



## 3.1 Rural environment and land use

	Rural population			Rural population density	Land area	Land use					
	% of total		average annual % growth	people per sq. km of arable land	thousand sq. km	Arable land % of land area		Permanent cropland % of land area		Other % of land area	
	1980	1998	1980-98	1997	1997	1980	1997	1980	1997	1980	1997
Albania	66	60	0.6	344	27	21.4	21.1	4.3	4.6	74.4	74.4
Algeria	57	41	0.8	163	2,382	2.9	3.2	0.3	0.2	96.8	96.6
Angola	79	67	2.1	263	1,247	2.3	2.4	0.4	0.4	97.3	97.2
Argentina	17	11	-1.2	16	2,737	9.1	9.1	0.8	0.8	90.1	90.1
Armenia	34	31	0.6	236	28	..	17.5	..	2.3	..	80.2
Australia	14	15	1.8	5	7,682	5.7	6.9	0.0	0.0	94.2	93.1
Austria	35	35	0.6	205	83	18.6	16.9	1.2	1.0	80.2	82.1
Azerbaijan	47	43	1.0	205	87	..	19.3	..	3.0	..	77.7
Bangladesh	86	77	1.5	1,204	130	68.3	60.8	2.0	2.5	29.6	36.7
Belarus	44	29	-1.7	49	207	..	29.8	..	0.7	..	69.5
Belgium	5	3	-2.5	..	33 <sup>a</sup>	23.2 <sup>a</sup>	23.4 <sup>a</sup>	0.4 <sup>a</sup>	0.5 <sup>a</sup>	76.4 <sup>a</sup>	76.1 <sup>a</sup>
Benin	73	59	1.9	240	111	12.2	13.1	0.8	1.4	87.0	85.6
Bolivia	55	39	0.3	163	1,084	1.7	1.7	0.2	0.2	98.1	98.1
Bosnia and Herzegovina	65	58	-1.5	425	51	..	9.8	..	2.9	..	87.3
Botswana	85	51	-0.1	229	567	0.7	0.6	0.0	0.0	99.3	99.4
Brazil	34	20	-1.3	63	8,457	4.6	6.3	1.2	1.4	94.2	92.3
Bulgaria	39	31	-1.7	60	111	34.6	39.0	3.2	1.8	62.2	59.2
Burkina Faso	92	83	1.9	257	274	10.0	12.4	0.1	0.2	89.8	87.4
Burundi	96	92	2.4	766	26	35.8	30.0	10.1	12.9	54.0	57.2
Cambodia	88	85	2.9	259	177	11.3	21.0	0.4	0.6	88.3	78.4
Cameroon	69	53	1.3	125	465	12.7	12.8	2.2	2.6	85.1	84.6
Canada	24	23	1.0	15	9,221	4.9	4.9	0.0	0.0	95.0	95.0
Central African Republic	65	60	1.9	106	623	3.0	3.1	0.1	0.1	96.9	96.8
Chad	81	77	2.4	169	1,259	2.5	2.6	0.0	0.0	97.5	97.4
Chile	19	15	0.4	111	749	5.1	2.6	0.3	0.4	94.6	96.9
China <sup>b</sup>	80	69	0.5	685	9,326	10.4	13.3	0.4	1.2	89.3	85.5
Hong Kong, China	9	0	-37.2	0	1	7.0	5.1	1.0	1.0	92.0	93.9
Colombia	36	27	0.4	568	1,039	3.6	1.9	1.4	2.4	95.0	95.7
Congo, Dem. Rep.	71	70	3.2	493	2,267	2.9	3.0	0.4	0.5	96.6	96.5
Congo, Rep.	59	39	0.5	773	342	0.4	0.4	0.1	0.1	99.5	99.5
Costa Rica	57	53	2.0	813	51	5.5	4.4	4.4	5.5	90.1	90.1
Côte d'Ivoire	65	55	2.3	267	318	6.1	9.3	7.2	13.8	86.6	76.9
Croatia	50	43	-0.9	150	56	..	23.6	..	2.2	..	74.2
Cuba	32	25	-0.6	75	110	23.9	33.7	6.4	6.8	69.7	59.5
Czech Republic	25	25	0.1	85	77	..	40.0	..	3.1	..	56.9
Denmark	16	15	-0.4	33	42	62.3	55.7	0.3	0.2	37.4	44.1
Dominican Republic	50	36	0.3	293	48	22.1	21.1	7.2	9.9	70.6	69.0
Ecuador	53	37	0.3	286	277	5.6	5.7	3.3	5.2	91.1	89.2
Egypt, Arab Rep.	56	55	2.2	1,177	995	2.3	2.8	0.2	0.5	97.5	96.7
El Salvador	58	54	1.1	570	21	26.9	27.3	11.7	12.1	61.4	60.6
Eritrea	87	82	2.5	794	101	..	3.9	..	0.0	..	96.1
Estonia	30	31	0.0	40	42	..	26.7	..	0.4	..	73.0
Ethiopia	90	83	2.3	508	1,000	..	9.9	..	0.6	..	89.5
Finland	40	34	-0.6	83	305	7.8	7.0	..	0.0	..	93.0
France	27	25	0.1	80	550	31.8	33.3	2.5	2.1	65.7	64.6
Gabon	50	21	-2.0	78	258	1.1	1.3	0.6	0.7	98.2	98.1
Gambia, The	80	69	2.9	421	10	15.5	19.5	0.4	0.5	84.1	80.0
Georgia	48	40	-0.6	283	70	..	11.2	..	4.1	..	84.7
Germany	17	13	-1.3	91	349	34.4	33.9	1.4	0.7	64.1	65.5
Ghana	69	63	2.6	398	228	8.4	12.5	7.5	7.5	84.2	80.0
Greece	42	40	0.3	150	129	22.5	21.9	7.9	8.5	69.6	69.6
Guatemala	63	61	2.4	471	108	11.7	12.5	4.4	5.0	83.9	82.4
Guinea	81	69	1.8	542	246	2.9	3.6	1.8	2.4	95.4	94.0
Guinea-Bissau	83	77	1.7	294	28	9.1	10.7	1.1	1.8	89.9	87.6
Haiti	76	66	1.1	885	28	19.8	20.3	12.5	12.7	67.7	67.0
Honduras	65	49	1.5	178	112	13.9	15.1	1.8	3.1	84.3	81.7



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	Rural population			Rural population density	Land area	Land use					
	% of total		average annual % growth			people per sq. km of arable land	Arable land		Permanent cropland		Other
	1980	1998	1980-98	1997	thousand sq. km	% of land area	1997	% of land area	1997	% of land area	1997
Hungary	43	36	-1.3	77	92	54.4	52.2	3.3	2.5	42.2	45.3
India	77	72	1.6	431	2,973	54.8	54.5	1.8	2.7	43.4	42.9
Indonesia	78	61	0.4	696	1,812	9.9	9.9	4.4	7.2	85.6	82.9
Iran, Islamic Rep.	50	39	1.2	137	1,622	8.0	10.9	0.5	1.0	91.5	88.0
Iraq	35	29	1.9	134	437	12.0	11.9	0.4	0.8	87.6	87.3
Ireland	45	41	-0.1	114	69	16.1	19.5	0.0	0.0	83.9	80.5
Israel	11	9	1.3	151	21	15.8	17.0	4.3	4.2	80.0	78.8
Italy	33	33	0.1	231	294	32.2	28.2	10.0	9.0	57.7	62.8
Jamaica	53	45	0.1	666	11	12.5	16.1	9.7	9.2	77.8	74.7
Japan	24	21	-0.2	696	377	11.4	10.4	1.6	1.0	87.0	88.6
Jordan	40	27	2.1	478	89	3.4	2.9	0.4	1.5	96.2	95.6
Kazakhstan	46	44	0.1	23	2,671	..	11.2	..	0.1	..	88.7
Kenya	84	69	2.1	498	569	6.7	7.0	0.8	0.9	92.5	92.1
Korea, Dem. Rep.	43	40	1.2	545	120	13.4	14.1	2.4	2.5	84.2	83.4
Korea, Rep.	43	20	-3.5	542	99	20.9	17.5	1.4	2.0	77.8	80.5
Kuwait	10	3	-6.7	832	18	0.1	0.3	..	0.1	..	99.6
Kyrgyz Republic	62	66	1.8	226	192	..	7.0	..	0.4	..	92.6
Lao PDR	87	78	1.9	474	231	2.9	3.5	0.1	0.2	97.0	96.3
Latvia	32	31	-0.3	42	62	..	29.0	..	0.5	..	70.5
Lebanon	26	11	-2.9	268	10	20.5	17.6	8.9	12.5	70.6	69.9
Lesotho	87	74	1.5	461	30	9.6	10.7	..	..	..	..
Libya	31	13	-1.7	39	1,760	1.0	1.0	0.2	0.2	98.8	98.8
Lithuania	39	32	-0.6	40	65	..	45.5	..	0.9	..	53.6
Macedonia, FYR	47	39	-0.8	129	25	..	23.9	..	1.9	..	74.1
Madagascar	82	72	2.0	399	582	4.3	4.4	0.9	0.9	94.8	94.7
Malawi	91	78	2.2	512	94	13.3	16.8	0.9	1.3	85.8	81.8
Malaysia	58	44	1.2	534	329	3.0	5.5	11.6	17.6	85.4	76.9
Mali	82	71	1.9	161	1,220	1.6	3.8	0.0	0.0	98.3	96.2
Mauritania	73	45	0.0	233	1,025	0.2	0.5	0.0	0.0	99.8	99.5
Mauritius	58	59	1.1	679	2	49.3	49.3	3.4	3.0	47.3	47.8
Mexico	34	26	0.5	98	1,909	12.1	13.2	0.8	1.1	87.1	85.7
Moldova	60	54	-0.2	130	33	..	54.1	..	12.1	..	33.8
Mongolia	48	38	1.2	73	1,567	0.8	0.8	..	0.0	..	99.2
Morocco	59	46	0.6	145	446	16.6	19.6	1.1	1.9	82.3	78.5
Mozambique	87	62	-0.2	359	784	3.6	3.8	0.3	0.3	96.1	95.9
Myanmar	76	73	1.3	338	658	14.6	14.5	0.7	0.9	84.8	84.6
Namibia	77	70	2.2	140	823	0.8	1.0	0.0	0.0	99.2	99.0
Nepal	94	89	2.3	686	143	16.0	20.3	0.2	0.5	83.8	79.2
Netherlands	12	11	0.2	188	34	23.3	26.5	0.9	1.0	75.8	72.4
New Zealand	17	14	0.2	35	268	9.3	5.8	3.7	6.4	86.9	87.8
Nicaragua	50	45	2.1	85	121	9.5	20.2	1.5	2.4	89.1	77.4
Niger	87	80	2.9	159	1,267	2.8	3.9	0.0	0.0	97.2	96.1
Nigeria	73	58	1.6	245	911	30.6	31.0	2.8	2.8	66.6	66.3
Norway	30	25	-0.4	125	307	2.7	2.9	..	..	..	..
Oman	69	19	-3.0	2,967	212	0.1	0.1	0.1	0.2	99.8	99.7
Pakistan	72	64	2.0	395	771	25.9	27.3	0.4	0.7	73.7	72.0
Panama	50	44	1.3	242	74	5.8	6.7	1.6	2.1	92.5	91.2
Papua New Guinea	87	83	2.0	6,260	453	0.0	0.1	1.1	1.3	98.9	98.5
Paraguay	58	45	1.5	107	397	4.1	5.5	0.3	0.2	95.6	94.2
Peru	35	28	0.7	187	1,280	2.5	2.9	0.3	0.4	97.2	96.7
Philippines	63	43	0.4	634	298	14.5	17.2	14.8	14.8	70.8	68.1
Poland	42	35	-0.5	98	304	48.0	46.2	1.1	1.2	50.9	52.6
Portugal	71	39	-3.3	187	92	26.5	23.5	7.8	8.2	65.7	68.3
Puerto Rico	33	26	-0.4	3,008	9	5.6	3.7	5.6	5.1	88.7	91.2
Romania	51	44	-0.9	108	230	42.7	40.4	2.9	2.6	54.4	57.0
Russian Federation	30	23	-1.2	27	16,889	..	7.5	..	0.1	..	92.4



## 3.1 Rural environment and land use

	Rural population			Rural population density	Land area thousand sq. km	Land use					
	% of total		average annual % growth	people per sq. km of arable land		Arable land % of land area		Permanent cropland % of land area		Other % of land area	
	1980	1998				1980	1997	1980	1997	1980	1997
Rwanda	95	94	1.9	874	25	30.8	34.5	10.3	12.2	58.9	53.4
Saudi Arabia	34	15	-0.1	87	2,150	0.9	1.7	0.0	0.1	99.1	98.2
Senegal	64	54	1.7	216	193	12.2	11.6	0.0	0.2	87.8	88.2
Sierra Leone	76	65	1.4	639	72	6.3	6.8	0.7	0.8	93.0	92.4
Singapore	0	0	..	0	1	3.3	1.6	9.8	..	86.9	..
Slovak Republic	48	43	-0.3	156	48	..	30.7	..	2.6	..	66.6
Slovenia	52	50	0.0	428	20	..	11.5	..	2.7	..	85.8
South Africa	52	47	1.7	121	1,221	10.2	12.6	0.7	0.8	89.1	86.7
Spain	27	23	-0.7	63	499	31.1	28.7	9.9	9.7	59.0	61.6
Sri Lanka	78	77	1.2	1,652	65	13.2	13.4	15.9	15.8	70.9	70.8
Sudan	80	66	1.1	111	2,376	5.2	7.0	0.0	0.1	94.8	92.9
Sweden	17	17	0.4	53	412	7.2	6.8	..	..	..	..
Switzerland	43	32	-1.1	545	40	9.9	10.6	0.5	0.6	89.6	88.8
Syrian Arab Republic	53	46	2.4	146	184	28.5	26.0	2.5	4.1	69.1	70.0
Tajikistan	66	73	3.2	574	141	..	5.4	..	0.9	..	93.7
Tanzania	85	70	2.0	714	884	2.5	3.5	1.0	1.0	96.5	95.5
Thailand	83	79	1.3	281	511	32.3	33.4	3.5	6.6	64.2	60.0
Togo	77	68	2.4	143	54	36.8	38.1	6.6	6.6	56.6	55.3
Trinidad and Tobago	37	27	-0.9	466	5	13.6	14.6	9.0	9.2	77.4	76.2
Tunisia	49	36	0.4	116	155	20.5	18.7	9.7	12.9	69.7	68.5
Turkey	56	27	-2.1	67	770	32.9	34.5	4.1	3.4	63.0	62.1
Turkmenistan	53	55	3.3	158	470	..	3.5	..	0.1	..	96.4
Uganda	91	86	2.6	349	200	20.4	25.3	8.0	8.8	71.6	65.9
Ukraine	38	32	-0.7	50	579	..	57.1	..	1.7	..	41.2
United Arab Emirates	29	15	1.7	991	84	0.2	0.5	0.1	0.5	99.7	99.0
United Kingdom	11	11	0.0	99	242	28.7	26.4	0.3	0.2	71.1	73.4
United States	26	23	0.3	35	9,159	20.6	19.3	0.2	0.2	79.2	80.5
Uruguay	15	9	-1.9	25	175	8.0	7.2	0.3	0.3	91.7	92.5
Uzbekistan	59	62	2.7	329	414	..	10.8	..	0.9	..	88.3
Venezuela, RB	21	14	0.1	120	882	3.2	3.0	0.9	1.0	95.9	96.0
Vietnam	81	80	2.1	1,071	325	18.2	17.4	1.9	4.7	79.8	77.9
West Bank and Gaza	..	..	..	..	..	..	..	..	..	..	..
Yemen, Rep.	81	76	3.7	850	528	2.6	2.7	0.2	0.2	97.2	97.1
Yugoslavia, FR (Serb./Mont.)	54	48	-0.2	138	102	..	36.3	..	3.4	..	60.2
Zambia	60	61	3.0	109	743	6.9	7.1	0.0	0.0	93.1	92.9
Zimbabwe	78	66	2.0	249	387	6.4	8.0	0.3	0.3	93.4	91.7
<b>World</b>	<b>60 w</b>	<b>54 w</b>	<b>1.0 w</b>	<b>519 w</b>	<b>130,181 s</b>	<b>10.1 w</b>	<b>10.6 w</b>	<b>0.9 w</b>	<b>1.0 w</b>	<b>88.9 w</b>	<b>88.4 w</b>
<b>Low income</b>	78	70	1.2	573	41,383	11.5	12.4	0.9	1.4	87.7	86.2
Excl. China & India	78	69	1.7	576	28,963	7.0	7.8	1.0	1.3	92.0	90.9
<b>Middle income</b>	44	35	0.2	378	57,873	7.1	8.7	1.2	1.0	91.7	90.3
Lower middle income	49	42	0.7	449	36,096	7.5	9.2	1.3	0.8	91.2	90.0
Upper middle income	37	23	-0.9	188	21,777	6.9	7.9	1.1	1.3	92.0	90.8
<b>Low &amp; middle income</b>	68	59	1.0	539	99,257	9.4	10.3	1.0	1.2	89.5	88.6
East Asia & Pacific	78	66	0.6	688	15,968	10.0	12.0	1.5	2.6	88.5	85.4
Europe & Central Asia	41	34	-0.5	123	23,844	38.6	11.9	3.1	0.4	58.3	87.7
Latin America & Carib.	35	25	0.1	253	20,064	5.8	6.7	1.1	1.3	93.1	92.0
Middle East & N. Africa	52	43	1.5	522	10,995	4.4	5.2	0.4	0.7	95.1	94.1
South Asia	78	72	1.7	531	4,781	42.5	42.4	1.5	2.1	56.1	55.5
Sub-Saharan Africa	77	67	2.0	378	23,605	5.4	6.4	0.7	0.9	93.9	92.7
<b>High income</b>	25	23	-0.2	190	30,925	12.0	11.7	0.5	0.5	87.5	87.8
Europe EMU	26	22	-0.5	139	2,307	27.6	26.7	4.7	4.3	67.7	69.0

a. Includes Luxembourg. b. Includes Taiwan, China.



## Rural environment and land use 3.1

### About the data

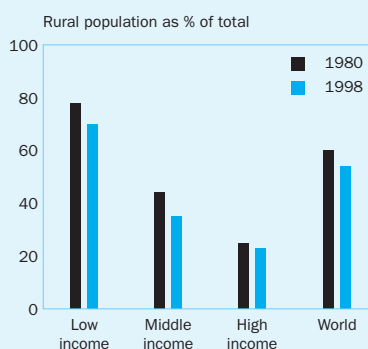
Indicators of rural development are sparse, as few indicators are disaggregated by a rural-urban breakdown (for some of these indicators see tables 2.7, 3.5, and 3.10). This table shows indicators of rural population and land use. Rural population is approximated as the midyear nonurban population.

The data in the table show that land use patterns are changing. They also indicate major differences in resource endowments and uses among countries. True comparability is limited, however, by variations in definitions, statistical methods, and the quality of data collection. For example, countries use different definitions of rural population and land use. The Food and Agriculture Organization (FAO), the primary compiler of these data, occasionally adjusts its definitions of land use categories and sometimes revises earlier data. (In 1985, for example, the FAO began to exclude from cropland land used for shifting cultivation but currently lying fallow.) And following FAO practice, this year's edition of the *World Development Indicators*, like last year's, breaks down the category *cropland*, used in previous editions, into *arable land* and *permanent cropland*. Because the data reflect changes in data reporting procedures as well as actual changes in land use, apparent trends should be interpreted with caution.

Satellite images show land use that differs from that given by ground-based measures in both area under cultivation and type of land use. Furthermore, land use data in countries such as India are based on reporting systems that were geared to the collection of tax revenue. Because taxes on land are no longer a major source of government revenue, the quality and coverage of land use data (except for cropland) have declined. Data on forest area, aggregated in the category *other*, may be particularly unreliable because of differences in definitions and irregular surveys (see *About the data* for table 3.4).

Figure 3.1a

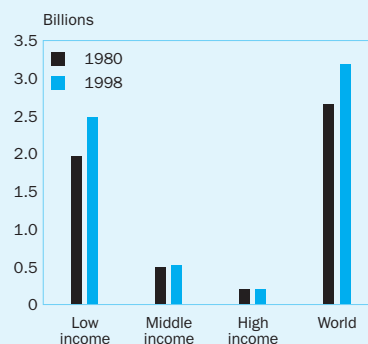
### Rural areas hold a shrinking share of the population everywhere . . .



Source: Table 3.1.

Figure 3.1b

### . . . but in low-income countries rural dwellers continue to grow in number



Source: Tables 2.1 and 3.1.

### Definitions

- **Rural population** is calculated as the difference between the total population and the urban population (see *Definitions* for tables 2.1 and 3.10).
- **Rural population density** is the rural population divided by the arable land area.
- **Land area** is a country's total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes. (See table 1.1 for the total surface area of countries.)
- **Land use** is broken into three categories.
- **Arable land** includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.
- **Permanent cropland** is 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.
- **Other land** includes forest and woodland as well as logged-over areas to be forested in the near future. Also included are uncultivated land, grassland not used for pasture, wetlands, wastelands, and built-up areas—residential, recreational, and industrial lands and areas covered by roads and other fabricated infrastructure.

### Data sources

The data on urban population shares used to estimate rural population come from the United Nations Population Division's *World Urbanization Prospects: The 1998 Revision*. The total population figures are World Bank estimates. The data on land area and land use are from the FAO's electronic files and are published in its *Production Yearbook*. The FAO gathers these data from national agencies through annual questionnaires and by analyzing the results of national agricultural censuses.