

STATISTICAL ANNEX



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GENERAL INDICATORS

Table 1: Total population, population growth, and proportion of children in the Arab region

Country	Total population 2007 (millions)	Population growth rate 2005-2015 (predicted) (%)	Proportion of the total population under 15 years old 2005 (%)
Algeria	33.8	1.5	29.6
Bahrain	0.7	1.7	26.3
Djibouti	0.8	1.7	38.5
Egypt	75.4	1.7	33.3
Iraq	28.9	2.2	41.5
Jordan	5.9	2.2	37.2
Kuwait	2.8	2.2	23.8
Lebanon	4.0	1.0	28.6
Libya	6.1	1.9	30.3
Mauritania	3.1	2.4	40.3
Morocco	31.2	1.2	30.3
Occupied Palestinian Territories	4.0	3.1	45.9
Oman	2.5	1.9	33.8
Qatar	0.8	2.0	21.7
Saudi Arabia	24.7	2.2	34.5
Somalia	8.6	2.9	44.1
Sudan	38.5	2.2	40.7
Syria	19.9	2.2	36.6
Tunisia	10.3	1.0	26.0
UAE	4.3	2.5	19.8
Yemen	22.3	2.9	45.9
Arab Countries	328.6	2.0	33.7

Source: World Population Prospects 2006 Revision, published 2007. http://www.un.org/esa/population/publications/wpp2006/WPP2006_Highlights_rev.pdf on 12 February 2009.

Table 2: Human Development Indices

Country	Human Development Index value 2006	Human Poverty Index (%)	GDP 2005 (US\$ billions)	GDP Per capita 2006 (Purchasing Power Parity US\$)	Adult illiteracy rate (% aged 15 and above 1999-2006)	Gender empowerment measure (value)	Gender empowerment measure (rank)
Algeria	0.748	18.1	102.3	7426	25.4	0.312	105
Bahrain	0.902	8.3	12.9	34516	11.7	0.627	35
Comoros	0.572	21.2	0.4	1152	25.8	..	..
Djibouti	0.513	26.5	0.7	1965	..	..	..
Egypt	0.716	20.0	89.4	4953	28.6	0.283	107
Iraq	..	22.6	..	..	25.9	..	..
Jordan	0.769	6.1	12.7	4654	7.3	..	..
Kuwait	0.912	..	80.8	46638	6.7	..	..
Lebanon	0.796	8.5	21.9	9757	..	..	..
Libya	0.840	13.6	38.8	13362	13.8	..	..
Mauritania	0.557	35.9	1.9	1890	44.8	..	..
Morocco	0.646	31.8	51.6	3915	45.3	0.316	104
Occupied Palestinian Territories	0.731	6.7	4.0	..	7.6	..	..
Oman	0.839	15.0	24.3*	20999	16.3	0.434	89
Qatar	0.899	7.2	42.5	72969	10.2	0.380	99
Saudi Arabia	0.835	12.5	309.8	22053	15.7	0.297	106
Somalia	..	..	..	..	..	..	..
Sudan	0.526	34.3	27.5	1887	39.1	..	..
Syria	0.736	13.0	26.3	4225	17.5	..	..
Tunisia	0.762	16.1	28.7	6958	23.1	..	..
UAE	0.903	7.8	129.7	49116	10.2	0.698	24
Yemen	0.567	36.6	15.1	2262	42.7	0.136	108
Arab Countries	0.713	..	1043.4	7760	28.2	..	..

* 2004 data

Source: UN, Statistical update of the tables of the Human Development Report 2007-2008, Fighting Climate Change: human solidarity in a divided world. http://hdr.undp.org/en/media/HDR_20072008_EN_Complete.pdf and http://hdr.undp.org/en/media/HDI_2008_EN_Tables.pdf on 13 April 2009.

Table 3: Economic Indicators

Country	Annual GDP growth 2007 (%)	Inflation rate 2007 (%)	Net foreign direct investment (US\$ millions)		Overall surplus/deficit in budget 2006 (US\$ millions)	Military expenditure (% of GDP) 2007	Balance of trade 2006 (US\$ millions)	Population living without electricity 2006 (millions)
			2004	2007				
Algeria	3	3.7	882	1665	15039	2.9	34060	0.6
Bahrain	8 ^a	3.4 ^b	865	1756	1471	3.6	3138	0.0
Djibouti	4	5.0 ^b	39	195	..	4.2 ^c	-294	..
Egypt	7	11.0	2157	11578	-8512	2.8	-8438	1.5
Iraq	..	..	300	448	..	..	6380	22
Jordan	6	5.4 ^b	816	1835	-626	5.3	-5004	0.0
Kuwait	10 ^a	5.0 ^b	24	123	23514	4.8	44284	0.0
Lebanon	2	4.1	1993	2845	-3238	4.5	-5755	0.0
Libya	7	6.7 ^b	357	2541	19415	2.0	24306	0.2
Mauritania	2	7.3	392	153	968	3.6	199	..
Morocco	2	2.0	895	2577	-1253	4.5	-9396	4.5
Occupied Palestinian Territories	-3	..	49	21	..	..	..	..
Oman	6 ^a	5.5 ^b	229	2377	1450	11.9	11274	0.1
Qatar	6 ^a	13.8 ^b	1199	1138	641	..	15617	0.2
Saudi Arabia	3	4.1 ^b	1942	24318	74763	8.2	149116	0.8
Somalia	..	..	-5	141	..	..	..	..
Sudan	10	8.0	1511	2436	-690	2.3 ^c	-847	25.4
Syria	7	7.0 ^b	275	885	-1698	5.1	-2240	1.9
Tunisia	6	3.1	639	1618	-512	1.6	-2589	0.1
UAE	8 ^a	11.0 ^b	10004	13253	19732	2.0	48877	0.4
Yemen	4	12.5 ^b	144	464	174	7.0	2595	13.2

(a) Figures from 2005.

(b) Estimated inflation rate for 2007.

(c) Figures from 2006.

Sources:Column 1: World Bank, <http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=135> on 12 February 2009.Column 2: IMF, <http://www.imf.org/external/pubs/ft/weo/2008/01/weodata/download.aspx> on 12 February 2009.Columns 3 and 4: UNCTAD database, <http://stats.unctad.org/FDI/TableViewer/tableView.aspx?ReportId=1254>.Column 5: Arab Monetary Fund, 2008 http://www.amf.org.ae/pages/XlsToHtmlViewer.aspx?filename=uploads/Docs/ECONOMIC%20DEPT/Eco_Ind/INDFRM08.xls on 12 February 2009.Column 6: UNDP, Office of the Human Development Report, <http://hdr.undp.org/en/statistics> on 12 February 2009.Column 7: OAPC, Annual Statistical Report 2007, <http://www.oapc.org/publications/ASR/A%20S%20R%202007.pdf> on 12 February 2009.Column 8: UNDP, Office of the Human Development Report, <http://hdr.undp.org/en/statistics> on 12 February 2009.

Table 4: World Bank Knowledge Economy Index* (most recent compared to 1995)

Country or region	Most recent period	1995	Change
Arab countries			
Algeria	3.25	2.90	0.35
Bahrain	6.02	6.89	-0.87
Djibouti	1.15	2.65	-1.50
Egypt	4.03	4.20	-0.17
Jordan	5.53	5.08	0.45
Kuwait	6.01	5.71	0.30
Lebanon	4.86	4.99	-0.13
Mauritania	2.35	1.79	0.56
Morocco	3.45	3.68	-0.23
Oman	5.37	4.71	0.66
Qatar	6.15	5.81	0.34
Saudi Arabia	5.15	4.66	0.49
Sudan	..	1.40	..
Syria	2.90	3.04	-0.14
Tunisia	4.73	4.10	0.63
UAE	6.66	6.22	0.44
Yemen	1.80	1.83	-0.03
Neighbouring and comparison countries			
Iran	3.39	3.15	0.24
Turkey	5.61	5.41	0.20
Israel	8.22	8.45	-0.23
Cyprus	7.55	7.49	0.06
Malaysia	6.06	6.03	0.03
India	3.12	3.14	-0.02
China	4.35	3.43	0.92
Top-ranking countries			
Denmark	9.58	9.59	-0.01
Sweden	9.52	9.48	0.04
Finland	9.37	9.56	-0.19
Holland	9.32	9.49	-0.17
Canada	9.21	9.23	-0.02
US	9.08	9.50	-0.42
UK	9.09	9.39	-0.30
Geographic regions of the world			
Middle East and North Africa	5.38	5.48	-0.10
Africa	2.80	3.13	-0.33
East Asia and the Pacific	6.59	7.05	-0.46
Europe and Central Asia	6.35	6.06	0.29
G7	8.76	9.07	-0.31
Latin America	5.07	5.40	-0.33
South Asia	2.53	2.57	-0.04
Income level			
High-income states	8.31	8.61	-0.30
Upper-middle-income states	6.21	6.11	0.10
Lower-middle-income states	4.10	4.18	-0.08
Low-income states	2.08	2.29	-0.21
World	8.01	8.18	-0.17

Source: World Bank database, Knowledge Assessment Methodology (KAM), http://info.worldbank.org/etools/kam2/KAM_page6.asp on 13 February 2009.

* The Knowledge Economy Index is calculated from twelve indicators. Values are on a scale of 0-10; the top 10 per cent of states score in the range 9-10, the next highest 10 per cent of states score in the range 8-9 and so on.

KNOWLEDGE PERFORMANCE ENVIRONMENTS

Table 5: Relationship of Arab market competitiveness with knowledge production 2008

Country	Intensity of local competition	Extent of market dominance	Effectiveness of antitrust policy	Compound score	Comprehensiveness of competition laws (legislation)	Independence of the competition agencies (institutions)
	(1)	(2)	(3)	(4)	(5)	(6)
Algeria	4.2	3.9	3.1	3.7	15	2
Bahrain	5.3	4.2	4.2	4.6	..	..
Djibouti	..	..	..	..	..	..
Egypt	4.6	3.4	3.3	3.8	13	1
Iraq	..	..	..	..	..	..
Jordan	5.6	4.6	4.5	4.9	23	2
Kuwait	5.1	4.1	3.6	4.3	..	..
Lebanon	..	..	..	..	..	..
Libya	4.0	3.5	3.7	3.7	..	..
Mauritania	4.1	2.4	3.6	3.4	..	..
Morocco	4.6	3.9	4.2	4.2	17	1
Occupied Palestinian Territories	..	..	..	..	..	..
Oman	4.7	3.8	3.9	4.1	..	..
Qatar	5.1	4.6	4.2	4.6	..	1
Saudi Arabia	5.2	4.4	4.3	4.6	20	3
Somalia	..	..	..	..	..	..
Sudan	..	..	..	..	..	..
Syria	5.1	3.7	3.8	4.2	..	2
Tunisia	5.4	4.8	5.0	5.0	14	3
UAE	5.6	4.6	4.1	4.8	..	..
Yemen	..	..	..	..	..	1

Sources:

Columns 1-3: World Economic Forum, Global Competitiveness Report 2008/2009 and Arab Competitiveness Report, <http://www.weforum.org/en/initiatives/gcp/index.htm> and <http://www.weforum.org/en/initiatives/gcp/Arab%20World%20Competitiveness%20Report/index.htm> on 12 February 2009.

Column 4: Simple Average of columns 1-3.

Column 5: Keith Hylton created this index for the Antitrust World Reports (<http://antitrustworldwiki.com>). The results for the indicator are calculated by measuring the breadth of the overall competition law on a positive scale of 0-30.

Column 6: The ratings on this index are based on the results of the analyses in the background paper by Deena Waked (in English). A rating of 1 indicates fully dependent, 2 indicates semi-independent, and 3 indicates fully independent.

Table 6: Worldwide governance indicators in the Arab region and comparison countries 2007

Country	Voice and accountability	Political stability and absence of violence	Government effectiveness	Regulatory quality	Rule of law	Control of corruption
Algeria	-1.01	-1.18	-0.52	-0.66	-0.72	-0.47
Bahrain	-0.82	-0.28	0.41	0.89	0.66	0.60
Djibouti	-1.06	-0.05	-0.98	-0.80	-0.51	-0.48
Egypt	-1.24	-0.77	-0.44	-0.31	-0.13	-0.58
Iraq	-1.29	-2.82	-1.68	-1.35	-1.89	-1.39
Jordan	-0.64	-0.29	0.27	0.35	0.51	0.32
Kuwait	-0.46	0.40	0.20	0.29	0.69	0.49
Lebanon	-0.45	-2.09	-0.61	-0.21	-0.66	-0.65
Libya	-1.94	0.47	-1.07	-0.98	-0.62	-0.83
Mauritania	-0.75	-0.33	-0.68	-0.36	-0.60	-0.50
Morocco	-0.62	-0.52	-0.07	-0.11	-0.15	-0.24
Occupied Palestinian Territories	-1.28	-2.07	-1.24	-1.38	-0.84	-0.77
Oman	-1.03	0.76	0.38	0.63	0.73	0.62
Qatar	-0.64	0.81	0.06	0.55	0.89	1.00
Saudi Arabia	-1.59	-0.59	-0.18	-0.10	0.27	-0.10
Somalia	-1.89	-3.01	-2.35	-2.72	-2.64	-1.87
Sudan	-1.73	-2.30	-1.18	-1.25	-1.46	-1.25
Syria	-1.77	-0.61	-0.88	-1.22	-0.55	-0.88
Tunisia	-1.22	0.10	0.46	0.15	0.32	0.08
UAE	-0.89	0.76	0.86	0.70	0.66	1.00
Yemen	-1.06	-1.48	-1.02	-0.71	-0.94	-0.62
India	0.38	-1.01	0.03	-0.22	0.10	-0.39
South Korea	0.66	0.45	1.26	0.88	0.82	0.36

Source: World Bank, Worldwide Governance Indicators 2007: (Voice & Accountability - Political Stability & Absence of Violence - Government Effectiveness - Regulatory Quality - Rule of Law - Control of Corruption).

<http://info.worldbank.org/governance/wgi/index.asp> on 14 February 2009.

Table 7: Press Freedom Index in the Arab region 2008

Country	Ranking (among 173 states)	Press freedom index
Kuwait	61	12.63
Lebanon	66	14.00
UAE	69	14.50
Qatar	74	15.50
Comoros	89	20.00
Bahrain	96	21.17
Mauritania	105	23.88
Algeria	121	31.33
Morocco	122	32.25
Oman	123	32.67
Jordan	128	36.00
Djibouti	134	41.50
Sudan	135	42.00
Tunisia	143	48.10
Egypt	146	50.25
Somalia	153	58.00
Yemen	155	59.00
Iraq	158	59.38
Syria	159	59.63
Libya	160	61.50
Saudi Arabia	161	61.75
Occupied Palestinian Territories	163	66.88

Remark: The lower the value of a state's press freedom index, the better the situation for press freedom.

Source: Reporters without Borders, Report on Worldwide Freedom of the Press 2008, http://www.rsf.org/article.php3?id_article=24025 on 10 June 2009.

Table 8: World Bank Economic Incentive and Institutional Regime Index* (most recent compared to 1995)

Country or region	Most recent period	1995	Change
Arab countries			
Algeria	2.53	1.87	0.66
Bahrain	6.84	7.22	-0.38
Djibouti	1.19	4.00	-2.81
Egypt	3.57	3.71	-0.14
Jordan	5.77	5.49	0.28
Kuwait	7.01	5.64	1.37
Lebanon	4.70	4.36	0.34
Mauritania	3.89	1.68	2.21
Morocco	3.80	4.53	-0.73
Oman	7.32	6.46	0.86
Qatar	5.99	5.75	0.24
Saudi Arabia	5.39	4.57	0.82
Sudan	0.61	0.53	0.08
Tunisia	5.26	4.44	0.82
UAE	6.95	7.14	-0.19
Yemen	1.72	1.78	-0.06
Neighbouring and comparison countries			
Iran	1.18	0.79	0.39
Turkey	7.02	6.40	0.62
Israel	8.16	8.85	-0.69
Cyprus	7.77	8.39	-0.62
Malaysia	6.18	7.21	-1.03
India	3.67	3.48	0.19
China	4.01	3.31	0.70
Top-ranking countries			
Denmark	9.66	9.57	0.09
Sweden	9.18	8.84	0.34
Finland	9.47	9.43	0.04
Holland	9.18	9.50	-0.32
Canada	9.42	8.41	1.01
US	9.16	9.20	-0.04
UK	9.28	9.40	-0.12
Geographic regions of the world			
Middle East and North Africa	4.63	4.40	0.23
Africa	2.80	2.61	0.19
East Asia and the Pacific	5.71	5.90	-0.19
Europe and Central Asia	5.44	4.22	1.22
G7	8.24	8.76	-0.52
Latin America	4.70	5.15	-0.45
South Asia	2.72	2.67	0.05
Western Europe	8.69	8.90	-0.21
Income Level			
High-income states	8.03	8.70	-0.67
Upper middle-income states	5.78	5.57	0.21
Lower middle-income states	3.41	3.26	0.15
Low-income states	1.88	1.95	-0.07
World	5.18	4.87	0.31

Source: World Bank database (Knowledge Assessment Methodology), http://info.worldbank.org/etools/kam2/KAM_page6.asp on 14 February 2009.

* The index value falls on a scale of 0-10 and is calculated from three key indicators: Tariff and non-tariff barriers, regulatory quality, and rule of law. The top 10 per cent of states score in the range 9-10, the next highest 10 per cent of states score in the range 8-9 and so on.

EDUCATION

Table 9: Adult literacy rates by gender in the Arab states 1980 and 2005

Country	1980 (or closest three years)				2005 (or closest three years)			
	Male (%)	Female (%)	Total (%)	Gender parity index **	Male (%)	Female (%)	Total (%)	Gender parity index
Algeria	55	24	39	0.44	83	64	74	0.77
Bahrain	80	60	72	0.75	90	85	88	0.94
Comoros	56	40	48	0.71	79	68	73	0.86
Djibouti	45	18	31	0.40	..	..	65	..
Egypt	54	25	40	0.46	83	59	71	0.71
Iraq	55	25	40	0.45	84*	64*	74*	0.76
Jordan	82	54	69	0.66	95	87	91	0.92
Kuwait	73	59	68	0.81	95	93	94	0.98
Lebanon	91	82	86	0.90	..	..	86	..
Libya	73	31	54	0.42	94	77	86	0.82
Mauritania	41	19	30	0.46	63	47	55	0.75
Morocco	42	16	29	0.38	67	41	54	0.61
Occupied Palestinian Territories	..	..	..	..	97	87	92	0.90
Oman	..	..	..	..	88	75	83	0.85
Qatar	72	65	70	0.90	89	89	89	1.00
Saudi Arabia	60	32	48	0.53	88	77	84	0.88
Somalia	..	..	..	..	..	..	..	..
Sudan	43	17	30	0.40	71*	52*	61*	0.73
Syria	72	34	54	0.47	89	75	82	0.84
Tunisia	61	32	46	0.52	85	67	76	0.79
UAE	72	64	70	0.89	90	88	89	0.98
Yemen	..	..	..	..	75	37	56	0.49
Arab Countries	55	25	40	0.45	82	62	73	0.76

** Ratio of women to men.

* 2000 Data

Source: Database of the UNESCO Institute for Statistics

Table 10: Gross enrolment ratio in secondary education in the Arab states by gender, 1980 and 2006

Country	1980 (or closest three years)				2006 (or closest three years)			
	Male (%)	Female (%)	Total (%)	Gender parity index	Male (%)	Female (%)	Total (%)	Gender parity index
Algeria	40	26	33	0.65	80	86	83	1.08
Bahrain	70	58	64	0.83	100	104	102	1.04
Comoros	..	..	22	..	40	30	35	0.75
Djibouti	15	9	12	0.60	27	18	22	0.67
Egypt	61	39	51	0.64	91	85	88	0.93
Iraq	76	38	57	0.50	54	36	45	0.67
Jordan	62	56	59	0.90	88	90	89	1.02
Kuwait	84	80	28	0.95	87	91	89	1.05
Lebanon	61	57	59	0.93	77	86	81	1.12
Libya	89	63	76	0.71	86	101	94	1.17
Mauritania	..	..	11	..	27	23	25	0.85
Morocco	32	20	26	0.63	53	45	56	0.85
Occupied Palestinian Territories	..	..	..	..	90	95	92	1.06
Oman	17	6	12	0.35	91	88	90	0.97
Qatar	65	68	66	1.05	105	102	103	0.97
Saudi Arabia	36	23	30	0.64	..	..	94	..
Somalia	13	5	9	0.38	..	..	..	..
Sudan	..	..	16	..	35	32	33	0.91
Syria	57	35	46	0.61	73	71	72	0.97
Tunisia	34	20	27	0.59	81	89	85	1.10
UAE	55	49	52	0.89	91	94	92	1.03
Yemen	..	..	..	..	61	30	46	0.49
Arab Countries	57	38	..	0.67	70	65	68	0.93

Source: Database of the UNESCO Institute for Statistics.

Table 11: Gross enrolment ratios in tertiary education in the Arab states by gender, 1980 and 2005

Country	1980 (or closest three years)				2005 (or closest three years)			
	Male (%)	Female (%)	Total (%)	Gender parity index	Male (%)	Female (%)	Total (%)	Gender parity index
Algeria	9	3	6	0.33	19	24	21	1.26
Bahrain	5	5	5	1.00	20	48	33	2.40
Comoros	< 1	< 1	< 1	..	3	2	2	0.67
Djibouti	< 1	< 1	< 1	..	2	2	2	1.00
Egypt	21	11	16	0.52	..	..	35	..
Iraq	12	6	9	0.50	20	12	16	0.60
Jordan	14	13	13	0.93	39	41	40	1.05
Kuwait	9	15	11	1.67	10	29	19	2.90
Lebanon	41	21	30	0.51	44	49	46	1.11
Libya	11	4	8	0.36	53	58	56	1.09
Mauritania	4	2	3	0.50	5	2	3	0.40
Morocco	9	3	6	0.33	13	10	11	0.77
Occupied Palestinian Territories	..	..	..	..	40	42	41	1.05
Oman	< 1	< 1	< 1	..	18	19	18	1.06
Qatar	6	17	10	2.83	10	33	19	3.30
Saudi Arabia	9	5	7	0.56	24	35	29	1.46
Somalia	1	<1	1	..	..	..	..	..
Sudan	3	1	2	0.33	6	6	6	1.00
Syria	23	10	17	0.43	..	..	15	..
Tunisia	7	3	5	0.43	25	35	30	1.40
UAE	2	5	3	2.50	13	37	23	2.85
Yemen	..	..	..	..	14	5	9	0.36

Source: Database of the UNESCO Institute for Statistics.

Table 12: World Bank Education and Human Resources Index* (KAM) (most recent compared to 1995)

Country or region	Most recent period	1995	Change
Arab countries			
Algeria	3.64	3.50	0.14
Bahrain	5.82	6.32	-0.50
Djibouti	0.49	0.78	-0.29
Egypt	4.35	4.31	0.04
Jordan	5.49	4.50	0.99
Kuwait	4.87	4.61	0.26
Lebanon	4.76	5.84	-1.08
Mauritania	0.94	1.11	-0.17
Morocco	2.00	2.44	-0.44
Oman	4.30	3.13	1.17
Qatar	5.29	5.55	-0.26
Saudi Arabia	4.87	3.86	1.01
Sudan	..	1.59	..
Syria	2.91	3.31	-0.40
Tunisia	4.10	3.50	0.60
UAE	4.78	4.27	0.51
Yemen	1.83	1.54	0.29
Neighbouring and comparison countries			
Iran	3.89	4.44	-0.55
Turkey	4.38	4.42	-0.04
Israel	6.72	7.39	-0.67
Cyprus	6.45	6.09	0.36
Malaysia	4.14	4.16	-0.02
India	2.26	2.56	-0.30
China	4.11	3.62	0.49
Top-ranking countries			
Denmark	9.80	9.61	0.19
Sweden	9.40	9.59	-0.19
Finland	9.78	9.74	0.04
Holland	9.26	9.69	-0.43
Canada	9.26	9.69	-0.43
US	8.77	9.42	-0.65
UK	8.54	9.69	-1.15
Geographic regions of the world			
Middle East and North Africa	3.69	3.97	-0.28
Africa	1.46	1.68	-0.22
Europe and Central Asia	6.74	6.65	0.09
G7	8.73	9.09	-0.36
Latin America	4.39	4.64	-0.25
South Asia	1.89	2.14	-0.25
Western Europe	8.16	8.61	-0.45
Income Level			
High income states	7.60	7.81	-0.21
Upper middle income states	5.89	5.76	0.13
Lower middle income states	3.61	4.02	-0.41
Low income states	1.71	1.87	-0.16
World	4.16	4.82	-0.66

Source: World Bank database (Knowledge Assessment Methodology), http://info.worldbank.org/etools/kam2/KAM_page6.asp on 13 February 2009.

* The index value falls on a scale of 0-10 and is calculated from three key indicators: adult literacy rate, secondary enrolment, and tertiary enrolment. The top 10 per cent of states score in the range 9-10, the next highest 10 per cent of states score in the range 8-9 and so on.

Table 13: Adult illiterate population and children (of primary school age) out of school in the Arab countries by gender 2007 (or closest two years)

	Number of illiterates				Number of children out of school			
	Male (000s)	Female (000s)	Total (000s)	Gender parity index	Male (000s)	Female (000s)	Total (000s)	Gender parity index
Algeria	1918	4057	5974	2.12	61	88	149	1.44
Bahrain	32	31	63	0.97	0.283	0.137	0.420	0.48
Comoros	48	74	122	1.54	..	..	..	..
Djibouti	..	..	..	..	27	29	56	1.07
Egypt	6256	10567	16824	1.69	10	222	232	22.20
Iraq	..	..	..	..	109	398	508	3.65
Jordan	87	219	305	2.52	34	26	60	0.76
Kuwait	66	56	122	0.85	5	7	13	1.40
Lebanon	94	215	309	2.29	37	37	74	1.00
Libya	124	445	569	3.59	..	..	..	..
Mauritania	346	486	832	1.40	51	38	89	0.75
Morocco	3349	6467	9816	1.93	157	237	395	1.51
Occupied Palestinian Territories	31	104	136	3.35	56	52	108	0.93
Oman	108	166	274	1.54	46	41	87	0.89
Qatar	29	18	47	0.62	0.700	0.454	1	0.65
Saudi Arabia	1032	1441	2473	1.40	245	252	497	1.03
Somalia	..	..	..	..	..	..	..	..
Sudan	..	..	..	..	..	..	..	..
Syria	663	1505	2168	2.27	..	..	..	..
Tunisia	529	1205	1733	2.28	21	14	35	0.67
UAE	249	78	328	0.31	2	3	5	1.50
Yemen	1414	3667	5081	2.59	275	632	906	2.30

Source: Database of the UNESCO Institute for Statistics, <http://stats.uis.unesco.org/> on 1 June 2009.

Table 14: Regional literacy rates and gross enrolment in primary and the upper stage of basic education 2007 (or the closest two years) in the Arab region and the other regions of the world

Region	Literacy rate (%)			Gross enrolment ratio in primary education (%)			Gross enrolment ratio in the upper stage of basic education (%)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
North America and Western Europe	99	99	99	101	101	101	104	103	103
Central and Eastern Europe	99	96	98	98	96	97	90	89	89
Latin America and the Caribbean	92	91	91	120	116	118	100	104	102
Central Asia	99	98	99	101	99	100	96	93	95
East Asia and the Pacific	96	91	93	110	108	109	92	92	92
Arab countries	82	62	73	102	92	97	85	77	81
South and West Asia	75	54	64	111	105	108	70	62	66
Sub-Saharan Africa	71	54	62	101	89	95	43	34	38

Source: Database of the UNESCO Institute for Statistics, <http://stats.uis.unesco.org/> on 25 February 2009.

Table 15: Ratios of gross enrolment in upper secondary and tertiary education and average school life expectancy in the Arab countries and the other regions of the world 2006 (or the closest two years)

Region	Gross enrolment ratio in upper secondary education (%)			Gross enrolment ratio in tertiary education (%)			School life expectancy (years)
	Male	Female	Total	Male	Female	Total	
North America and Western Europe	98	98	98	60	80	70	15.8
Central and Eastern Europe	88	83	85	53	66	60	12.8
Latin America and the Caribbean	70	79	74	29	34	31	13.1
Central Asia	87	81	84	24	26	25	11.1
East Asia and the Pacific	58	59	58	25	24	25	11.0
Arab countries	55	53	54	22	22	22	10.1
South and West Asia	43	35	39	12	9	11	8.3
Sub-Saharan Africa	27	21	24	6	4	5	7.3

Source: Database of the UNESCO Institute for Statistics, <http://stats.uis.unesco.org/> on 25 February 2009.

Table 16: Net and gross enrolment in primary education and proportion of over-age pupils for this stage 2006

Country	Net enrolment rate (%)			Gross enrolment ratio (%)			Over-age enrolment ratio (%)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Algeria	96	94	95	114	106	110	17	11	14
Bahrain	98	98	98	120	119	120	8	6	7
Comoros	..	..	..	91	80	85	..	..	..
Djibouti	42	34	38	49	39	44	7	5	6
Egypt	96	92	94	107	100	103	10	8	9
Iraq	95	82	89	109	90	99	14	8	11
Jordan	89	90	90	96	98	97	2	2	2
Kuwait	84	83	83	97	96	96	8	7	7
Lebanon	82	82	82	96	93	94	10	8	9
Libya	..	..	..	113	108	110	..	..	..
Mauritania	78	82	79	99	104	102	20	21	21
Morocco	91	85	88	112	100	106	21	14	18
Occupied Palestinian Territories	76	76	76	82	83	83	2	2	2
Oman	73	75	74	82	83	82	5	4	5
Qatar	93	94	94	105	104	105	4	3	4
Saudi Arabia	77	79	78	91	91	91	..	..	..
Somalia	..	..	..	..	..	..	..	..	..
Sudan	..	..	..	71	61	66	..	..	..
Syria	97	92	95	129	123	126	7	6	7
Tunisia	96	97	96	110	107	108	13	9	11
UAE	88	88	88	104	103	104	4	3	4
Yemen	85	65	75	100	74	87	14	9	12

Source: Database of the UNESCO Institute for Statistics.

Table 17: Gross enrolment ratios in upper stage of basic education by gender, average school life expectancy, and number of years of compulsory education around the year 2005

Country	Gross enrolment in the upper stage of basic education (%)			Years of compulsory education ¹	Average school life expectancy (years)
	Male	Female	Total		
Algeria	111	105	108	9	12.0
Bahrain	104	104	104	9	14.4
Comoros	47	35	41	8	7.9
Djibouti	32	22	27	10	3.5
Egypt	102	95	98	9	11.9
Iraq	70	45	58	6	8.9
Jordan	94	95	94	10	13.0
Kuwait	91	92	91	9	12.4
Lebanon	85	92	88	6	12.6
Libya	117	115	116	9	16.5
Mauritania	29	26	27	9	7.1
Morocco	70	58	69	9	9.3
Occupied Palestinian Territories	98	102	100	..	12.8
Oman	96	92	94	(10) ²	11.6
Qatar	103	100	101	12	12.1
Saudi Arabia	..	..	63	6	..
Somalia	..	..	..	..	..
Sudan	49	45	47	8	4.6
Syria	95	89	92	9	..
Tunisia	107	106	107	11	13.3
UAE	97	96	97	9	11.2
Yemen	67	34	51	9	7.9

Source: Database of the UNESCO Institute for Statistics.

¹ International Bureau of Education (2006), International database on education, Geneva, UNESCO-International Bureau of Education

² Oman does not have compulsory education, but the new education law envisages a ten-year basic education stage.

Table 18: Lessons in basic education devoted to each subject as a proportion of all lessons (per cent)

Country	Islamic education	Arabic language	Foreign languages	Mathematics	Science	Social studies	Arts	Physical education
Algeria	5	30	14	19	10	7	9	6
Bahrain	8	26	13	18	11	9	7	8
Comoros	..	..	..	..	..	..	..	..
Djibouti	..	..	..	..	..	..	..	..
Egypt	9	38	9	17	8	7	8	6
Iraq	11	26	8	16	13	11	7	7
Jordan	10	27	10	16	15	9	7	6
Kuwait	12	25	16	14	12	5	10	8
Lebanon	0	20	22	16	15	11	10	6
Libya	12	23	4	20	13	9	10	9
Mauritania	10	24	18	18	4	11	11	3
Morocco	10	25	19	18	10	5	9	5
Occupied Palestinian Territories	..	..	..	..	..	..	..	..
Oman	17	26	9	17	11	7	7	6
Qatar	15	25	17	15	10	6	5	6
Saudi Arabia	28	26	4	14	9	9	4	6
Somalia	..	..	..	..	..	..	..	..
Sudan	18	28	9	17	9	4	9	4
Syria	8	29	8	16	10	10	10	8
Tunisia	5	28	24	14	9	8	5	6
UAE	13	24	16	17	11	7	7	6
Yemen	20	26	5	17	9	9	5	5
Average	11.7	26.4	12.5	16.6	10.5	8.0	7.8	6.2
Standard deviation	6.4	3.7	6.1	1.7	2.6	2.1	2.1	1.5

Source: Compiled by Ramzi Salamah, member of the Report's core team, on the basis of data from the International Database on Education, publications of UNESCO's International Bureau of Education, Geneva, 2006.

Table 19: Time devoted to education in the two stages of basic education in the Arab states

Country	Number of school weeks per year	Primary education		Intermediate education	
		Average number of periods per week	Average annual hours of education	Average number of periods per week	Average annual hours of education
Algeria	30	27	810	32	955
Bahrain	31	28	789	30	850
Comoros	..	..	..	..	..
Djibouti	..	..	..	..	..
Egypt	34	37	944	39	995
Iraq	36	33	891	33	891
Jordan	37	30	819	36	999
Kuwait	34	32	808	31	791
Lebanon	34	30	810	35	1050
Libya	30	28	651	36	837
Mauritania	36	30	1080	30	1080
Morocco	33	28	924	32	1056
Occupied Palestinian Territories	..	..	..	..	..
Oman	32	30	640	30	640
Qatar	30	33	660	36	792
Saudi Arabia	30	30	664	34	765
Somalia	..	..	..	..	..
Sudan	42	29	812	39	1106
Syria	32	32	768	35	925
Tunisia	30	28	825	30	900
UAE	30	34	680	35	788
Yemen	36	32	864	36	972
Average	33	31	802	34	911

Source: Compiled by Ramzi Salamah, member of the Report's core team, on the basis of data from the International Database on Education, publications of UNESCO's International Bureau of Education, Geneva, 2006.

Table 20: Literacy rates among young people (15-24 years of age) and gross enrolment in upper secondary education by gender 2005

Country	Literacy rates				Gross enrolment in upper secondary education			
	Male (%)	Female (%)	Total (%)	Gender Parity Index	Male (%)	Female (%)	Total (%)	Gender Parity Index
Algeria	94	90	92	0.95	50	67	58	1.34
Bahrain	100	100	100	1.00	93	103	98	1.11
Comoros	91	86	89	0.95	30	24	27	0.80
Djibouti	..	..	..	..	19	12	16	0.63
Egypt	90	80	85	0.89	79	75	77	0.95
Iraq	..	..	..	..	38	26	32	0.68
Jordan	99	99	99	1.00	74	77	76	1.04
Kuwait	99	98	99	0.99	91	107	99	1.18
Lebanon	..	..	..	..	68	76	72	1.12
Libya	100	98	99	0.98	78	111	94	1.42
Mauritania	70	62	66	0.89	21	19	20	0.90
Morocco	83	64	74	0.77	37	32	34	0.86
Occupied Palestinian Territories	99	99	99	1.00	66	74	70	1.12
Oman	99	98	98	0.99	79	79	79	1.00
Qatar	96	98	97	1.02	93	99	96	1.06
Saudi Arabia	98	96	97	0.98	..	..	..	..
Somalia	..	..	..	..	..	..	..	..
Sudan	..	..	..	..	25	25	25	1.00
Syria	95	91	93	0.96	32	32	32	1.00
Tunisia	97	94	95	0.97	61	75	68	1.23
UAE	98	96	97	0.98	75	81	78	1.08
Yemen	93	64	79	0.69	54	25	40	0.46

Source: Database of UNESCO Institute for Statistics.

Table 21: Time devoted to secondary education in the Arab states

Country	Humanities Track		Science Track	
	Average number of periods per week	Average annual hours of education	Average number of periods per week	Average annual hours of education
Algeria	30	895	31	930
Bahrain	26	663	26	672
Comoros	..	..	..	..
Djibouti	..	..	..	..
Egypt	41	944	39	995
Iraq	33	882	33	900
Jordan	31	870	32	879
Kuwait	31	791	31	791
Lebanon	35	1050	35	1050
Libya	38	863	39	870
Mauritania	30	1092	32	1152
Morocco	29	946	31	1012
Occupied Palestinian Territories	..	..	..	..
Oman	35	747	35	747
Qatar	36	660	36	792
Saudi Arabia	34	773	36	803
Somalia	..	..	..	..
Sudan	38	812	39	1106
Syria	33	889	34	907
Tunisia	39	889	39	885
UAE	35	788	35	788
Yemen	36	872	36	972
Average	34	857	34	903

Source: Compiled by Ramzi Salamah, member of the Report's core team, on the basis of data from the International Database on Education, publications of UNESCO's International Bureau of Education, Geneva, 2006.

Table 22: Evolution of enrolment rates in vocational and technical secondary education in the Arab states from 1970 till 2005 (per cent)

Country	1970	1975	1980	1985	1990	1995	2000	2005
Algeria	19.7	2.5	..	3.7	7.1	5.8	..	21.3
Bahrain	6.8	..	10.6	20.4	..	13.0	37.7	48.2
Comoros	..	..	..	..	..	..	..	..
Djibouti	44.0	28.1	..	26.7	..	14.7	29.2	18.7
Egypt	19.0	17.4	21.6	..	18.6	..	..	..
Iraq	3.1	..	5.5	10.5	..	8.6	19.6	23.4
Jordan	3.0	3.9	5.3	9.2	24.8	23.2	25.1	17.5
Kuwait	2.9	1.2	0.2	0.4	..	1.0	3.6	9.0
Lebanon	1.6	..	10.9	..	..	..	26.7	26.3
Mauritania	..	..	..	..	..	..	..	..
Morocco	2.3	..	1.3	2.2	1.4	6.9	14.5	12.0
Occupied Palestinian Territories	..	..	6.0	..	2.4	0.9	..	..
Oman	..	..	..	..	..	..	..	..
Qatar	5.1	3.7	2.8	3.1	2.9	1.7	3.2	2.0
Saudi Arabia	1.9	..	1.5	2.0	2.8	1.7	..	..
Somalia	3.1	5.7	17.6	..	..	..	..	..
Sudan	..	..	..	..	..	..	..	..
Syria	3.2	4.5	4.3	6.4	7.3	..	39.8	28.2
Tunisia	11.1	..	27.3	19.0	..	..	..	6.4
UAE	9.9	..	..	1.0	..	1.3	1.9	1.3
Yemen	..	..	..	..	..	..	..	..

Source: Database of the UNESCO Institute for Statistics.

Table 23: Enrolment in tertiary education by level of study around 2005 (per cent)

Country	Technical Education		Bachelor's Degree		Postgraduate	
	Common rate	Ratio of females	Common rate	Ratio of females	Common rate	Ratio of females
Algeria	19	30	77	64	4	44
Bahrain	8	52	92	69	0	30
Comoros	..	..	..	..	..	..
Djibouti	31	48	69	39	0	..
Egypt	4	..	95	..	1	..
Iraq	17	22	78	39	5	35
Jordan	11	61	88	49	1	28
Kuwait	0	0	98	71	2	37
Lebanon	15	47	84	54	1	35
Libya	26	50	72	52	2	38
Mauritania	4	13	96	25	0	..
Morocco	17	45	77	46	5	32
Occupied Palestinian Territories	10	49	90	50	0	..
Oman	20	41	79	54	1	22
Qatar	3	87	97	68	1	39
Saudi Arabia	14	21	84	65	2	40
Somalia	..	..	..	..	..	..
Sudan	..	..	..	..	..	..
Syria	12	47	83	..	5	..
Tunisia	23	26	70	68	7	55
UAE	..	..	..	..	..	..
Yemen	15	13	85	22	0	31

Source: Database of the UNESCO Institute for Statistics.

Table 24: Student enrolment rates in tertiary education by field of specialisation 2005 (per cent)

Country	Education	Medicine and health sciences	Engineering	Mathematics and pure and applied sciences	Social sciences, law, and business administration	Agriculture	Literature and arts	Other / not specified
Algeria	1	..	9	8	36	..	14	32
Bahrain	3	8	8	9	53	..	9	11
Comoros	..	..	..	..	..	..	..	..
Djibouti	..	..	2	9	31	..	5	55
Egypt	..	..	..	..	..	..	..	100
Iraq	19	..	18	5	21	..	14	23
Jordan	20	11	12	11	26	2	16	4
Kuwait	..	..	..	..	..	..	..	100
Lebanon	3	9	12	12	42	1	18	3
Libya	12	..	20	10	18	..	18	22
Mauritania	4	..	..	6	20	..	13	57
Morocco	2	4	5	17	51	1	20	1
Occupied Palestinian Territories	27	..	7	11	32	..	14	9
Oman	30	3	9	11	20	..	8	18
Qatar	12	..	4	14	46	..	6	18
Saudi Arabia	24	5	3	14	15	..	32	6
Somalia	..	..	..	..	..	..	..	..
Sudan	..	..	..	..	..	..	..	..
Syria	..	..	..	..	..	..	..	..
Tunisia	1	..	8	18	22	..	18	33
UAE	..	..	..	..	..	..	..	..
Yemen	..	..	..	..	..	..	..	..

Source: Database of the UNESCO Institute for Statistics.

Table 25: Number of specialists in the health fields in the Arab states 2005 (per thousand people)

Country	Physicians	Nurses	Registered Midwives	Dentists	Pharmacists	Laboratory Technicians	Health Administration	General Health
Algeria	1.13	1.99	0.24	0.31	0.20	0.28	1.93	0.29
Bahrain	1.09	4.04	0.76	0.46	0.62	0.65	2.30	2.13
Comoros	0.15	0.61	0.14	0.04	0.05	0.08	0.34	0.08
Djibouti	0.18	0.26	0.16	0.01	0.03	0.12	0.33	0.25
Egypt	0.54	1.98	0.02	0.14	0.10	0.27	0.07	0.18
Iraq	0.66	1.25	0.07	0.44	0.53	0.47	1.33	0.97
Jordan	2.03	2.94	0.30	1.29	3.14	1.00	3.15	1.60
Kuwait	1.53	3.91	..	0.29	0.31	..	..	..
Lebanon	3.25	1.18	..	1.21	0.95	..	..	..
Libya	1.29	3.60	..	0.14	0.25	..	..	..
Mauritania	0.11	0.56	0.08	0.02	0.03	0.04	0.35	0.16
Morocco	0.51	0.72	0.07	0.10	0.24	0.05	0.20	0.06
Occupied Palestinian Territories	..	..	..	..	..	..	..	..
Oman	1.32	3.50	0.01	0.19	0.53	0.36	1.33	0.49
Qatar	2.22	4.94	..	0.37	0.90	..	..	..
Saudi Arabia	1.37	2.97	..	0.17	0.22	..	..	1.57
Somalia	0.04	0.19	..	0.00	0.00	..	..	..
Sudan	0.22	0.51	0.40	0.03	0.10	0.09	1.03	0.50
Syria	1.40	1.94	..	0.72	0.52	..	..	..
Tunisia	1.34	2.58	0.29	0.25	0.29	0.40	1.61	1.18
UAE	2.02	4.18	..	0.33	0.38	..	..	..
Yemen	0.33	0.64	0.02	0.04	0.13	0.23	0.53	0.55
World	1.23	2.56	..	0.29	..	..	..	..
Europe	3.20	7.43	..	0.52	..	..	..	..

Source: Statistics of the World Health Organisation, 2007, <http://www.who.int/whosis/whostat2007/en/index.html> on 14 March 2009.

Table 26: Distribution of graduates of tertiary education by field of specialisation around 2005

Country	Education (%)	Medicine and health sciences (%)	Engineering (%)	Maths and pure and applied sciences (%)	Social sciences, law, and business administration (%)	Agriculture (%)	Literature and arts (%)	Other / not specified (%)	Number of graduates
Bahrain	8	10	10	10	40	..	9	14	3184
Djibouti	0	0	0	0	14	..	8	..	280
Egypt	..	..	..	..	..	..	..	100	342902
Iraq	16	10	26	4	20	3	10	10	87849
Jordan	16	11	9	19	28	2	10	4	42294
Lebanon	5	11	13	8	44	0	16	3	25700
Mauritania	0	0	0	5	17	0	12	66	2602
Morocco	12	5	6	9	31	1	18	18	48162
Occupied Palestinian Territories	23	7	9	12	32	0	17	0	12567
Oman	..	..	..	..	..	..	..	..	8280
Qatar	32	4	5	11	38	0	10	0	1386
Saudi Arabia	28	5	3	16	13	0	30	5	82659
Tunisia	..	..	..	..	..	..	..	100	56559

Source: Database of the UNESCO Institute for Statistics.

Table 27: School life expectancy in the Arab states from 1970 to 1990 (in years)

Country	1970			1975			1980			1985			1990		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Algeria	7.7	4.5	6.2	8	5	7	9.8	6.8	8.3	10.9	8.3	9.6	11	9	10
Bahrain	10.5	7.6	9.1	9.1	8.2	8.7	11.2	9.7	10.5	13.1	13.7	13.5	13	14	14
Comoros	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..
Djibouti	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..
Egypt	7.7	4.5	6.2	8	5	7	9	6	8	10	7	9	11	8	10
Iraq	8.4	3.5	6.0	11.0	5.5	8.4	12.2	9.1	10.8	12.0	8.7	10.4	11	8	10
Jordan	8	6	7	9.2	7.6	8.4	9.4	9.0	9.2	10	10	10	12	13	12
Kuwait	10.4	8.3	9.4	10.6	9.5	10.1	..	..	..	..	..	..	..	..	..
Lebanon	8	6	7	9.2	7.6	8.4	9.4	9.0	9.2	10	10	10	12	12	12
Libya	10.8	5.6	8.4	13.0	10.1	11.6	13.4	11.1	12.3	..	..	..	13	12	13
Mauritania	3	1	2	..	..	..	..	..	..	..	..	..	5	3	4
Morocco	5	3	4	5.8	3.2	4.5	8.1	4.8	6.4	8	5	6	8	5	6
Occupied Palestinian Territories	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oman	..	..	..	..	..	..	..	..	..	..	..	..	9	8	8
Qatar	9.0	10.3	9.7	9.7	11.6	10.3	10.6	11.4	10.9	11.8	13.2	12.6	12	13	12
Saudi Arabia	5.2	2.1	3.7	6.6	3.8	5.3	7.2	4.8	6.0	8.2	6.2	7.2	8	7	8
Somalia	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..
Sudan	3	1	2	..	..	..	..	..	..	..	..	..	5	4	4
Syria	10.1	5.1	7.7	10.8	6.7	9.0	11.4	8.0	9.7	11.9	9.3	10.7	11	9	10
Tunisia	7.7	4.5	6.2	8	5	7	9.8	6.8	8.4	12.0	9.6	10.9	11	10	10
UAE	8	9.5	9	9.0	10.3	9.7	9.7	11.6	10.3	10.6	11.4	10.9	11	12	11
Yemen	3	1	2	..	..	..	..	..	..	..	..	..	8	3	5

Source: Database of the UNESCO Institute for Statistics with extrapolations (Ramzi Salamah).

Table 28: Estimated educational level of people aged 25-50 in the Arab states 2005

Country	Aged 25	Aged 30	Aged 35	Aged 40	Aged 45	Aged 50	Weighted Average	Rank
Algeria	3.9	3.5	3.3	2.8	2.6	2.1	3.13	10
Bahrain	4.6	4.4	4.0	4.4	3.2	2.8	4.00	2
Comoros	..	..	..	..	..	..	..	..
Djibouti	1.6	1.6	1.6	1.6	1.5	1.4	1.56	16
Egypt	4.2	4.0	3.7	3.2	2.9	2.8	3.55	6
Iraq	2.7	2.9	3.1	3.3	3.2	2.4	2.94	12
Jordan	4.7	3.4	3.0	3.1	3.2	2.7	3.43	7
Kuwait	4.5	3.5	3.1	4.2	3.9	3.1	3.76	5
Lebanon	4.4	4.3	3.8	3.8	3.3	2.9	3.83	3
Libya	5.1	4.9	4.3	3.5	3.6	3.1	4.20	1
Mauritania	..	..	..	..	..	..	..	..
Morocco	2.3	2.5	2.5	2.5	2.2	1.8	2.33	15
Occupied Palestinian Territories	..	..	..	..	..	..	..	..
Oman	3.8	3.3	2.7	2.0	1.5	1.1	2.56	14
Qatar	4.0	3.9	4.1	4.0	3.5	3.1	3.81	4
Saudi Arabia	3.5	3.2	2.7	2.5	2.2	1.9	2.76	13
Somalia			1.3	1.4	1.3	1.4	1.37	17
Sudan	..	..	..	..	..	..	..	..
Syria	3.1	3.2	3.4	3.4	3.1	2.9	3.20	9
Tunisia	4.1	3.5	3.1	2.8	2.3	2.3	3.12	11
UAE	3.7	3.9	3.4	3.0	2.9	2.5	3.31	8
Yemen	..	..	..	..	..	..	..	..

Source: These indicators were calculated on the basis of data available in the database of the UNESCO Institute for Statistics with extrapolations. The figures are to be interpreted as follows: 1 = literacy; 2 = completion of primary education; 3 = completion of the upper stage of basic education; 4 = completion of the upper stage of secondary education; 5 = completion of a bachelor's degree (see the body of the text for further explanation.)

Table 29: Government expenditure on education in the Arab countries in the five years 2002-2006

Country	Expenditure as a proportion of GDP (%)	Expenditure as a proportion of total government expenditure (%)
Algeria	..	..
Bahrain	..	..
Comoros	..	24.1
Djibouti	8.7	22.4
Egypt	4.7	15.1
Iraq	..	..
Jordan	..	..
Kuwait	5.4	13.5
Lebanon	2.6	12.0
Libya	..	..
Mauritania	3.1	9.2
Morocco	6.5	27.1
Occupied Palestinian Territories	..	..
Oman	4.0	24.7
Qatar	2.7	19.6
Saudi Arabia	7.2	27.6
Somalia	..	..
Sudan	..	..
Syria	..	..
Tunisia	7.1	20.8
UAE	1.7	25.4
Yemen	..	..

Source: Based on data from the database of the UNESCO Institute for Statistics.

Table 30: Enrolment rates in non-government schools at pre-university educational stages in the Arab countries 2005 (per cent)

Country	Pre-primary education	Primary education	Upper stage of basic education	General secondary education	Technical secondary education
Algeria	..	..	0.0	0.0	0.0
Bahrain	99.4	23.7	17.9	26.0	0.0
Comoros	62.2	10.0	37.5	49.4	0.0
Djibouti	83.5	14.7	21.5	33.9	2.2
Egypt	30.1	7.3	..	..	..
Iraq	0.0	0.0	0.0	0.0	0.0
Jordan	..	30.4	..	10.8	2.3
Kuwait	37.4	33.0	28.0	..	..
Lebanon	77.3	65.8	56.5	46.7	57.5
Libya	..	..	..	..	..
Mauritania	77.8	8.0	10.9	16.3	0.0
Morocco	..	6.6	3.9	5.4	16.0
Occupied Palestinian Territories	99.8	8.7	4.4	3.5	7.3
Oman	..	4.6	1.3	..	..
Qatar	94.2	45.3	33.6	31.2	0.0
Saudi Arabia	..	..	..	..	..
Somalia	..	..	..	..	..
Sudan	71.0	5.3	6.2	15.8	0.0
Syria	74.3	4.4	4.0	6.5	0.0
Tunisia	..	1.1	3.3	7.8	0.0
UAE	75.4	61.1	45.4	37.8	0.0
Yemen	49.0	2.3	2.3	2.0	0.0

Source: Based on data available in the database of UNESCO Institute for Statistics on 25 February 2009.

Table 31: Number of students from some Arab countries in the US before and after the events of September 2001

Country	2000-2001	2006-2007	Change (%)
Algeria	220	145	-34
Bahrain	562	392	-30
Comoros	38	39	3
Djibouti	8	14	75
Egypt	2255	1664	-26
Iraq	155	262	69
Jordan	2187	1726	-21
Kuwait	3045	1633	-46
Lebanon	2005	1852	-8
Libya	39	93	138
Mauritania	73	64	-12
Morocco	1917	1202	-37
Occupied Palestinian Territories	237	361	52
Oman	702	254	-64
Saudi Arabia	5273	7886	50
Somalia	96	78	-19
Sudan	366	321	-12
Syria	713	462	-35
Tunisia	385	274	-29
UAE	2659	885	-67
Yemen	411	248	-40
Arab countries	23346	19855	-15

Source: Institute of International Education, 2007. <http://opendoors.iienetwork.org/page/113118/> on 1 June 2009.

RESEARCH AND INNOVATION

Table 32: Number of patents granted in the US in 2007 and spending on research and development

Country	Number of patents granted to citizens of the state in 2007	Research and development expenditure as a proportion of GDP (%)
Algeria	..	..
Bahrain	0	..
Djibouti	..	0.34
Egypt	11	0.19
Iraq	0	..
Jordan	1	..
Kuwait	10	0.20
Lebanon	..	..
Libya	..	..
Mauritania	..	..
Morocco	..	0.62
Occupied Palestinian Territories	..	..
Oman	1	..
Qatar	..	..
Saudi Arabia	37	..
Somalia	..	..
Sudan	..	0.33
Syria	3	..
Tunisia	..	0.63
UAE	11	..
Yemen	..	..
Korea	7264	2.64
Chile	27	0.61

Source: US Patent and Trademark Office, 2007. http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_all.htm. Statistics of the Human Development Report, UNDP, 2008. <http://hdr.undp.org/en/statistics/> on 25 February 2009.

Table 33: World Bank Innovation System Index* (most recent compared to 1995)

Country or region	Most recent period	1995	Change
Arab countries			
Algeria	3.48	3.33	0.15
Bahrain	4.20	6.74	-2.54
Djibouti	1.29	2.47	-1.18
Egypt	4.55	5.02	-0.47
Jordan	5.66	6.09	-0.43
Kuwait	5.05	5.44	-0.39
Lebanon	4.69	4.19	0.50
Mauritania	1.75	1.87	-0.12
Morocco	3.67	4.78	-1.11
Oman	4.95	5.38	-0.43
Qatar	5.77	4.70	1.07
Saudi Arabia	4.04	4.96	-0.92
Sudan	1.97	2.23	-0.26
Syria	3.44	2.97	0.47
Tunisia	4.58	4.20	0.38
UAE	6.74	6.49	0.25
Neighbouring and comparison countries			
Iran	3.02	2.83	0.19
Israel	9.34	9.20	0.14
Cyprus	7.65	7.50	0.15
Malaysia	6.83	6.20	0.63
India	3.97	3.65	0.32
China	5.12	4.06	1.06
Top-ranking countries			
Denmark	9.57	9.53	0.04
Sweden	9.79	9.75	0.04
Finland	9.66	9.31	0.35
Holland	9.48	9.53	-0.05
Canada	9.43	9.32	0.11
US	9.45	9.56	-0.11
UK	9.18	9.36	-0.18
Geographic regions of the world			
Middle East and North Africa	4.31	4.64	-0.33
Africa	8.44	8.87	-0.43
East Asia and the Pacific	6.88	6.82	0.06
Europe and Central Asia	9.19	9.29	-0.10
G7	5.94	6.05	-0.11
Latin America	7.22	7.43	-0.21
South Asia	3.34	3.01	0.33
Western Europe	9.23	9.19	0.04
Income levels			
High- income states	9.05	9.22	-0.17
Upper middle-income states	6.76	6.69	0.07
Lower middle-income states	4.95	5.11	-0.16
Low-income states	2.63	2.90	-0.27
World	8.01	8.18	-0.17

Source: World Bank database (Knowledge Assessment Methodology), http://info.worldbank.org/etools/kam2/KAM_page6.asp on 14 February 2009.

* The index value falls on a scale of 0-10 and is calculated from three key indicators: Total royalty payments and receipts in US\$ per person, number of patent applications granted by the US Patent and Trademark Office per million people, and the number of scientific and technical journal articles published per million people. The top 10 per cent of states score in the range 9-10, the next highest 10 per cent of states score in the range 8-9 and so on.

Table 34: Indicators on research and development activity and innovation in the Arab countries and other country groups

The Arab countries ¹ and other country groups	Number of researchers working in the fields of research and development (per million of population)	Expenditure on research and development as a proportion of GDP (%)	Royalty and license fees payments and receipts (US\$ per person)	Patents applications granted to residents (per million people)
	1990-2005	2000-2005	2005	2000-2005
Kuwait	..	0.2	0.0	..
Qatar	..	..	..	..
UAE	..	..	..	..
Bahrain	..	..	..	..
Libya	361	..	0.0	..
Oman	..	..	..	..
Saudi Arabia	..	..	0.0	..
Jordan	1927	..	..	..
Lebanon	..	..	0.0	..
Tunisia	1013	0.6	1.4	..
Algeria	..	..	..	1
Occupied Palestinian Territories	..	..	..	..
Syria	29	..	..	2
Egypt	493	0.2	1.9	1
Morocco	..	0.6	0.4	1
Comoros	..	..	..	..
Mauritania	..	..	..	..
Sudan	..	0.3	0.0	..
Djibouti	..	..	..	..
Yemen	..	..	..	..
Developing countries	..	1.0	..	..
Least developed countries	..	..	0.2	..
East Asia and the Pacific	722	1.6	1.7	..
Latin America and the Caribbean	256	0.6	1.1	..
South Asia	119	0.7	..	..
Sub-Saharan Africa	..	..	0.3	..
OECD states	3096	2.4	104.2	239
High HDI states	3035	2.4	75.8	189
Medium HDI states	..	0.8	0.3	..
Low HDI states	..	..	0.2	..
High income states	3781	2.4	125.3	286
Medium income states	725	0.8	1.0	..
Low income states	..	0.7	..	..
World	..	2.3	21.6	22*
Arab Countries	..	..	0.9	..

* World Bank database of the Knowledge Assessment Methodology (KAM) on 17 February 2009.

¹ Within this table, the Arab countries are given in order of their Human Development Index as given in the UNDP's Human Development Report for 2007-2008.

Source: Statistics of the Human Development Report 2007-2008

Table 35: World Bank indicators for the Innovation System Index

Foreign Direct Investment Outflows as % of GDP
Foreign Direct Investment Inflows as % of GDP
Royalty and License Fees Payments (US\$ millions)
Royalty and License Fees Payments (US\$ per person)
Royalty and License Fees Receipts (US\$ millions)
Royalty and License Fees Receipts (US\$ per person)
Total Royalty Payments and Receipts (US\$ millions)
Total Royalty Payments and Receipts (US\$ per person)
Science and Engineering Enrolment Ratio (%)
Science Enrolment Ratio (%)
Researchers in R&D
Researchers in R&D per million people
Total Expenditure for R&D as a percentage of GDP
Manufacturing Trade as a percentage of GDP
University-Company Research Collaboration (1-7)*
Scientific and Technical Journal Articles
Scientific and Technical Journal Articles per million people
Availability of Venture Capital (1-7)
Patents Granted by US Patent and Trademark Office
Patents Granted by US Patent and Trademark Office per million people
High-Tech Exports as a percentage of Manufacturing Exports
Private Sector Spending on R&D (1-7)
Firm-Level Technology Absorption (1-7)
Value Chain Presence (1-7)

Source: Website of the World Bank (KAM), www.worldbank.org/kam.

* This is based on the statistical score on a 1-7 scale of a large sample group in a particular country responding to one of the questions connected with the indicator to be measured.

INFORMATION AND COMMUNICATION TECHNOLOGY

(a) The Information and Communication Technology Index

Table a-1: World Bank ICT Index (most recent compared with 1995)

Country or region	Most recent period	1995	Change
Arab countries			
UAE	8.18	6.99	1.19
Qatar	7.56	7.24	0.32
Bahrain	7.22	7.30	-0.08
Kuwait	7.13	7.16	-0.03
Saudi Arabia	6.29	5.26	1.03
Lebanon	5.27	5.56	-0.29
Jordan	5.21	4.25	0.96
Tunisia	5.00	4.27	0.73
Oman	4.90	3.85	1.05
Morocco	4.32	2.96	1.36
Sudan	3.84	1.22	2.62
Syria	3.68	3.58	0.10
Egypt	3.66	3.75	-0.09
Algeria	3.37	2.91	0.46
Mauritania	2.80	2.50	0.30
Yemen	1.99	2.02	-0.03
Djibouti	1.63	3.36	-1.73
Neighbouring and comparison countries			
Iran	5.48	4.56	0.92
Turkey	5.38	5.87	-0.49
Israel	8.64	8.37	0.27
Cyprus	8.32	7.97	0.35
Malaysia	7.08	6.57	0.51
India	2.59	2.87	-0.28
China	4.16	2.74	1.42
Top-ranking countries			
Denmark	9.28	9.63	-0.35
Sweden	9.69	9.73	-0.04
Finland	8.56	9.75	-1.19
Holland	9.36	9.24	0.12
Canada	8.74	9.49	-0.75
US	8.93	9.83	-0.90
UK	9.38	9.10	0.28
Geographic regions of the world			
Middle East and North Africa	5.97	6.13	-0.16
Africa	2.65	3.58	-0.93
East Asia and the Pacific	6.94	7.83	-0.89
Europe and Central Asia	6.33	6.55	-0.22
G7	8.89	9.14	-0.25
Latin America	5.23	5.77	-0.54
South Asia	2.17	2.45	-0.28
Western Europe	8.80	9.22	-0.42
Income levels			
High-income states	8.58	8.72	-0.14
Upper middle-income states	6.41	6.40	0.01
Lower middle-income states	4.43	4.35	0.08
Low-income states	2.10	2.46	-0.36
World	6.34	7.36	-1.02

Remark: The table includes data from only seventeen Arab states.

* The index value falls on a scale of 0-10 and is calculated from three key indicators: number of telephone lines per thousand of the population, number of computers per thousand of the population, and number of internet users per thousand of the population. The top 10 per cent of states score in the range 9-10, the next highest 10 per cent of states score in the range 8-9 and so on.

Source: World Bank database (Knowledge Assessment Methodology), http://info.worldbank.org/etools/kam2/KAM_page6.asp on 13 February 2009.

(b) The growth of fixed and mobile telephone lines in the Arab states

Figure b-1 illustrates how the average total number of telephone lines (fixed and mobile) per thousand people grows in line with per capita GDP. It makes it clear that the population of most of the high-income Arab states possess fewer telephone lines than their counterparts in the other states of the world that enjoy similar per capita incomes, when measured as per the indicator itself (i.e., purchasing power parity). Despite telephone ownership rates in seven Arab states exceeding or approximating the world average, mobile telephone ownership rates in the remaining Arab states are less than the world average.

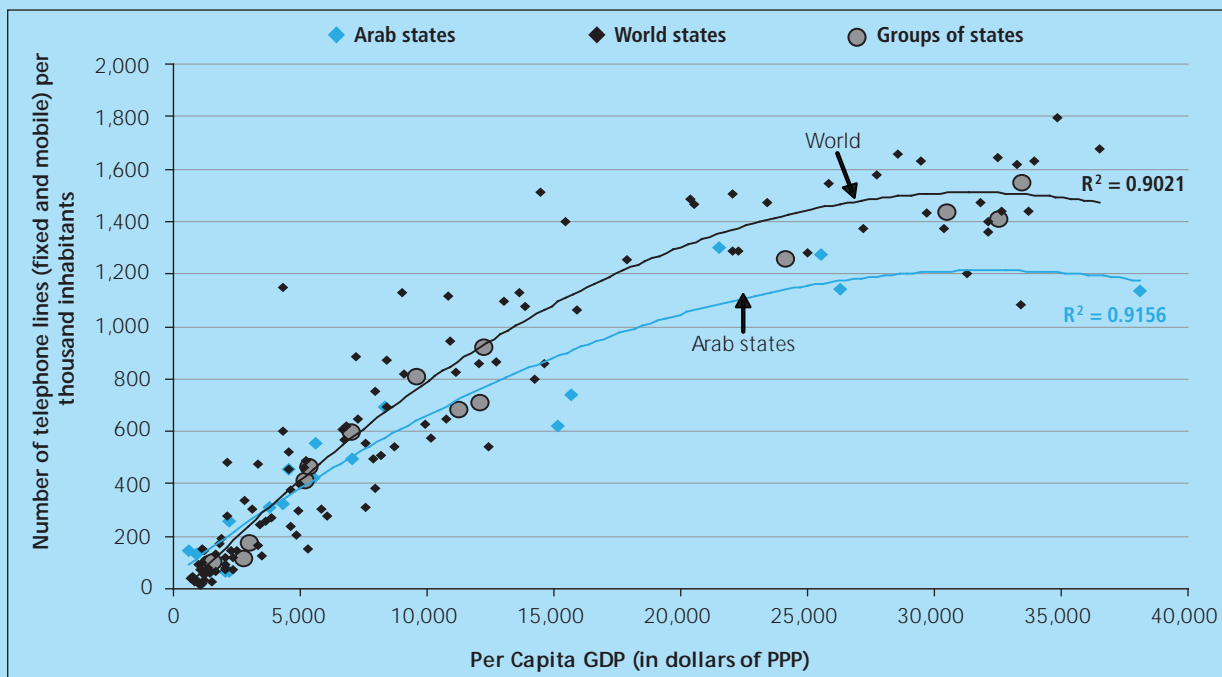
The spread of fixed telephone lines per thousand people has recorded marked growth in line with per capita income evaluated in purchasing power parity. Figure b-2 demonstrates that the relationship between the increased proliferation of fixed telephone lines and the increase in individual income is approximately linear. However, it is notable that the spread of these lines is increasing at a slower rate in the Arab states than worldwide. Hence, the number of fixed telephone lines per thousand people exceeds or approximates the world average in only six Arab states. This reflects negatively on the capacity of the remaining Arab states to access the internet, particularly given the expectation that in the near and medium term access to the internet will continue to rely on fixed telephone lines.

Figure b-3 gives a picture of the clear increase in mobile phone ownership as individual income increases. The figure reveals the direct relationship between increasing proliferation of mobile phones and increasing per capita income in the Arab states and globally. However the curve that depicts mobile phone growth against per capita income growth in all but seven of the Arab countries falls below the curve representing the other countries of the world. This means that personal income growth in the Arab countries has not been matched by growth in mobile phone proliferation similar to that in the rest of the world.

Nonetheless, it may be non-technical obstacles that prevent the wider proliferation of next-generation mobile phone services. In some Arab countries, many people will not be able to meet the rising costs.¹ Other factors are also expected to lead to some delay in the introduction of third-generation services to the Arab markets. These include,

FIGURE b-1

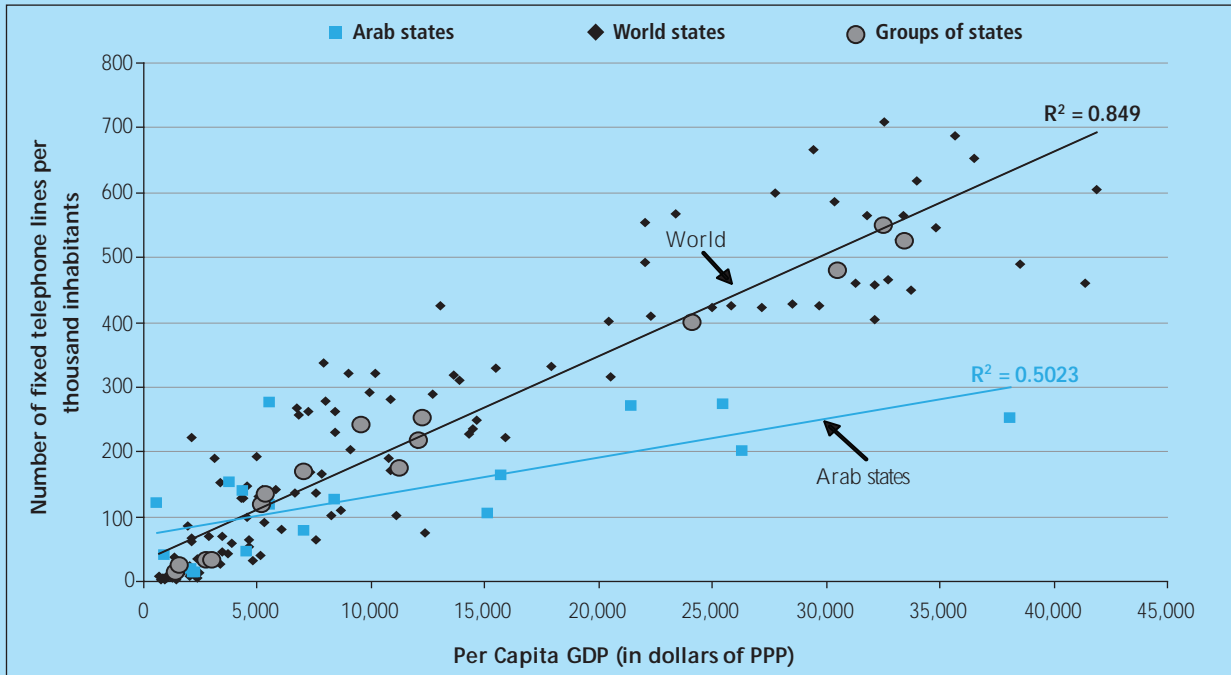
Growth in average total number of telephone lines (fixed and mobile) per thousand people plotted against per capita income for the world's states, some Arab states, and selected groups of states



Source: World Bank database (Knowledge Assessment Methodology)

FIGURE b-2

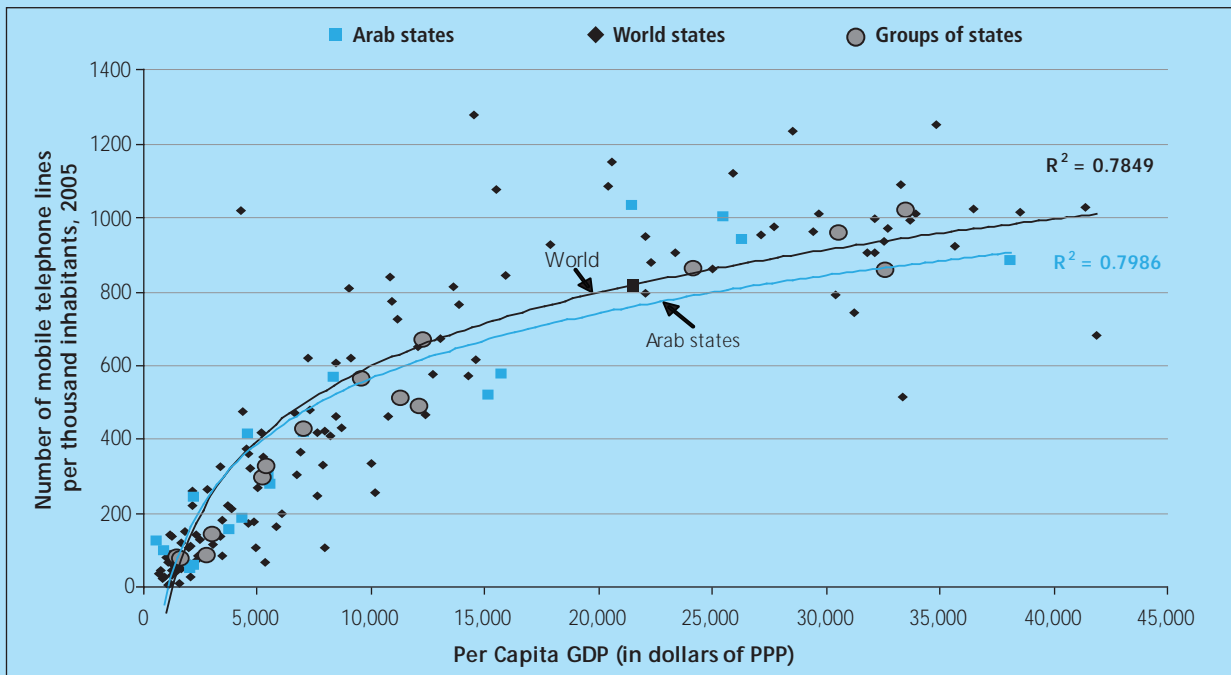
Growth in average number of fixed telephone lines per thousand people plotted against per capita income for the world's states, some Arab states, and selected groups of states



Source: World Bank database (Knowledge Assessment Methodology)

FIGURE b-3

Growth in average number of mobile phone lines per thousand of population plotted against per capita income for the world's states, some Arab states, and selected groups of states



Source: World Bank database (Knowledge Assessment Methodology)

for example, technological under-preparation that may open the door to futile practices and delay the widespread provision of services that conform to the tastes and behaviours of Arab societies. There is time enough, however, to avoid such pitfalls given that it is expected that onerous costs will remain a barrier until competition between the service companies leads to a marked drop in prices. Likewise, the rise in demand for 3G lines will depend as much on the removal of restrictions imposed by most Arab states on the use of certain services that form key incentives to migrate to third-generation (3G), such as the Global Positioning System, considered one of the main driving forces behind the spread of 3G networks around the world thanks to its ability to provide users with satellite-linked digital maps, as it will on the quality standards that are applied in the operation of these networks.²

(c) Classification of the Arab states according to selected indicators

It is no easy matter to classify the Arab states into groups according to the efforts they have expended and the results they have achieved in their attempt to obtain and utilise ICT in building the knowledge economy. The data necessary for undertaking a serious and objective evaluation are scarce and the methodologies of categorisation that have been devised are numerous. Many of these methodologies are based on simplistic assumptions and lead to conflicting results. The various elements that go to make up the design of a particular indicator are frequently handled as if they all have equal or similar effects when it comes to obtaining technology or spreading its use, which puts limits on the accuracy of the results of the evaluation. Many of the indicators are basically designed to measure the trend to purchase the goods and services linked to technology more than to measure how far it is utilised for the production and dissemination of knowledge. Most are largely quantitative and numerical rather than qualitative and descriptive and do not deal with how intensively and efficiently modes of technology are used to close the knowledge gap. To a great extent, they fail to measure knowledge content. Thus they do not permit an accurate diagnosis of the knowledge crisis in the Arab states or allow solutions to be drawn up.

Tables c-1 and c-2 present the “basic” indicators related to the proliferation of telephones and computers, use of the internet, bandwidth, and access costs in the Arab states for which data is available. They make it clear that the infrastructure provided and the material resources available do not necessarily correlate with usage. More meaningful methods of classification may be those that permit the evaluation of the Arab countries on the basis of the data available on the steps they have taken to formulate strategies and draw up plans aimed at developing their technological capabilities. According to such methodologies, states like the UAE, Bahrain, and Qatar lead the Arab countries, since they have abundant and integrated policies, strategies, plans, and projects for ICT which are implemented with some alacrity. This is undoubtedly helped by their low populations, the availability of the required resources, and the intensive follow-up at the highest decision-making levels to remove obstacles as they occur. The second group comprises states like Jordan, Egypt, and Saudi Arabia which have policies, strategies, plans, and programmes to sponsor and promote ICT, but whose implementation is slow because of obstacles of a largely bureaucratic nature or because of the lack of resources that can be allotted to the technology sector, as in Jordan and Egypt. States such as Kuwait, Oman, Syria, and Lebanon, which have succeeded in laying down ICT policies and strategies, but where the implementation plans and the programmes deriving from them remain incomplete, belong to the third group. The fourth group includes states such as Iraq, the Occupied Palestinian Territories, Yemen, and Djibouti that are suffering from difficult conditions represented by political crises, security disturbances, or severe lack of resources, which limit the role of governments in the implementation of ICT policies and strategies.

The Networked Readiness Index, which is monitored by the World Economic Forum, is connected to criteria linked to ICT policies and strategies. It expresses the extent of government commitment to develop this technology and to allocate the necessary support to it (see Table c-3). On the basis of this categorisation, the UAE comes first out of the Arab states and in twenty-seventh place out of 134 states of the world. It is followed by Qatar in twenty-ninth place, then by Bahrain, Tunisia, and Saudi Arabia in thirty-seventh, thirty-eighth, and fortieth place respectively. The bottom three places for the Arab states included in the report went to Libya, Algeria, and Mauritania in 101st, 108th, and 109th place respectively.

According to indicators of the World Economic Forum’s report on ICT³, the UAE comes top of the Arab states covered by the report with respect to the first three indicators, although it fares less well on the encouragement of

competition between the internet service providers (ISPs). Egypt is ahead of the remaining Arab states covered by this report in terms of this fourth indicator. Qatar, Tunisia, and Bahrain also rank high among the world's states with respect to these indicators (see Table c-4).

The Global Competitiveness Report published by the World Economic Forum gives a similar picture of the performance of the Arab states with respect to a number of other indicators connected to technology and its use. As Table c-5 makes clear, Qatar, Saudi Arabia, and the UAE occupy high positions in the ranking of world states, and subsequently the top positions among the Arab states, on the basis of pillars including "Technological Readiness" and "Innovation." The other Arab states (for which the Report provides data) are ranked lower. Kuwait, Tunisia, Bahrain, and Oman, for example, occupy thirty-fifth, thirty-sixth, thirty-seventh, and thirty-eighth place respectively out of the 134 states covered by the report. These are followed by Jordan, Morocco, Syria, and Egypt in positions between forty-eighth (Jordan) and eighty-first (Egypt). The remaining Arab states covered by the Global Competitiveness Report – Libya, Algeria, and Mauritania – occupy lower positions in terms of technological readiness, with their positions falling between ninety-first (Libya) and 131st (Mauritania).

To sum up, investigation of the current state of ICT in the Arab countries shows them to be lagging behind the other countries of the world in some respects and keeping up with them in others. Available data also indicates the advance of some Gulf states over the rest of the Arab states, and over much of the rest of the world. However, the criteria used to measure both the lag and the progress have shortcomings.

Table c-1: Classification of the Arab countries according to some indicators of ICT infrastructure

Arab countries	Number of computers per thousand of population 2005	Mobile telephone lines per thousand of population 2006	Fixed telephone lines per thousand of population 2006
Algeria	10	630	90
Bahrain	180	1220	260
Djibouti	20	50	10
Egypt	40	240	150
Jordan	70	780	110
Kuwait	240	940	200
Lebanon	100	270	170
Mauritania	30	350	10
Morocco	20	520	40
Oman	50	710	110
Qatar	180	1120	280
Saudi Arabia	140	830	170
Sudan	110	120	20
Syria	40	240	170
Tunisia	60	720	130
UAE	260	1300	310
Yemen	20	90	50

Source: World Bank database (Knowledge Assessment Methodology/KAM) on 10 June 2009

Table c-2: Classification of the Arab countries according to internet use, access cost, and bandwidth

Arab countries	Number of internet users per thousand of population	Price basket for internet (US\$ per month)	International internet bandwidth (bits per person)
	2006	2005	2005
Algeria	70	9.41	4.98
Bahrain	210	30.23	579.43
Djibouti	10	41.11	56.74
Egypt	80	4.97	49.40
Jordan	140	11.14	57.94
Kuwait	310	22.22	347.87
Lebanon	230	10.00	81.08
Mauritania	30	54.25	14.66
Morocco	200	26.8	235.35
Oman	130	14.53	194.39
Qatar	350	16.48	953.44
Saudi Arabia	200	21.33	33.29
Sudan	90	65.51	5.58
Syria	80	13.97	0.90
Tunisia	130	12.38	74.78
UAE	400	13.07	923.20
Yemen	10	10.93	0.32

Source: World Bank database (Knowledge Assessment Methodology /KAM) on 10 June 2009

Table c-3: Ranking of some Arab countries according to Networked Readiness Index (2008/2009)

Arab countries	World ranking (among 134 countries)	Networked Readiness Index
UAE	27	4.76
Qatar	29	4.68
Bahrain	37	4.38
Tunisia	38	4.34
Saudi Arabia	40	4.29
Jordan	44	4.19
Oman	50	4.08
Kuwait	57	3.98
Egypt	76	3.76
Morocco	86	3.59
Syria	94	3.41
Libya	101	3.28
Algeria	108	3.14
Mauritania	109	3.12

Source: Website of the World Economic Forum, <http://www.weforum.org/pdf/gitr/2009/rankings.pdf> on 12 March 2009.

Table c-4: Ranking of a group of Arab countries according to some criteria related to ICT policy for 2008/2009

Importance of ICT to government's vision of the future			Laws dedicated to the guidance and regulation of ICT investment			Government prioritization of ICT			Quality of competition in the ISP sector		
UAE	1	5.86	UAE	1	5.13	UAE	1	6.05	Egypt	1	5.34
Qatar	2	5.66	Tunisia	2	4.87	Tunisia	2	5.80	Jordan	2	5.30
Tunisia	3	5.45	Qatar	3	4.82	Qatar	3	5.55	Saudi Arabia	3	4.86
Jordan	4	5.04	Bahrain	4	4.59	Jordan	4	5.52	Tunisia	4	4.84
Bahrain	5	5.03	Oman	5	4.34	Bahrain	5	5.42	Bahrain	5	4.37
Oman	6	4.97	Saudi Arabia	6	4.31	Egypt	6	5.18	Kuwait	6	4.27
Saudi Arabia	7	4.81	Jordan	7	4.05	Saudi Arabia	7	5.17	Morocco	7	4.09
Egypt	8	4.45	Egypt	8	3.86	Oman	8	5.02	UAE	8	3.85
Mauritania	9	4.16	Morocco	9	3.12	Mauritania	9	4.91	Oman	9	3.82
Syria	10	4.02	Kuwait	10	3.09	Syria	10	4.51	Algeria	10	3.59
Morocco	11	3.93	Mauritania	11	2.67	Libya	11	4.40	Libya	11	3.43
Algeria	12	3.68	Libya	12	2.39	Algeria	12	4.37	Qatar	12	3.41
Kuwait	13	3.61	Syria	13	2.37	Kuwait	13	4.28	Syria	13	3.38
Libya	14	3.32	Algeria	14	2.32	Morocco	14	4.14	Mauritania	14	3.17

Source: World Economic Forum, The Global Information Technology Report 2008-2009.

Table c-5: The Global Competitiveness Index and rank for some Arab states with respect to selected pillars, 2008/2009

Arab countries	Global competitiveness index		Pillar of technological readiness		Pillar of innovation		Pillar of infrastructure		Pillar of health and primary education	
	Rank ¹	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Qatar	26	4.8	37	4.3	29	3.8	35	4.5	18	6.2
Saudi Arabia	27	4.7	51	3.7	34	3.7	41	4.4	51	5.7
UAE	31	4.7	28	4.6	46	3.4	14	5.7	36	5.9
Kuwait	35	4.6	50	3.7	71	3.1	49	4.2	75	5.3
Tunisia	36	4.6	52	3.7	27	3.9	34	4.6	27	6.1
Bahrain	37	4.6	39	4.3	75	3.0	28	4.8	45	5.8
Oman	38	4.6	68	3.3	44	3.5	32	4.6	80	5.3
Jordan	48	4.4	57	3.6	51	3.4	44	4.3	56	5.7
Morocco	73	4.1	78	3.2	78	3.0	70	3.5	71	5.4
Syria	78	4.0	107	2.6	84	3.0	74	3.3	70	5.4
Egypt	81	4.0	84	3.0	67	3.2	60	3.7	88	5.2
Libya	91	3.9	98	2.8	100	2.8	112	2.5	103	4.6
Algeria	99	3.7	114	2.5	113	2.7	84	3.0	76	5.3
Mauritania	131	3.1	102	2.7	125	2.5	127	2.1	114	4.1

¹With respect to the 134 countries of the world covered by the report.

Source: The Global Competitiveness Report 2008-2009.

End Notes

- ¹ For example a news report, from Egypt, indicates that a proportion approaching 70 per cent of the people using the mobile phone services offered by the Mobinil company (which estimates its customer base at around 18 million, that is nearly 13 million Egyptian mobile users), will be unable to meet the costs of the full package of 3G services. It estimates that 20 per cent will be able to make partial use of these services and that only 10 per cent will be able to afford the whole package. Mobinil has offered some 3G services on its network and announced that it would launch the full package in September 2008. From "35 Millions Confront New Technologies ... 3G Mobiles ...", Al-Hayat newspaper, Cairo, 19 August 2008.
- ² "Research and Studies of the 'ICTTA' in Damascus...", Al-Hayat newspaper, Damascus, 2 May 2008.
- ³ This includes four indicators to measure the government prioritisation of ICT, the laws devoted to guiding and regulating ICT use, the importance of ICT to government vision of the future, and quality of competition in the ISP sector.

