	895	385	1 596	453	460	565	557	299
Caribbean	113	198	324	334	136	192	167	60
North America	0	0	0	0	0	0	0	0
Oceania	14	7	3	0	0	0	0	0
Europe	140	260	1 142	3 043	581	518	170	342
LIFDC	6 477	7 051	8 529	7 001	7 531	6 250	8 248	6 593

(Low-income food deficit countries)

1/ Including shipments channelled through multilateral organizations for which breakdown by recipients is not available

8.5 Food Aid Shipments (Cereals) to Main Recipient Countries in 2003/2004 (July/June)

Country	Quantity (thousand tonnes)	% of total food aid	Country	Quantity (thousand tonnes)	% of total food aid
Iraq	1 203	16.3	Afghanistan	116	1.6
Ethiopia	942	12.7	Tanzania	112	1.5
Korea Dem. People's Rep.	837	11.3	Philippines	106	1.4
Zimbabwe	343	4.6	Uganda	90	1.2
Bangladesh	239	3.2	Uzbekistan	82	1.1
Ukraine	200	2.7	Tajikistan	76	1.0
Indonesia	187	2.5	South Africa	75	1.0
Eritrea	176	2.4	Congo, Dem. Rep. of	73	1.0
Mozambique	175	2.4	Liberia	70	1.0
Angola	173	2.3	Honduras	64	0.9
Sudan	159	2.1	Haiti	59	0.8
Jordan	140	1.9	Mauritania	59	0.8
Yemen	119	1.6	Kenya	57	0.8
Georgia	117	1.6	Holy See	56	0.8
Bolivia	117	1.6	Ghana	51	0.7

8.6 Selected Cereal Market Indicators

	Average 1997/1998— 2001/2002	2002/2003	2003/2004	2004/2005 forecast
1. Ratio of World Stocks to Utilization				
Wheat	40.3	33.2	26.1	25.8
Coarse grains	24.0	17.0	15.0	15.0
Rice	36.3	28.9	24.9	22.9
Cereals (total)	31.5	24.4	20.5	20.0
2. Ratio of Five Major Grain Exporters				
Supplies to Normal Market Requirements	1.22	1.09	1.16	1.31
3. Closing Stocks as a percentage of				
Total Disappearance of Major Exporters				
Wheat	19.9	18.1	17.9	19.6
Coarse grains	16.3	12.6	10.4	11.1
Rice	52.8	45.0	37.9	36.4
Cereals (total)	29.7	25.2	22.1	22.4
	Annual Trend Growth Rate 1994-2003	Percentage Change from Previous Year		
		2002	2003	2004 forecast
4. Changes in World Cereal Production	0.64	-3.91	2.75	5.37
5. Changes in Cereal Production in the Low-income				
Food deficit Countries (LIFDCs)	0.80	-2.37	1.97	2.99
6. Changes in Cereal Production in LIFDCs				
less China and India	2.52	1.93	8.02	-1.55
	Percentage Change from Previous Year			
	2001/2002	2002/2003	2003/2004	
7. Selected cereal Price Indices				
Wheat (July/June)		2.7	21.3	-1.1
Maize (July/June)		4.8	18.6	7.1
Rice (Jan./Dec.)		-3.9	14.7	33.9

Notes:

Utilization is defined as the sum of food use, feed and other uses.

Cereals refer to wheat, coarse grains and rice; Grains refer to wheat and coarse grains.

Major Grain Exporters are Argentina, Australia, Canada, the EU, and the United States; *Major Rice Exporters* are China, Pakistan, Thailand, the United States, and Viet Nam.

Normal Market Requirements for major grain exporters are defined as the average of domestic utilization plus exports in the three preceding seasons.

Disappearance is defined as domestic utilization plus exports for any given season.

Price indices: The wheat price index has been constructed based on the IGC wheat price index, rebased to July/June 1997/98-1999/00 = 100; For maize, the U.S. maize No. 2 Yellow (delivered U.S. Gulf ports) with base July/June, 1997/98-1999/00 = 100; For rice, the FAO Rice Price Index, 1998-2000=100, is based on 16 rice export quotations. For 2003/04, the indices are calculated based on average selected prices from the beginning of the seasons up to June 2004 for Wheat and Maize and up to August 2004 for Rice. Rice index refers to the second year shown.

PROJECTIONS

9.1 Total Population - Projections

World / Region	Total population (million)						
	1990	2000	2010	2020	2030	2040	2050
WORLD	5 280	6 086	6 843	7 578	8 199	8 701	9 076
Developed countries	1 256	1 316	1 358	1 385	1 396	1 396	1 386
Industrialized countries	845	907	957	993	1 018	1 034	1 043
Transition economies	412	409	401	392	378	361	343
Developing countries	4 023	4 769	5 485	6 193	6 803	7 306	7 690
Latin America and the Caribbean	444	523	599	667	722	761	783
Near East and North Africa	322	403	490	580	664	739	801
Sub-Saharan Africa	481	625	792	987	1 201	1 424	1 644
East and Southeast Asia	1 666	1 871	2 028	2 161	2 233	2 253	2 227
South Asia	1 104	1 339	1 568	1 787	1 970	2 114	2 220
Oceania developing	6	8	10	11	13	14	15
North America developing	0	0	0	0	0	0	0
Continental groupings							
Africa	636	812	1 007	1 228	1 463	1 705	1 937
Asia	3 169	3 676	4 130	4 554	4 872	5 092	5 217
Latin America	410	485	558	623	677	715	736
Caribbean	34	37	41	44	46	46	46
North America	283	315	346	375	400	421	438
Oceania	27	31	35	39	43	45	48
Europe	721	728	726	715	698	677	653

9.2 Average Annual Growth Rate of Total Population Projections

World / Region	Average annual rate of growth (%)					
	1990-2000	2000-2010	2010-2020	2020-2030	2030-2040	2040-2050
WORLD	1.4	1.2	1.0	0.8	0.6	0.4
Developed countries	0.5	0.3	0.2	0.1	0.0	-0.1
Industrialized countries	0.7	0.5	0.4	0.3	0.2	0.1
Transition economies	-0.1	-0.2	-0.2	-0.4	-0.4	-0.5
Developing countries	1.7	1.4	1.2	0.9	0.7	0.5
Latin America and the Caribbean	1.6	1.4	1.1	0.8	0.5	0.3
Near East and North Africa	2.2	1.9	1.7	1.4	1.1	0.8
Sub-Saharan Africa	2.6	2.4	2.2	2.0	1.7	1.4
East and Southeast Asia	1.2	0.8	0.6	0.3	0.1	-0.1
South Asia	1.9	1.6	1.3	1.0	0.7	0.5
Oceania developing	2.2	1.8	1.5	1.3	0.9	0.7
North America developing	0.3	0.5	0.3	0.1	0.0	-0.1
Continental groupings						
Africa	2.5	2.1	2.0	1.8	1.5	1.3
Asia	1.5	1.2	1.0	0.7	0.4	0.2
Latin America	1.7	1.4	1.1	0.8	0.5	0.3
Caribbean	1.0	0.8	0.7	0.4	0.2	0.0
North America	1.1	0.9	0.8	0.6	0.5	0.4
Oceania	1.5	1.2	1.1	0.9	0.6	0.5
Europe	0.1	0.0	-0.2	-0.2	-0.3	-0.4

9.3 Agricultural Population Projections

World / Region	Agricultural population (million)						
	1990	2000	2010	2020	2030	2040	2050
WORLD	2 452	2 582	2 626	2 607	2 505	2 345	2 146
Developed countries	134	100	73	55	41	31	24
Industrialized countries	51	37	26	19	14	10	8
Transition economies	83	63	47	36	27	21	16
Developing countries	2 319	2 482	2 552	2 552	2 464	2 314	2 122
Latin America and the Caribbean	118	109	97	86	75	63	53
Near East and North Africa	115	121	123	118	111	103	95
Sub-Saharan Africa	335	401	464	525	577	615	633
East and Southeast Asia	1 094	1 121	1 094	1 038	941	823	697
South Asia	653	726	769	779	754	704	639
Oceania developing	4	5	6	6	6	6	6
North America developing	0	0	0	0	0	0	0
Continental groupings							
Africa	387	453	513	568	613	644	656
Asia	1 846	1 945	1 960	1 911	1 785	1 612	1 417
Latin America	108	99	88	78	67	57	47
Caribbean	10	9	9	8	7	7	6
North America	9	7	6	5	4	3	2
Oceania	6	6	7	7	7	7	6
Europe	87	62	43	30	21	15	11

9.4 Average Annual Growth Rate of Agricultural Population Projections

	Average annual rate of growth (%)					
	1990-2000	2000-2010	2010-2020	2020-2030	2030-2040	2040-2050
WORLD	0.5	0.2	-0.1	-0.4	-0.7	-0.9
Developed countries	-3.0	-3.0	-2.9	-2.9	-2.8	-2.8
Industrialized countries	-3.2	-3.4	-3.3	-3.2	-3.0	-2.7
Transition economies	-2.8	-2.8	-2.7	-2.7	-2.7	-2.8
Developing countries	0.7	0.3	0.0	-0.4	-0.6	-0.9
Latin America and the Caribbean	-0.8	-1.1	-1.2	-1.4	-1.6	-1.8
Near East and North Africa	0.5	0.2	-0.4	-0.6	-0.8	-0.8
Sub-Saharan Africa	1.8	1.5	1.2	0.9	0.6	0.3
East and Southeast Asia	0.2	-0.2	-0.5	-1.0	-1.3	-1.7
South Asia	1.1	0.6	0.1	-0.3	-0.7	-1.0
Oceania developing	1.6	1.0	0.6	0.2	-0.4	-0.8
North America developing	-2.9	0.5	0.3	0.1	0.0	-0.1
Continental groupings						
Africa	1.6	1.2	1.0	0.8	0.5	0.2
Asia	0.5	0.1	-0.3	-0.7	-1.0	-1.3
Latin America	-0.8	-1.2	-1.2	-1.5	-1.7	-1.9
Caribbean	-0.7	-0.7	-0.7	-0.9	-1.1	-1.3
North America	-2.1	-2.1	-2.1	-2.2	-2.3	-2.4
Oceania	1.2	0.8	0.4	0.1	-0.4	-0.8
Europe	-3.5	-3.6	-3.5	-3.4	-3.3	-3.2

9.5 Total Labour Force - Projections

World / Region	Total labour force (million)						
	1990	2000	2010	2020	2030	2040	2050
WORLD	2 502	2 956	3 419	3 796	4 101	4 365	4 550
Developed countries	611	655	683	671	653	636	617
Industrialized countries	408	448	470	470	465	464	465
Transition economies	202	207	213	201	188	172	152
Developing countries	1 892	2 301	2 736	3 125	3 448	3 729	3 933
Latin America and the Caribbean	176	222	270	310	340	359	366
Near East and North Africa	109	151	205	249	291	329	356
Sub-Saharan Africa	214	278	357	465	600	752	911
East and Southeast Asia	922	1 062	1 180	1 237	1 231	1 209	1 167
South Asia	467	584	720	858	979	1 073	1 124
Oceania developing	3	4	5	6	7	8	8
North America developing	0	0	0	0	0	0	0
Continental groupings							
Africa	268	350	447	569	715	877	1 040
Asia	1 554	1 847	2 144	2 372	2 517	2 612	2 639
Latin America	162	206	250	289	318	337	344
Caribbean	14	17	19	21	22	22	22
North America	144	162	179	187	196	206	213
Oceania	13	15	18	19	21	22	24
Europe	348	359	362	339	313	289	268

9.6 Average Annual Growth Rate of Total Labour Force Projections

World / Region	Average annual rate of growth (%)					
	1990-2000	2000-2010	2010-2020	2020-2030	2030-2040	2040-2050
WORLD	1.7	1.5	1.0	0.8	0.6	0.4
Developed countries	0.7	0.4	-0.2	-0.3	-0.3	-0.3
Industrialized countries	0.9	0.5	0.0	-0.1	0.0	0.0
Transition economies	0.2	0.3	-0.6	-0.7	-0.9	-1.2
Developing countries	2.0	1.7	1.3	1.0	0.8	0.5
Latin America and the Caribbean	2.3	1.9	1.4	0.9	0.5	0.2
Near East and North Africa	3.3	3.1	2.0	1.6	1.2	0.8
Sub-Saharan Africa	2.6	2.5	2.6	2.5	2.3	1.9
East and Southeast Asia	1.4	1.1	0.5	0.0	-0.2	-0.4
South Asia	2.2	2.1	1.8	1.3	0.9	0.5
Oceania developing	2.4	2.4	2.2	1.6	1.2	0.9
North America developing	0.1	0.5	0.3	0.1	0.0	-0.1
Continental groupings						
Africa	2.7	2.4	2.4	2.3	2.0	1.7
Asia	1.7	1.5	1.0	0.6	0.4	0.1
Latin America	2.4	2.0	1.4	1.0	0.6	0.2
Caribbean	1.7	1.3	0.8	0.4	0.3	0.0
North America	1.2	1.0	0.5	0.4	0.5	0.3
Oceania	1.6	1.5	1.0	0.7	0.7	0.5
Europe	0.3	0.1	-0.7	-0.8	-0.8	-0.8

9.7 Agricultural Labour Force - Projections

World / Region	Agricultural labour force (million)						
	1990	2000	2010	2020	2030	2040	2050
WORLD	1 224	1 323	1 391	1 397	1 350	1 280	1 184
Developed countries	62	48	36	27	20	14	11
Industrialized countries	23	17	12	8	6	4	3
Transition economies	40	31	25	19	14	10	7
Developing countries	1 162	1 276	1 354	1 370	1 331	1 265	1 173
Latin America and the Caribbean	45	44	41	38	34	29	24
Near East and North Africa	43	50	56	55	52	49	46
Sub-Saharan Africa	153	184	216	256	299	337	367
East and Southeast Asia	623	654	655	609	531	451	373
South Asia	297	342	383	409	412	395	360
Oceania developing	2	2	3	3	3	3	3
North America developing	0	0	0	0	0	0	0
Continental groupings							
Africa	169	202	235	273	313	349	376
Asia	961	1 040	1 086	1 064	988	889	774
Latin America	41	40	37	34	30	26	21
Caribbean	4	4	4	4	4	3	3
North America	4	3	3	2	2	1	1
Oceania	3	3	3	4	4	4	3
Europe	42	31	22	15	10	7	5

9.8 Average Annual Growth Rate of Agricultural Labour Force Projections

World / Region	Average annual rate of growth (%)					
	1990-2000	2000-2010	2010-2020	2020-2030	2030-2040	2040-2050
WORLD	0.8	0.5	0.0	-0.3	-0.5	-0.8
Developed countries	-2.7	-2.7	-3.1	-3.1	-3.0	-3.2
Industrialized countries	-3.1	-3.5	-3.7	-3.5	-3.1	-2.8
Transition economies	-2.5	-2.2	-2.8	-2.9	-3.0	-3.4
Developing countries	0.9	0.6	0.1	-0.3	-0.5	-0.8
Latin America and the Caribbean	-0.2	-0.6	-0.9	-1.2	-1.5	-1.7
Near East and North Africa	1.5	1.1	-0.2	-0.5	-0.6	-0.7
Sub-Saharan Africa	1.8	1.6	1.7	1.5	1.2	0.8
East and Southeast Asia	0.5	0.0	-0.7	-1.4	-1.6	-1.9
South Asia	1.4	1.1	0.6	0.1	-0.4	-0.9
Oceania developing	1.6	1.5	1.2	0.4	-0.1	-0.7
North America developing	-3.1	0.5	0.3	0.1	0.0	-0.1
Continental groupings						
Africa	1.8	1.5	1.5	1.4	1.1	0.7
Asia	0.8	0.4	-0.2	-0.7	-1.0	-1.4
Latin America	-0.2	-0.6	-0.9	-1.3	-1.6	-1.8
Caribbean	-0.1	-0.2	-0.3	-0.5	-0.7	-1.1
North America	-1.9	-2.1	-2.4	-2.4	-2.3	-2.4
Oceania	1.2	1.1	0.9	0.3	-0.2	-0.7
Europe	-3.2	-3.2	-3.9	-3.8	-3.7	-3.7

9.9 Average Annual Rates of Growth of Value of Gross Agricultural Production and Domestic Demand

World/Region	Production				Domestic Demand (all uses)			
	Total		Per Caput		Total		Per Caput	
	1992-2002 – 2015	1997/99 – 2015	1992-2002 – 2015	1997/99 – 2015	1992-2002 – 2015	1997/99 – 2015	1992-2002 – 2015	1997/99 – 2015
(%)								
WORLD	2.2	1.6	0.8	0.4	2.3	1.6	0.9	0.4
Developed countries	0.3	0.8	-0.1	0.6	0.3	0.7	-0.1	0.5
Industrialized countries	1.1	0.8	0.5	0.5	1.1	0.7	0.4	0.4
Transition economies	-2.1	0.6	-2.0	0.9	-1.9	0.5	-1.8	0.7
Developing countries	3.5	2.0	1.9	0.6	3.6	2.2	1.9	0.7
Latin America and the Caribbean	3.3	2.1	1.6	0.8	2.7	2.1	1.1	0.8
Near East and North Africa	2.3	2.1	0.3	0.2	2.5	2.4	0.4	0.5
Sub-Saharan Africa	2.9	2.8	0.3	0.2	3.3	2.9	0.7	0.3
East and Southeast Asia	4.4	1.7	3.3	0.8	4.6	1.8	3.4	0.9
South Asia	2.4	2.5	0.5	0.9	2.9	2.6	1.0	1.0
Continental groupings								
Africa	3.0	2.5	0.5	0.3	3.0	2.6	0.6	0.3
Asia	3.4	1.9	1.9	0.7	3.6	2.0	2.1	0.8
Latin America	3.3	2.1	1.6	0.8	2.7	2.1	1.0	0.7
Caribbean	1.9	1.9	0.9	1.0	3.3	1.8	2.3	0.9
North America, developed	1.5	1.3	0.4	0.4	1.5	1.1	0.4	0.3
Oceania, developed	3.0	1.1	1.8	0.2	1.6	0.8	0.5	0.0
Europe	-0.6	0.3	-0.6	0.5	-0.3	0.3	-0.4	0.5

9.10 Total Cereal Production - Projections

World/Region	Cereals Production *				Average Annual Growth Rates (%)		
	1992/1994	2000/2002	2015	2030	1992-2002	1997/99	2015
					(million tonnes)	– 2015	– 2030
WORLD	1 767	1 871	2 387	2 839	0.8	1.4	1.2
Developed countries	842	857	1 033	1 186	0.3	1.1	0.9
Industrialized countries	594	628	785	899	0.8	1.1	0.9
Transition economies	248	230	248	287	-1.0	1.0	1.0
Developing countries	924	1 014	1 354	1 652	1.2	1.6	1.3
Latin America and the Caribbean	111	135	188	244	2.3	2.4	1.7
Near East and North Africa	84	84	107	133	0.2	1.5	1.5
Sub-Saharan Africa	61	72	114	168	2.0	2.8	2.6
East and Southeast Asia	454	474	622	714	0.7	1.2	0.9
South Asia	214	249	323	393	1.8	1.8	1.3
Continental groupings							
Africa	95	109	163	230	2.0	2.5	2.3
Asia	768	817	1 054	1 239	0.8	1.4	1.1
Latin America	110	133	186	242	2.2	2.4	1.7
Caribbean	1	2	2	2	4.6	1.8	1.7
North America, developed	369	363	483	572	0.0	1.3	1.1
Oceania, developed	23	30	39	45	2.1	0.9	1.1
Europe	400	417	460	509	0.5	0.8	0.7

* Including rice in milled form.

9.11 Harvested Land - Projections

World/Region	1997/99	2015	2030
	(million ha)		
WORLD	1 401	1 505	1 609
Developed countries	514	526	543
Industrialized countries	310	317	326
Transition economies	203	209	217
Developing countries	887	979	1 066
Latin America and the Caribbean	127	151	174
Near East and North Africa	70	77	84
Sub-Saharan Africa	155	186	217
East and Southeast Asia	304	317	329
South Asia	230	248	262
Continental groupings			
Africa	184	218	252
Asia	623	661	693
Latin America	123	146	168
Caribbean	4	5	5
North America, developed	173	182	194
Oceania, developed	41	41	40
Europe	252	252	257

9.12 Availability of Arable Land (including permanent crops) - Projections

Region	1997/99		2015		2030	
	Total	per person	Total	per person	Total	per person
	(million ha)	(ha)	(million ha)	(ha)	(million ha)	(ha)
Developing countries	956	0.21	1,017	0.17	1,076	0.16
Latin America and the Caribbean	203	0.41	223	0.36	244	0.34
Near East and North Africa	86	0.23	89	0.17	93	0.14
Sub-Saharan Africa	228	0.40	262	0.30	288	0.23
East and Southeast Asia	232	0.13	233	0.11	237	0.10
South Asia	207	0.16	210	0.13	216	0.11
Continental groupings						
Africa (excl. South Africa)	254	0.34	288	0.27	315	0.22
Asia (excl. Japan)	499	0.15	506	0.12	518	0.11
Latin America	197	0.42	217	0.37	238	0.35
Caribbean	6	0.19	6	0.16	6	0.15

Note: projections of arable land only for developing countries

9.13 Irrigated Land - Projections

Region	Irrigated land in use			Irrigated land harvested		
	1997/99	2015	2030	1997/99	2015	2030
	(million ha)			(million ha)		
Developing countries	202	221	242	257	306	341
Latin America and the Caribbean	18	20	22	16	19	22
Near East and North Africa	26	29	33	27	32	37
Sub-Saharan Africa	5	6	7	5	6	7
East and Southeast Asia	71	78	85	110	131	144
South Asia	81	87	95	100	117	131
Continental groupings						
Africa (excl. South Africa)	11	13	15	13	15	18
Asia (excl. Japan)	172	188	206	229	271	301
Latin America	17	19	21	15	18	21
Caribbean	1	1	1	1	1	1

Note: projections of irrigated land only for developing countries

9.14 Per Person Food Availability and Percentage and Number of Undernourished - Projections

Region	Per caput food availability			Undernourished			Number (million)		
	(kcals/day)			Percentage of population					
	1997/99	2015	2030	1997/99	2015	2030	1997/99	2015	2030
Developing countries	2 681	2 846	2 983	17	11	6	776	610	443
Latin America and the Caribbean	2 824	2 983	3 136	11	6	4	54	40	25
Near East and North Africa	3 006	3 092	3 165	9	7	5	32	37	34
Sub-Saharan Africa	2 195	2 360	2 543	34	23	15	194	205	183
East and Southeast Asia	2 923	3 064	3 192	11	6	4	193	135	82
South Asia	2 403	2 700	2 901	24	12	6	303	195	119
Continental groupings									
Africa (excl. South Africa)	2 385	2 517	2 660	28	20	13	200	211	189
Asia (excl. Japan)	2 721	2 909	3 058	16	9	5	522	361	229
Latin America	2 858	3 009	3 156	10	6	3	45	34	22
Caribbean	2 340	2 584	2 808	28	16	9	9	6	4

SELECTED FOOD AND AGRICULTURE INDICATORS BY COUNTRY

10.1 Selected Food and Agriculture Indicators by Country

Region/Country	Population 2004 (thousands)	Per caput food availability 2000-2002 (kcals/day)	Per caput GNI 2003 (US\$) (a)	Agricultural labour force in total labour force 2004 (%)	Agricultural exports in total export value 2003 (%)
WORLD					
DEVELOPED COUNTRIES					
Industrialized countries					
Andorra	67	...	...	...	...
Australia	19 942	3 090	21 950	4	20
Austria	8 171	3 740	26 810	4	6
Belgium	10 400	3 580	25 760	2	9
Canada	31 958	3 560	24 470	2	6
Denmark	5 414	3 410	33 570	3	17
Faeroe Islands	47	...	...	...	3
Finland	5 235	3 120	27 060	5	2
France	60 257	3 630	24 730 (b)	3	11
Germany	82 645	3 470	25 270	2	4
Gibraltar	28	...	...	...	...
Greece	11 098	3 690	13 230	15	23
Holy See	1	...	...	...	...
Iceland	292	3 220	30 910	7	2
Ireland	4 080	3 660	27 010	9	8
Israel	6 601	3 640	16 240	2	4
Italy	58 033	3 690	21 570	4	7
Japan	127 923	2 780	34 180	3	...
Liechtensten	34	...	...	...	...
Luxembourg	459	3 590	45 740	2	5
Malta	400	3 540	10 780	1	1
Monaco	35	...	...	...	...
Netherlands	16 226	3 350	26 230	3	14
New Zealand	3 989	3 220	15 530	9	47
Norway	4 598	3 420	43 400	4	1
Portugal	10 441	3 750	11 800	11	7
San Marino	28	...	...	...	...
South Africa	47 208	2 920	2 750	8	8
Spain	42 646	3 360	17 040	6	14
Sweden	9 008	3 140	28 910	3	3
Switzerland	7 240	3 470	40 680	4	3
United Kingdom	59 479	3 400	28 320	2	6
United States of America	295 410	3 790	37 870	2	9
Transition Economies					
Albania	3 112	2 860	1 740	46	6
Armenia	3 026	2 190	950	11	10
Azerbaijan	8 355	2 480	820	25	9
Belarus	9 811	3 010	1 600	11	8
Bosnia and Herzegovina	3 909	2 760	1 530	4	10
Bulgaria	7 780	2 800	2 130	5	11
Croatia	4 540	2 770	5 370	7	11
Czech Republic	10 229	3 120	7 150	7	4
Estonia	1 335	2 990	5 380	10	8
Georgia	4 518	2 280	770	18	34
Hungary	10 124	3 470	6 350	9	8
Kazakstan	14 839	2 550	1 780	16	6
Kyrgyzstan	5 204	2 950	340	23	18
Latvia	2 318	2 960	4 400	11	12
Lithuania	3 443	3 360	4 500	10	11
Macedonia, Former Yug. Rep. of	2 030	2 640	1 980	10	11
Moldova, Rep. of	4 218	2 720	590	20	63
Poland	38 559	3 380	5 280	20	8
Romania	21 790	3 410	2 260	12	3
Russian Federation	143 899	3 000	2 610	9	2
Serbia and Montenegro	10 510	2 660	1 910	17	30
Slovakia	5 401	2 880	4 940	8	3

10.1 Selected Food and Agriculture Indicators by Country

Region/Country	Population 2004 (thousands)	Per caput food availability 2000-2002 (kcals/day)	Per caput GNI 2003 (US\$) (a)	Agricultural labour force in total labour force 2004 (%)	Agricultural exports in total export value 2003 (%)
Slovenia	1 967	3 010	11 920	1	4
Tajikistan	6 430	1 840	210	31	19
Turkmenistan	4 766	2 720	1 120	32	2
Ukraine	46 989	2 980	970	13	12
Uzbekistan	26 209	2 270	420	25	23
DEVELOPING COUNTRIES					
Latin America and the Caribbean					
Anguilla	12	...	...	...	...
Antigua and Barbuda	81	2 340	9 160	...	
Argentina	38 372	3 070	3 810	9	47
Aruba	98	...	...	...	...
Bahamas	319	2 750	...	3	5
Barbados	269	3 060	9 260	4	26
Belize	264	2 840	3 370	30	58
Bolivia	9 009	2 250	900	43	31
British Virgin Island	22	...	...	...	4
Brazil	183 913	3 010	2 720	15	29
Cayman Islands	44	...	...	...	...
Chile	16 124	2 850	4 360	15	17
Colombia	44 915	2 580	1 810	18	22
Costa Rica	4 253	2 860	4 300	18	29
Cuba	11 245	3 000	...	13	44
Dominica	79	2 750	3 330	...	35
Dominican Republic	8 768	2 320	2 130	14	58
Ecuador	13 040	2 740	1 830	23	33
El Salvador	6 762	2 550	2 340	26	12
Falkland Is. (Malvinas)	3	...	...	...	94
French Guiana	183	...	...	...	...
Grenada	102	2 870	3 710	...	49
Guadeloupe	445	...	...	2	...
Guatemala	12 295	2 190	1 910	43	52
Guyana	750	2 710	900	16	35
Haiti	8 407	2 080	400	60	6
Honduras	7 048	2 350	970	28	54
Jamaica	2 639	2 670	2 980	19	25
Martinique	394	...	...	3	...
Mexico	105 699	3 160	6 230	19	10
Montserrat	4	...	...	...	...
Netherlands Antilles	181	2 560	...		1
Nicaragua	5 376	2 280	740	17	37
Panama	3 175	2 240	4 060	18	31
Paraguay	6 017	2 560	1 110	33	61
Peru	27 562	2 550	2 140	28	10
Puerto Rico	3 932	...	...	2	...
Saint Kitts and Nevis	42	2 640	6 630	...	18
Saint Lucia	159	2 940	4 050	...	64
Saint Vincent/Grenadines	118	2 530	3 310	...	72
Suriname	446	2 630	2 280	18	5
Trinidad and Tobago	1 301	2 730	7 790	8	4
Turks and Caicos Islands	25	...	...	...	...
Uruguay	3 439	2 830	3 820	12	55
US Virgin Islands	112	...	...	...	...
Venezuela	26 282	2 350	3 490	7	1
Near East and North Africa					
Afghanistan	28 574	...	...	66	44
Algeria	32 358	2 990	1 930	23	...
Bahrain	716	...	...	1	1
Cyprus	826	3 250	...	7	28

10.1 Selected Food and Agriculture Indicators by Country

Region/Country	Population 2004 (thousands)	Per caput food availability 2000-2002 (kcals/day)	Per caput GNI 2003 (US\$) (a)	Agricultural labour force in total labour force 2004 (%)	Agricultural exports in total export value 2003 (%)
Egypt	72 642	3 340	1 390	31	11
Iran, Islamic Rep. of	68 803	3 070	2 010	25	4
Iraq	28 057	...	...	8	...
Jordan	5 561	2 670	1 850 (c)	10	14
Kuwait	2 606	3 050	17 960	1	...
Lebanon	3 540	3 180	4 040	3	16
Libyan Arab Jamahiriya	5 740	3 320	...	5	...
Morocco	31 020	3 040	1 310	33	11
Palestinian, O.T.	3 587	2 190	...	10	21
Oman	2 534	...	1 110	33	4
Qatar	777	...	...	1	...
Saudi Arabia	23 950	2 840	9 240	7	...
Syrian Arab Republic	18 582	3 040	1 160	26	9
Tunisia	9 995	3 270	2 240	23	6
Turkey	72 220	3 360	2 800	43	10
United Arab Emirates	4 284	3 200	...	4	1
Yemen	20 329	2 040	520	46	3
Sub-Saharan Africa					
Angola	15 490	2 040	740	71	...
Benin	8 177	2 520	440	50	43
Botswana	1 769	2 160	3 530	44	2
Burkina Faso	12 822	2 410	300	92	70
Burundi	7 282	1 640	90	90	82
Cameroon	16 038	2 270	630	55	25
Cape Verde	495	3 210	1 440	20	2
Central African Republic	3 986	1 980	260	69	1
Chad	9 448	2 150	240	71	60
Comoros	777	1 750	450	72	50
Congo, Democratic Rep.	55 853	1 630	100	61	6
Congo, Rep. of	3 883	2 090	650	37	1
Côte d'Ivoire	17 872	2 620	660	45	55
Djibouti	779	2 200	910	...	52
Equatorial Guinea	492	...	...	69	...
Eritrea	4 232	1 520	190	76	5
Ethiopia	75 600	1 840	90	81	75
Gabon	1 362	2 610	3 340	33	...
Gambia	1 478	2 270	270	78	35
Ghana	21 664	2 620	320	56	54
Guinea	9 202	2 380	430	82	8
Guinea-Bissau	1 540	2 100	140	82	69
Kenya	33 467	2 110	400	74	54
Lesotho	1 798	2 620	610	38	1
Liberia	3 241	2 000	110	66	7
Madagascar	18 113	2 060	290	72	49
Malawi	12 608	2 150	160	81	98
Mali	13 124	2 200	290	79	33
Mauritania	2 980	2 770	400	52	9
Mauritius	1 233	2 960	4 100	10	17
Mozambique	19 424	2 030	210	80	10
Namibia	2 009	2 270	1 930	38	18
Niger	13 499	2 130	200	87	19
Nigeria	128 709	2 700	350	30	3
Reunion	773	...	...	2	...
Rwanda	8 882	2 050	220	90	46
Saint Helena	5	...	...	...	...
Sao Tome and Principe	153	2 390	300	...	43

10.1 Selected Food and Agriculture Indicators by Country

Region/Country	Population 2004 (thousands)	Per caput food availability 2000-2002 (kcals/day)	Per caput GNI 2003 (US\$) (a)	Agricultural labour force in total labour force 2004 (%)	Agricultural exports in total export value 2003 (%)
Senegal	11 386	2 280	540	73	15
Seychelles	80	2 450	7 490	...	
Sierra Leone	5 336	1 930	150	60	9
Somalia	7 964	...	...	69	45
Sudan	35 523	2 260	460	57	19
Swaziland	1 034	2 360	1 350	32	16
Tanzania, United Rep.	37 627	1 960	300	(d)	62
Togo	5 988	2 300	310	57	21
Uganda	27 821	2 360	250	78	21
Western Sahara	330	...	...	...	...
Zambia	11 479	1 900	380	67	12
Zimbabwe	12 936	2 020	...	60	26
East and Southeast Asia					
Brunei Darussalam	366	2 860	...	1	...
Cambodia	13 798	2 060	300	69	1
China	1 320 892	2 960	1 100	(e)	64
Timor Leste	887	2 810	460	81	21
Indonesia	220 077	2 910	810	46	10
Korea, Dem. People's Rep	22 384	2 140	...	27	2
Korea, Republic of	47 645	3 060	12 030	8	1
Laos	5 792	2 290	340	76	42
Malaysia	24 894	2 890	3 880	16	9
Mongolia	2 614	2 240	480	22	13
Myanmar	50 004	2 880	...	69	6
Philippines	81 617	2 380	1 080	37	5
Singapore	4 273	...	21 230		2
Thailand	63 694	2 450	2 190	53	13
Viet Nam	83 123	2 530	480	66	11
South Asia					
Bangladesh	139 215	2 190	400	52	2
Bhutan	2 116	...	630	94	12
India	1 087 124	2 420	540	58	11
Maldives	321	2 540	2 350	19	...
Nepal	26 591	2 440	240	93	10
Pakistan	154 794	2 430	520	45	10
Sri Lanka	20 570	2 390	930	44	12
Oceania Developing					
American Samoa	63	...	...	...	...
Cook Islands	18	...	...	...	10
Fiji Islands	841	2 890	2 240	38	29
French Polynesia	253	2 880	...	...	11
Guam	167	...	...	...	...
Kiribati	97	2 850	860	...	29
Marshall Islands	60	...	2 710	...	17
Micronesia, Fed. States of	110	...	2 070	...	11
Nauru	13	...	...	...	...
New Caledonia	233	2 790	...	...	...
Niue Island	1	...	...	...	97
Northern Mariana Is.	79	...	...	...	...
Palau	20	...	6 500	...	...
Papua New Guinea	5 772	2 460	500	72	16
Samoa	184	2 900	1 440	...	35
Solomon Islands	466	2 240	560	72	22
Tokelau Islands	1	...	...	...	...
Tonga	102	...	1 490	...	46
Tuvalu	10	...	...	...	1
Vanuatu	207	2 570	1 180	...	80
Wallis and Futuna Is.	15	...	...	...	...

10.1 Selected Food and Agriculture Indicators by Country

Region/Country	Population 2004 (thousands)	Per caput food availability 2000-2002 (kcals/day)	Per caput GNI 2003 (US\$) (a)	Agricultural labour force in total labour force 2004 (%)	Agricultural exports in total export value 2003 (%)
North America Developing					
Bermuda	64	2 260	...	...	...
Greenland	57	...	...	...	7
Saint Pierre and Miquelon	6	...	...	...	...

(a) Source: World Bank. 2005. World Development Indicators

Data calculated using the Atlas method

(b) Including French overseas departments of French Guiana, Guadeloupe, Martinique and Reunion

(c) Data refer to East Bank

(d) Data refer to Tanzania Mainland

(e) Data refer to China Mainland

ANNEXES

Annex I: Glossary of Symbols and Acronyms used

US\$	United States dollars
%	percent
Int.\$	International dollars
MLN	million
ha	hectare
tonne	metric tonne
m	metre
km	kilometre
km ³	cubic kilometres
m ³	cubic metres
kcals/day	calories per day
...	data not available
0 or 0.0	zero or less than half of the unit shown

To divide decimals from whole numbers, a full stop (.) is used

ESSA	Socio-Economic Statistics and Analysis Service of Statistics Division (FAO)
ILO	International Labour Organization
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
UN	United Nations

Annex II: Sources

The majority of tables are based on data available in the FAO Statistical database (FAOSTAT) as of mid October 2005. Other sources used are listed below:

Table	Source
1.1, 1.2	World Bank , <i>World Development Indicators, 2005</i> (CD Rom)
1.3 - 1.5	Socio-Economic Statistics and Analysis Service of Statistics Division (ESSA). External Assistance to Agriculture Database
1.6	International Monetary Fund (IMF) . 2003. <i>Government Finance Statistics Yearbook, 2003</i> . Washington DC.
3.3	FAO. 2005. Global Forest Resource Assessment 2005. Rome
3.7	United Nations (UN) . 2002. <i>Industrial Commodity Statistics, Yearbook, Vol.33, 1999</i> . New York
4.2	I.A. Shikomanov . 1996. <i>Assessment of water resources and water availability in the world</i> (Scientific and Technical Report). St. Petersburg, Russia. State Hydrological Institute
4.3, 4.4	FAO AQUASTAT (http://www.fao.org/waicent/faoinfo/agricult/agl/aglw/aquastat/main/index.stm)
7.1 - 7.10	FAO FISHSTAT (http://www.fao.org/fi/default_all.asp)
8.3	ESSA estimates
8.6	FAO . 2004. <i>Assessment of the World Food Security Situation. Committee on World Food Security</i> . Rome (CFS: 2004/2 – corr. 1)
9.9 - 9.14	FAO . 2002. <i>Agriculture: Towards 2015/30 – Summary Report</i> . Rome
10.1	World Bank , <i>World Development Indicators, 2005</i> (CD Rom) (for Gross National Income (GNI) data)

Annex III: Country Group Composition

Developed Countries

Industrialized Countries

Andorra	Greece	Netherlands
Australia	Holy See	New Zealand
Austria	Iceland	Norway
Belgium	Ireland	Portugal
Canada	Israel	San Marino
Denmark	Italy	South Africa
Faeroe Islands	Japan	Spain
Finland	Liechtenstein	Sweden
France	Luxembourg	Switzerland
Germany	Malta	United Kingdom
Gibraltar	Monaco	United States of America

Transition Economies

Albania	Fmr Yug. Rep.of Macedonia	Romania
Armenia	Georgia	Russian Federation
Azerbaijan	Hungary	Serbia and Montenegro
Belarus	Kazakhstan	Slovakia
Bosnia and Herzegovina	Kyrgyzstan	Slovenia
Bulgaria	Latvia	Tajikistan
Croatia	Lithuania	Turkmenistan
Czech Republic	Moldova, Republic of	Ukraine
Estonia	Poland	Uzbekistan

Developing Countries

Latin America and Caribbean

Anguilla	Dominican Republic	Nicaragua
Antigua and Barbuda	Ecuador	Panama
Argentina	El Salvador	Paraguay
Aruba	Falkland Islands	Peru
Bahamas	French Guiana	Puerto Rico
Barbados	Grenada	St. Kitts and Nevis
Belize	Guadeloupe	St. Lucia
Bolivia	Guatemala	St. Vincent/Grenadines
Brazil	Guyana	Suriname
British Virgin Islands	Haiti	Trinidad and Tobago
Cayman Islands	Honduras	Turks and Caicos Islands
Chile	Jamaica	Uruguay
Colombia	Martinique	US Virgin Islands
Costa Rica	Mexico	Venezuela, Bolivarian Rep. of
Cuba	Montserrat	
Dominica	Netherlands Antilles	

Near East and North Africa

Afghanistan	Jordan	Qatar
Algeria	Kuwait	Saudi Arabia
Bahrain	Lebanon	Syrian Arab Republic
Cyprus	Libyan Arab Jamahiryia	Tunisia
Egypt	Morocco	Turkey

Iran, Islamic Republic of	Oman	United Arab Emirates
Iraq	Palestinian, O. T.	Yemen

Sub-Saharan Africa

Angola	Ethiopia	Nigeria
Benin	Gabon	Réunion
Botswana	Gambia	Rwanda
British Indian Ocean Terr.	Ghana	Sao Tome and Principe
Burkina Faso	Guinea	Senegal
Burundi	Guinea-Bissau	Seychelles
Cameroon	Kenya	Sierra Leone
Cape Verde	Lesotho	Somalia
Central African Republic	Liberia	St. Helena
Chad	Madagascar	Sudan
Comoros	Malawi	Swaziland
Congo, Dem. Republic of	Mali	Tanzania, United Republic of
Congo, Republic of	Mauritania	Togo
Côte d'Ivoire	Mauritius	Uganda
Djibouti	Mozambique	Western Sahara
Equatorial Guinea	Namibia	Zambia
Eritrea	Niger	Zimbabwe

East and Southeast Asia

Brunei Darussalam	Korea, Republic of	Philippines
Cambodia	Laos	Singapore
China	Malaysia	Thailand
Indonesia	Mongolia	Timor-Leste
Korea, Dem. People's Republic	Myanmar	Viet Nam

South Asia

Bangladesh	Maldives	Sri Lanka
Bhutan	Nepal	
India	Pakistan	

Oceania, developing

American Samoa	Micronesia, Federal States of	Samoa
Cañon and Enderbury Islands	Midway Islands	Solomon Islands
Christmas Island	Nauru	Tokelau
Cocos Islands	New Caledonia	Tonga
Cook Islands	Niue Island	Tuvalu
Fiji Islands	Norfolk Island	US Minor Islands
French Polynesia	Northern Mariana Islands	Vanuatu
Guam	Pacific Islands (Trust Terr.)	Wake Island
Johnston Island	Palau	Wallis and Futuna Islands
Kiribati	Papua New Guinea	
Marshall Islands	Pitcairn Island	

North America, developing

Bermuda	Greenland	St. Pierre et Miquelon
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Continental Groupings

Africa

Algeria	Ethiopia	Nigeria
Angola	Gabon	Réunion
Benin	Gambia	Rwanda
Botswana	Ghana	Sao Tome and Principe
British Indian Ocean Terr.	Guinea	Senegal
Burkina Faso	Guinea-Bissau	Seychelles
Burundi	Kenya	Sierra Leone
Cameroon	Lesotho	Somalia
Cape Verde	Liberia	South Africa
Central African Republic	Libyan Arab Jamahiryia	St. Helena
Chad	Madagascar	Sudan
Comoros	Malawi	Swaziland
Congo, Dem. Republic of	Mali	Tanzania, United Republic of
Congo, Republic of	Mauritania	Togo
Côte d'Ivoire	Mauritius	Tunisia
Djibouti	Morocco	Uganda
Egypt	Mozambique	Western Sahara
Equatorial Guinea	Namibia	Zambia
Eritrea	Niger	Zimbabwe

Asia

Afghanistan	Japan	Pakistan
Armenia	Jordan	Philippines
Azerbaijan	Kazakhstan	Qatar
Bahrain	Korea, Dem. People's Republic	Saudi Arabia
Bangladesh	Korea, Republic of	Singapore
Bhutan	Kuwait	Sri Lanka
Brunei Darussalam	Kyrgyzstan	Syrian Arab Republic
Cambodia	Laos	Tajikistan
China	Lebanon	Thailand
Cyprus	Malaysia	Timor-Leste
Georgia	Maldives	Turkey
India	Mongolia	Turkmenistan
Indonesia	Myanmar	United Arab Emirates
Iran, Islamic Republic of	Nepal	Uzbekistan
Iraq	Oman	Viet Nam
Israel	Palestinian, O. T.	Yemen

Latin America

Argentina	El Salvador	Panama
Belize	Falkland Islands	Paraguay
Bolivia	French Guiana	Peru
Brazil	Guatemala	Suriname
Chile	Guyana	Uruguay
Colombia	Honduras	Venezuela, Bolivarian Rep. of
Costa Rica	Mexico	
Ecuador	Nicaragua	

Caribbean

Anguilla	Dominica	Netherlands Antilles
Antigua and Barbuda	Dominican Republic	Puerto Rico
Aruba	Grenada	St. Kitts and Nevis
Bahamas	Guadeloupe	St. Lucia
Barbados	Haiti	St. Vincent/Grenadines

British Virgin Islands	Jamaica	Trinidad and Tobago
Cayman Islands	Martinique	Turks and Caicos Islands
Cuba	Montserrat	US Virgin Islands

North America

Bermuda	Greenland	United States of America
Canada	St. Pierre et Miquelon	

Oceania

American Samoa	Marshall Islands	Papua New Guinea
Australia	Micronesia, Federal States of	Pitcairn Island
Canton and Enderbury Islands	Midway Islands	Samoa
Christmas Island	Nauru	Solomon Islands
Cocos Islands	New Caledonia	Tokelau
Cook Islands	New Zealand	Tonga
Fiji Islands	Niue Island	Tuvalu
French Polynesia	Norfolk Island	US Minor Islands
Guam	Northern Mariana Islands	Vanuatu
Johnston Island	Pacific Islands (Trust Terr.)	Wake Island
Kiribati	Palau	Wallis and Futuna Islands

Europe

Albania	Germany	Netherlands
Andorra	Gibraltar	Norway
Austria	Greece	Poland
Belarus	Holy See	Portugal
Belgium	Hungary	Romania
Bosnia and Herzegovina	Iceland	Russian Federation
Bulgaria	Ireland	San Marino
Croatia	Italy	Serbia and Montenegro
Czech Republic	Latvia	Slovakia
Denmark	Liechtenstein	Slovenia
Estonia	Lithuania	Spain
Faeroe Islands	Luxembourg	Sweden
Finland	Malta	Switzerland
Fmr Yug. Rep.of Macedonia	Moldova, Republic of	United Kingdom
France	Monaco	Ukraine

Annex IV: Concepts and Definitions

Macroeconomic

Agriculture, value added

Agriculture corresponds to the International Standard Industrial Classification (ISIC) divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of the sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by ISIC, revision 3. Data are in current U.S. dollars.

Gross National Income (GNI) per caput, Atlas method

GNI per caput (formerly Gross National Product (GNP) per caput) is the gross national income, converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. GNI, which is originally calculated in national currency, is usually converted to U.S. dollars at official exchange rates for comparisons across economies, although an alternative rate is used when the official exchange rate is judged to diverge by an exceptionally large margin from the rate actually applied in international transactions. To smooth fluctuations in prices and exchange rates, a special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, United Kingdom, and United States). From 2001, these countries include the Euro Zone, Japan, the United Kingdom, and the United States.

Gross Capital Formation

Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and "work in progress". According to the 1993 SNA, net acquisitions of valuables are also considered capital formation. Data are in current U. S. dollars.

Gross Domestic Product (GDP)

GDP at purchaser prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U. S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.

External Assistance to Agriculture

External Assistance to Agriculture (EAA)

EAA refers to the concessional and non-concessional commitments made by bilateral and multilateral donors to developing countries and countries in transition for the development of agriculture in a broad sense which includes: land and water; research, training and extension; inputs; agricultural services; crop production; livestock; fisheries; forestry; agriculture (others, not elsewhere specified); environment protection; rural development/infrastructure; manufacturing of inputs; regional and river development; and agro-industries.

Concessional and non-concessional

If the commitment has a grant element not less than 25% it is considered as concessional otherwise it is considered as non-concessional.

Multilateral

Multilateral commitments are those made through an institution which:

- conducts all or part of its activities in favour of development;
- is an international agency, institution or organization whose members are Governments or a fund managed autonomously by such an agency; and
- pools funds so that they lose their identity and become an integral part of its financial assets.

Bilateral

Bilateral commitments are those where the donor effectively controls the disposal of the funds by specifying the recipient or other aspects of the disbursement (e.g. purpose, terms, total amount and re-use of any repayments).

Total Assistance

This represents total official commitments (bilateral and multilateral, concessional and nonconcessional) to aid recipients (developing countries and countries in transition) at current prices.

Government Expenditure

Government expenditure refers to all non-repayable payments, whether capital or current, required or not by government. Expenditures are shown by function or purpose at different levels of government administration - Central Government; State, Region or Province; and local governments. The data given in this document refer to the share of expenditure on agriculture, forestry, fishery and hunting (function) in the total government expenditure.

Gross Fixed Investment

This refers to total annual average investment in fixed assets excluding working capital.

Population

Agricultural Population

This refers to all persons whose livelihood depends on agriculture. It comprises all persons actively assisting in the operation of family farms or businesses, whether as employers, own-account workers, salaried employees or unpaid workers and their non-working dependants.

Economically Active Population (total labour force)

This refers to all employed and unemployed persons (including those seeking work for the first time). It covers employers; self-employed workers; salaried employees; wage earners; unpaid and members of the armed forces.

Economically Active Population in Agriculture (agricultural labour force)

The economically active population in agriculture is that part of the economically active population engaged in or seeking work in agriculture, hunting, fishing or forestry.

Rural Population

This refers to the population residing in rural areas. Usually the urban areas and hence the urban population are defined and the residual is taken as rural. In practice, the criteria adopted for distinguishing between urban and rural areas vary among countries. However, these criteria can be roughly divided into three major groups: classification of localities of a certain size as urban; classification of administrative centres of minor civil divisions as urban; and classification of centres of minor civil divisions on a chosen criterion which may include type of local government, number of inhabitants or proportion of population engaged in agriculture.

Total Population

Generally refers to the present-in-area (de facto) population within the present national boundaries.

Land

Arable Land

Arable land refers to land under temporary crops (double-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). This category of land does not include abandoned land resulting from shifting cultivation. "Arable land" is not meant to indicate the amount of land that is potentially cultivable.

Forest Cover Land

Land with tree crown cover (or equivalent stocking level) of more than 10% and area of more than 0.5 ha. The trees should be able to reach a minimum height of 5 m at maturity in situ. This may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground; or open forest formations with a continuous vegetation cover in which tree crown cover exceeds 10%. Young natural stands and all plantations established for forestry purposes which have yet to reach a crown density of 10% or tree height of 5 m are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention or natural causes but which are expected to revert to forest. These include: forest nurseries and seed orchards that constitute an integral part of the forest; forest roads, cleared tracts, firebreaks and other small open areas; forests in national parks, nature reserves and other protected areas such as those of specific scientific, historical, cultural or spiritual interest; windbreaks and shelterbelts of trees with an area of more than 0.5 ha and width of more than 20 m; plantations primarily used for forestry purposes, including rubberwood plantations and cork oak stands. Excludes: land predominantly used for agricultural practices

Land Area

Total country area, excluding area under inland water bodies. The definition of inland water bodies generally includes major rivers and lakes.

Land Availability

This refers to arable land plus land under permanent crops.

Land under Permanent Crops

Land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee and rubber. This category includes land under flowering shrubs, fruit trees, nut trees and vines, but excludes land under trees grown for wood or timber.

Total Area

The total area of the country, including area under inland water bodies.

Agricultural Inputs

Agricultural Tractors and Threshers/Harvesters

Agricultural tractors generally refer to wheel and crawler tractors (excluding garden tractors) used in agriculture. Harvester and threshers refer to self-propelled machines that reap and thresh in one operation.

Fertilizer Consumption

Fertilizer consumption refers to the total amount of fertilizers used. This is obtained by adding the volumes of nitrogenous, phosphate and potash fertilizers expressed in terms of plant nutrients (N, P₂O₅ and K₂O). The time reference for fertilizer consumption is the crop year (July through June).

Fertilizer Production

Fertilizer production includes nitrogenous, phosphate and potash fertilizers. Production based on imported ammonia, phosphoric acid or rock phosphate is considered as national production, while that based on imported finished fertilizers (ammonium phosphate, potassium chloride, etc.) is excluded from national production to avoid double counting at the World level.

Pesticides

Pesticides refers to insecticides, fungicides, herbicides, disinfectants and any substance intended for preventing, destroying, attracting, repelling, or controlling any pest including unwanted species of plants or animals during the production, storage, transport, distribution, and processing of food, agricultural commodities, or animal feeds of which may be administered to animals for the control of ectoparasites.

Pesticides Production

This refers to the total industrial production of each type of pesticide within the national boundaries of each country during the reference period.

Pesticides Trade

Refers to the value of all types of pesticides provided to (exports) or received (imported) from the rest of the world. Differences between figures given for total exports and total imports at the world level may be due to several factors, e.g. the time lag between the dispatch of goods from exporting country and their arrival in the importing country; the use of different classification of the same product by different countries; or the fact that some countries supply data on general trade while others give data on special trade.

Water Resources and Irrigation

Freshwater Availability (internal renewable freshwater resources)

Refers to the average annual flow of rivers and groundwater generated from endogenous precipitation.

Irrigated Land

This refers to the areas equipped to provide water to crops. It includes areas equipped for full or partial control irrigation, spate irrigation areas, and equipped wetland or inland valley bottoms. It should be noted that definitions on irrigation vary between countries.

Agricultural Production and Trade

Agricultural Production

This refers to the aggregate volume of agricultural production in the narrow sense, i.e. excluding fishery and forestry products. In order to obtain these figures the aggregate production quantities of each agricultural commodity are weighted by 1999-2001 average international commodity prices and then summed for each year. When calculating the aggregates, all intermediate primary inputs of agricultural origin are deducted. In other words, amounts of seed and feed are subtracted from the production data in order to avoid double counting. Processed and semi-processed commodities such as bran, oilcakes, meals and molasses have been completely excluded from the calculations at all stages. The "international prices", expressed in so-called "international dollars", are derived using the Geary-Khamis formula for the agricultural sector. This method assigns a single producer price to each commodity. For example, one metric ton of wheat has the same price regardless of the country in which it was produced. The currency unit in which the prices are expressed has no influence on the indices.

Crop Production

Crop production refers to the actual harvested production from the field or orchard and gardens, excluding harvesting losses and that part of crop not harvested for any reason. Crop production therefore includes the quantities of the commodity sold in the market and the quantities consumed or used by the producers. The time reference for statistics on production of crops is based on the calendar year. That is to say, the data for any particular crop are reported under the calendar year in which the entire harvest or bulk of it took place.

Food Production

The food production aggregate includes the commodities that are considered edible and that contain nutrients. Accordingly, coffee and tea are excluded along with inedible commodities, as, although edible, they have practically no nutritive value.

Meat Production

The meat production aggregate is computed based on data for production from indigenous animals, which takes account of the meat equivalent of exported live animals but excludes the meat equivalent of imported live animals. Annual changes in livestock and poultry numbers or in their average live weights are not taken into account.

Agricultural Trade

This refers to imports and exports pertaining to agriculture in the narrow sense, excluding fishery and forestry products. Differences between figures given for total cereal exports and total cereal imports at the world level may be due to several factors, e.g. the time lag between the dispatch of goods from one exporting country and their arrival in the importing country; the use of different classifications of the same product by different countries; or the fact that some countries supply data on general trade while others give data on special trade.

Total Merchandise Trade

This refers to total imports and total exports of merchandise. In general, export values are f.o.b. (free on board) and import values are c.i.f. (cost, insurance and freight).

Forestry Production and Trade

Roundwood

Roundwood (wood in the rough) is wood in its natural state as felled, or otherwise harvested, with or without bark, round, split, roughly squared or other forms (e.g. roots, stumps, burls, etc.). It may also be impregnated (e.g. telegraph poles) or roughly shaped or pointed. It comprises all wood obtained from removals, i.e. the quantities removed from forests and from trees outside the forest, including wood recovered from natural, felling and logging losses during the calendar year or forest year period. Commodities included are sawlogs and veneer logs, pulpwood, other industrial roundwood (including pitprops) and fuelwood. The statistics include recorded volumes, as well as estimated unrecorded volumes. Statistics for trade include, as well as roundwood from removals, the estimated roundwood equivalent of chips and particles, wood residues and charcoal.

Fishery Production and Trade

Aquaculture

The term aquaculture designates the culturing or farming (including harvesting) of aquatic organisms with some sort of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated. For statistical purposes, aquatic organisms harvested by an individual or corporate body which has owned them throughout their rearing period, contribute to aquaculture. Data refer to the output from aquaculture activities designated for final harvest for consumption or other purposes. Data cover fish, molluscs, crustaceans and aquatic organisms, farmed in fresh, brackish and marine waters. Statistics are reported on live weight equivalent and exclude aquatic plants.

Capture Fisheries (nominal catches concept)

Capture fisheries refer to hunting, collecting and gathering activities directed at removing or collecting live wild aquatic organisms. Data shown refer to nominal catches of fish, crustaceans, molluscs and other aquatic organisms taken for all purposes (commercial, industrial, recreational and subsistence purposes) by all types and classes of fishing units (fishermen, vessels, gear, etc.) operating both in inland, fresh and brackish water areas, and in inshore, sponges, shells, pearls and aquatic plants.

The nominal catches concept refers to the landings converted on a live weight basis. Landings refer to the quantities on a landed weight basis. In many fisheries the landed quantities (landings) are identical to the quantities caught (nominal catches). In many other instances the catches on board of fishing vessels or factory ships are gutted, eviscerated, filleted, salted, dried, etc., or reduced to meals and oil. These data require conversion by accurate conversion factors to establish the live weight equivalents (nominal catches) at the time of their capture. The flag of the vessel performing the essential part of the operation of catching the fish should be considered as the paramount indication of the nationality to be assigned to the catch data. National data cover all quantities caught by fishing crafts flying the flag of the reporting country and landed not only in the domestic harbours of the reporting country but also in foreign harbours. National catch excludes quantities caught by foreign fishing craft and landed in domestic ports.

Exports and Imports of Fish and Fishery Products

Statistics refer to the values of fisheries commodities imported or exported (including re-exports when applicable). The commodity categories cover products derived from fish production (capture and aquaculture) of fish, crustaceans, molluscs and other aquatic animals, excluding aquatic plants. In general, export values are f.o.b. (free on board) and import values are c.i.f. (cost, insurance and freight). In accordance with the internationally recommended practice, import statistics include fish caught by foreign fishing craft, whether or not processed on board, be landed in domestic ports; export statistics include fish caught by domestic fishing craft, whether or not processed on board or landed in foreign ports. The totals for the world, developed and developing countries, continents, and regions, are obtained by adding up the imports or exports of each country included in the various groups irrespective of origin or destination of the commodity. Consequently, these totals are by no means to be taken as net trade of the groups to which they refer.

Furthermore, differences between figures given for total exports and total imports at the world level may be due to several factors, e.g. the time lapse between the dispatch of goods from the exporting country and their arrival in the importing country; the use of a different classification of the same product by different countries; or the fact that some countries supply trade data on general trade, while others give data on special trade. Two systems of recording trade are in common use (general trade and special trade), differing mainly in the treatment of recording the movement of goods through customs-bounded storage areas (warehouses, free areas, etc.).

Fish Production

Refers to the aggregate production (capture and aquaculture combined) of freshwater, brackishwater and marine species of fish, crustaceans, molluscs and other aquatic organisms taken for all commercial, industrial, recreational and subsistence purposes. Data exclude aquatic mammals, crocodiles, corals, sponges, shells, pearls and aquatic plants. Data are expressed in live weight equivalent: that is the weight of fish and shellfish at the time of their capture or harvest.

Fish Utilization

Human consumption

Refers to total fish available for human consumption derived through the food balance sheet, for fish by the following equation:

Production, less reduction to meal and other non-food uses, plus imports, less exports, plus or less variation in stocks.

The calculations are made in terms of live weight equivalent.

Other purposes

Includes utilization of aquatic products for reduction to meal and oil, for feed and bait, ornamental purposes, withdrawals from markets and any one other non-food use of fish production (e.g. fertilizers, medical uses).

Food and Nutrition

Food Aid Received

This refers to food aid shipments which represent a transfer of food commodities from donor to recipient countries on a total-grant basis or on highly concessional terms. A food aid shipment record contains information on the year of shipment, donor, recipient, commodity and quantity in terms of thousand metric tons. Cereal food aid shipments are reported on a global trade year basis (July/June). The series starts from 1970/71. Processed and blended cereals are converted into their grain equivalent by applying the conversion factors included in the Rule of Procedures under the 1999 Food Aid Convention to facilitate comparisons between deliveries of different commodities.

Food Availability

This refers to the amount of food available for human consumption as estimated by the FAO Food Balance Sheets (FBS). The FBS are compiled every year by FAO with country-level data on the production and trade of food commodities. Using these data and the available information on seed rates, waste coefficients, stock changes and types of utilization (feed, food, other uses), a supply/utilization account is prepared for each commodity in weight terms. The food component of a commodity account, which is usually derived as a balancing item, refers to the total amount of the commodity available for human consumption during the year. Besides commodity-by-commodity information, the FAO FBS also provide total food availability estimates by aggregating the food component of all commodities including fishery products after conversion

into nutritive values. From these values and the available population estimates, the per caput dietary energy and protein and fat supplies are derived and expressed on a daily basis.

The data shown for food availability refer to the dietary energy supply (DES) per caput/day, during the reference period, in kilocalories. However, the amount of food actually consumed may be lower than the quantity shown as food availability, depending on the degree of losses of edible food and nutrients in the household, e.g. during storage, in preparation and cooking, as plate-waste or quantities fed to domestic animals and pets, or thrown away.

Undernourishment

Undernourishment refers to the condition of people whose dietary energy intake is below that needed for maintaining a healthy and active life. The undernourished refers to those in this condition.

The prevalence of undernourishment refers to the proportion of the population undernourished. The number of persons undernourished is obtained by multiplying estimates of the proportion of undernourished for each country by estimates of the total population.

Annex V: Technical Notes

Calculation of average annual growth rates

Tables 1.2 and 5.1- 5.2

The growth rate in these tables is calculated by fitting a linear trend line, of the form

$$\ln X_t = a + bt$$

to the annual values of the variable X in the aggregate time series. The parameter b is estimated by the least-squares method and the percentage growth rate, r, is then derived as follows:

$$r = [\exp(b) - 1] \times 100$$

Tables 2.1, 2.2, 11.2 – 11.5, 11.7

In these tables the percentage growth rate, r, is calculated between two time points using the following formula:

$$r = \left[\ln\left(\frac{p_n}{p_1}\right) / n \right] * 100$$

where p_n and p_1 are the last and first observations in the period respectively, n is the number of years in the period, and ln is the natural logarithm operator.

Tables 5.4, 5.7 - 5.9, 5.10, 5.13, 5.16, 5.19, 5.22, 5.25, 5.28, 6.1, 6.2, 7.1 – 7.3, 7.8

In these tables the percentage growth rate, r, is also calculated between two time points but using the following formula:

$$r = \left[\left(\frac{p_n}{p_1} \right)^{\frac{1}{n}} - 1 \right] \times 100$$

where p_n and p_1 are the last and first observations in the period respectively and n is the number of years in the period.

Population and labour force estimates and projections

Tables 2.1 – 2.3 and 9.1 – 9.5

The population and labour force estimates and projections presented in these tables are based on the products of a coordinated inter-agency work programme involving the UN Population Division, the International Labour Organization (ILO) Bureau of Statistics and the FAO Statistics Division. The basic framework for the set of demographic estimates and projections are the estimates and projections of the total population by sex and age, which are prepared by the UN Population Division.

The estimates and projections of urban/rural population, economically active population (labour force) and the agricultural population are obtained by systematically applying estimates and projections of the relevant population ratios (i.e. the proportion of urban/ rural population, the activity rates by sex and age and the proportion of agricultural population) to the total population. The economically active population in agriculture (agricultural labour force) is obtained by applying the estimates and projections of the proportion of economically active population in agriculture to the total economically active population.

The estimates and projections of the total population are biennially revised by the UN Population Division and the figures in the present document are based on the 2004 revision ("World Population Prospects: The 2004 Revision", United Nations, New York, 2005). The estimates and projections of the proportion of urban/rural population, which are also prepared by the UN Population Division, refer to the assessment made in 2003 ("World Population Prospects: The 2003 Revision", United Nations, New York, 2004). The estimates and projections of the activity rates by sex and age, which are produced by the ILO Bureau of Statistics, are based on the assessment made in 1996 ("Economically Active Population, 1950 – 2010", Fourth Edition, ILO, Geneva, 1996). The estimates of the proportion of the economically active population in agriculture also emanate from the latter

assessment while the projections were prepared by the FAO Statistics Division ("World-wide Estimates and Projections of Agricultural Population and Labour Force", FAO, Rome, 2000). The estimates and projections of the proportion of the population dependent on agriculture (agricultural population) are also prepared by FAO. However, as information on agricultural population derived from population censuses or surveys is scarce, FAO has largely relied on the close relationship existing between the ratio of economically active population in agriculture (EAPA) to the total economically active population (EAP) and the ratio of agricultural population (AP) to total population (TP). For most countries the two ratios are assumed to be equal. Thus applying the EAPA/EAP ratio to the total population derives the agricultural population.

Estimation of the proportion of the population undernourished

Table 8.3

The estimation of the proportion of the population undernourished requires the specification of the distribution of food intake (expressed in terms of dietary energy) within the population and a cut-off point reflecting the minimum dietary energy requirement of the average individual. The part of the distribution below the cut-off point represents the proportion of the population undernourished.

The distribution of food intake in the population is assumed to be lognormal. This means that its parameters can be derived on the basis of the mean and the coefficient of variation of the household per caput food intake. Thus for the purpose of deriving the distribution for all countries at common time periods, the per caput dietary energy supply estimated through the food balance sheets is taken as a proxy for the mean. The coefficient of variation, which reflects the inequality in the distribution, is however estimated on the basis of household income/expenditure survey data. For countries where the appropriate household survey data are not available the coefficient of variation is estimated by certain indirect procedures. Given the mean and the coefficient of variation, the parameters of the lognormal distribution of food intake are estimated as follows:

$$\mu = \log_e x - [\log_e \{CV^2(x) + 1\}] / 2$$

$$\sigma = [\log_e \{CV^2(x) + 1\}]^{0.5}$$

where x and $CV(x)$ are the mean and coefficient of variation respectively of the distribution of food intake.

Regarding the minimum dietary energy requirement used as the cut-off point, the procedure is to first specify the sex-age specific minimum requirements. These are then averaged, using the proportion of the population in the different sex-age groups as weight, to reflect the minimum energy requirement of the average individual in the population. Thus if the cut-off point is denoted by r_L the proportion of the population undernourished is derived as follows:

$$P(u) = \Phi \{(\log_e r_L - \mu) / \sigma\}$$

where the expression on the right hand side refers to the proportion below $\log_e r_L$ in the normal distribution with mean μ and standard deviation σ .

Selected Cereals Market Indicators (Global Food Security Indicators)

Table 8.6

FAO uses six indicators to monitor changes in Global Food Security. "Ratio of Five Major Grain Exporters' Supplies to Requirements" is used to monitor and assess the potential for the five major wheat and coarse grain exporters to meet the global import demand for those grains. The indicator is derived as the ratio of the sum of the five major exporter's production, imports and opening stocks to their total domestic utilization plus exports.

"Closing Stocks as a percentage of Total Disappearance of Major Cereal Exporters" is another measure of the exporters' potential to meet world import demand. In order to capture the supply and wheat. It is derived as the ratio of the projected ending stocks in the major exporting countries to total disappearance (i.e. domestic consumption plus exports), "World Changes in Cereal Production" measures changes in cereal production against the trend and the preceding year's value.

"Changes in Cereal Production in Low-income Food Deficit Countries (LIFDCs)" and "Changes in Cereal Production in LIFDCs less China and India", is changes in aggregate cereal production of international prices.

"Selected Cereal Price Indices" provides a comparison of export prices for the major cereals.