

5. Maternal and reproductive health

Close to 50 per cent of the over half a million maternal deaths in the world occur in the Asian and Pacific region.

The maternal mortality ratio (MMR), at 330 per 100,000 live births, of the Asian and Pacific region is less than half that of Africa, but it is significantly higher than that of Latin America and the Caribbean. It also contrasts with the ratios in Europe and North America, 15 and 16, respectively.

Obtaining reliable figures on maternal mortality is hampered by the lack of effective data collection and registration systems. Furthermore, improvements in the measurement of maternal mortality over the last few decades impede any trend assessments.

High-income countries of Asia and the Pacific have an MMR even below that of Europe, while middle-income countries, with a ratio of 94 deaths per 100,000 live births, are below the region's average. Low-income countries, on the other hand, have a considerably higher rate, at 523 deaths per 100,000 live births.

Landlocked developing countries and least developed countries have the highest MMRs in Asia and the Pacific. While least developed countries have an MMR of 646 deaths per 100,000 live births, landlocked developing countries have a ratio of 818, which is quite close to the 834 deaths per 100,000 live births found in Africa.

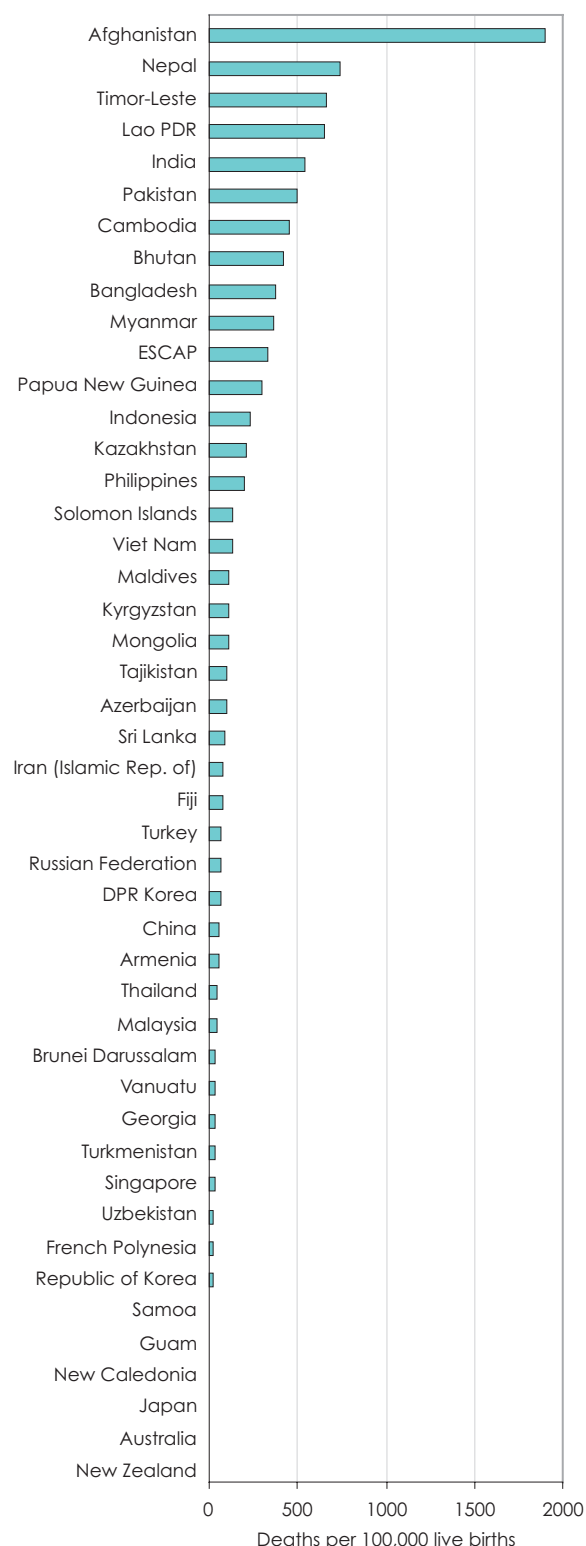
In North and Central Asia, only Georgia, Turkmenistan and Uzbekistan have achieved MMRs of 32 deaths per 100,000 live births or less. The MMRs in Kyrgyzstan and Tajikistan exceed 100 and in Kazakhstan it is 210 deaths per 100,000 live births.

In both absolute and relative terms, maternal mortality is highest in the SAARC region. With 226,077 deaths, this region accounted for more than two thirds of the maternal deaths in Asia and the Pacific in 2000. Nepal had the highest MMR, at 740, while India and Pakistan also had high levels, at 540 and 500, respectively. These rates are among the highest in the world.

The ASEAN region, in contrast, has an MMR of 208 deaths per 100,000 live births. Within South-East Asia, however, the MMR in Cambodia is 450 and in the Lao People's Democratic Republic it is 650.

MMRs also diverge widely at subnational levels, with sizeable disparities between economic groups and between urban and rural areas, as shown

Figure 5.1 Maternal mortality ratios in Asia and the Pacific, 2000



in table 5.1. The vast majority of maternal deaths can be prevented if appropriate reproductive health services are provided, but such services are often not available to the poorest income quintiles or in rural areas.

Antenatal care and the attendance of deliveries by skilled birth personnel can help to detect health

problems early and refer patients to emergency obstetric care, thus considerably reducing maternal mortality. It is therefore not surprising that the subregions with the lowest birth attendance by skilled personnel are the ones with the highest MMRs.

In Asia and the Pacific, the countries with the lowest number of births attended by skilled health personnel are in South and South-West Asia. In Bangladesh, for example, only 13 per cent of births are attended by skilled health personnel, resulting in a high MMR of 380. In Nepal, where the MMR is 740, only one in five births is attended by skilled health personnel.

Other countries in the Asian and Pacific region also have low treatment rates for pregnant women. Cambodia, for example, has an antenatal care rate (one visit) of 44 per cent and an MMR of 450 deaths per 100,000 live births. In Afghanistan, with antenatal care coverage at 52 per cent, the MMR is 1,900 deaths per 100,000 live births.

Apart from these aspects, socio-cultural factors that inhibit women from accessing appropriate reproductive and sexual health services also play a major role in increasing maternal mortality. Many countries in the region have low rates of contraceptive use; this results in high levels of adolescent fertility, which is also a cause of high maternal mortality.

Afghanistan, for example, has the lowest contraceptive prevalence rate in Asia and the Pacific, at 5 per cent of women aged 15 to 49, resulting in the second highest adolescent fertility rate in the region, at 132 births per 1,000 women (see table 1.5 and figure 5.4). The Lao People's Democratic Republic, with a contraceptive rate below 32 per cent, also has a high adolescent fertility rate, at 88 births per 1,000 women.

Figure 5.2 Births attended by skilled health personnel in Asia and the Pacific, latest year from 2000-2005

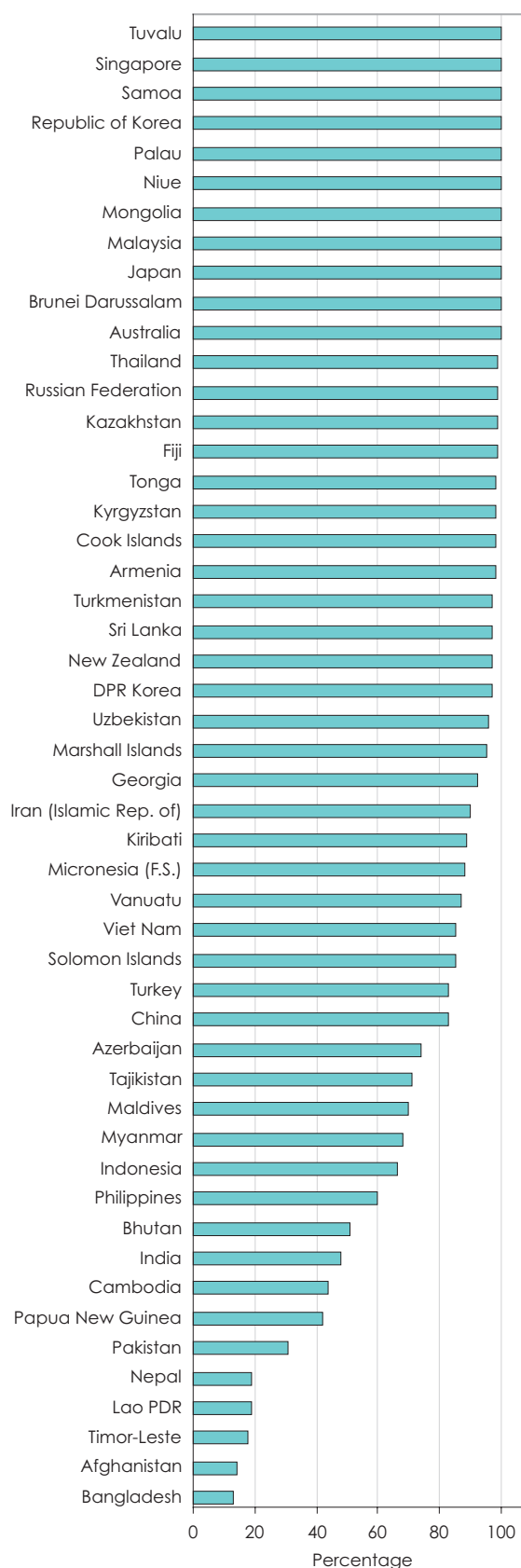


Figure 5.3 Contraceptive prevalence among women aged 15-49 in Asia and the Pacific, latest year from 1996-2004

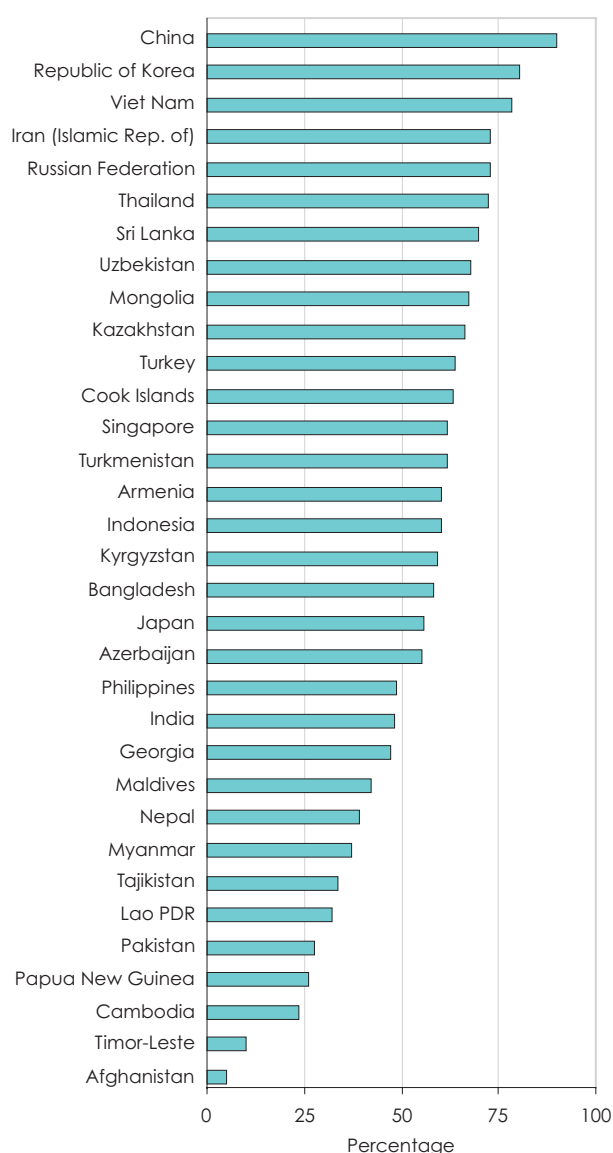
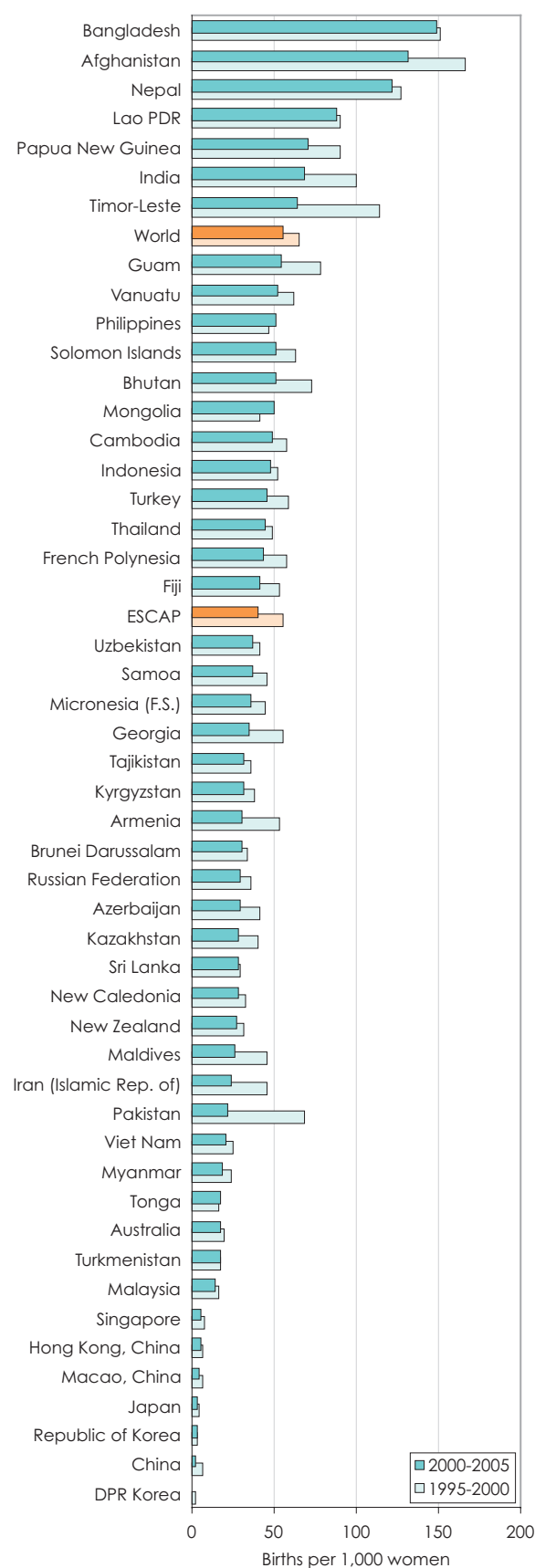


Figure 5.4 Fertility rate among adolescents aged 15-19 in Asia and the Pacific, 1995-2000 and 2000-2005



Maternal mortality (number): The number of deaths of women from pregnancy-related causes, while pregnant or within 42 days of termination of pregnancy, during a specified year. *Aggregates:* Sum of individual country values. *Source:* Calculated by ESCAP using data from United Nations Millennium Development Goals Indicators, (online database, accessed in September 2007).

Maternal mortality ratio (deaths per 100,000 live births): The number of deaths of women from pregnancy-related causes, while pregnant or within 42 days of termination of pregnancy, expressed per 100,000 live births, during a specified year. *Aggregates:* Averages are calculated using the total number of births as weight. *Source:* United Nations Millennium Development Goals Indicators, (online database, accessed in September 2007).

Proportion of births attended by skilled health personnel (percentage): The proportion of births attended by health personnel trained in providing life saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labour and the post-partum period; to conduct deliveries on their own; and to care for new borns. Includes doctors, nurses and midwives, but not traditional birth attendants, even if they have received a short training course. *Source:* United Nations Millennium Development Goals Indicators, (online database, accessed in September 2007).

Proportion of births attended by skilled health personnel, poorest quintile (percentage): The proportion of births in the poorest wealth quintile attended by skilled health personnel (doctors, nurses or midwives). *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Proportion of births attended by skilled health personnel, richest quintile (percentage): The proportion of births of the richest wealth quintile attended by skilled health personnel (doctors, nurses or midwives). *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Proportion of births attended by skilled health personnel, rural (percentage): The percentage of live births attended by skilled health personnel (doctors, nurses or midwives) in rural areas. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Proportion of births attended by skilled health personnel, urban (percentage): The percentage of live births attended

by skilled health personnel (doctors, nurses or midwives) in urban areas. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Contraceptive prevalence rate (percentage): The proportion of women of reproductive age (15-49 years) who are using, or whose partner is using, a contraceptive method at a given point in time. Contraceptive methods include clinic and supply (modern) methods and non-supply (traditional) methods. Clinic and supply methods include female and male sterilization, intra uterine devices (IUDs), hormonal methods (oral pills, injectables, and hormone-releasing implants, skin patches and vaginal rings), condoms and vaginal barrier methods (diaphragm, cervical cap and spermicidal foams, jellies, creams and sponges). Traditional methods include rhythm, withdrawal, abstinence and lactational amenorrhoea. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Pregnant women receiving antenatal care coverage, at least one visit (percentage): The proportion of women aged 15-49 who used antenatal care provided by skilled health personnel for reasons related to pregnancy at least once during pregnancy, expressed as a percentage of live births in a given time period. Antenatal care includes recording medical history, assessment of individual needs, advice and guidance on pregnancy and delivery, screening tests, education on self-care during pregnancy, identification of conditions detrimental to health during pregnancy, first-line management and referral if necessary. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Pregnant women receiving antenatal care coverage, at least four visits (percentage): The proportion of women aged 15-49 who utilized at least four times during pregnancy, antenatal care provided by skilled health personnel for reasons relating to pregnancy among all women who gave birth to a live child in a given time period. WHO recommends a minimum of four antenatal visits at specific times for all pregnant women. Antenatal care includes recording medical history, assessment of individual needs, advice and guidance on pregnancy and delivery, screening tests, education on self-care during pregnancy, identification of conditions detrimental to health during pregnancy, first-line management and referral if necessary. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

5.1 Maternal mortality and antenatal care

	Maternal mortality		Proportion of births attended by skilled health personnel				
	Number	Deaths per 100,000 live births	Total	Percentage			
				Poorest quintile	Richest quintile	Rural	Urban
East and North-East Asia							
China	10 404	56	83 (04)				
DPR Korea	260	67	97 (04)				
Hong Kong, China							
Macao, China							
Mongolia	54	110	100 (04)				
Republic of Korea	111	20	100 (03)				
South-East Asia							
Brunei Darussalam	3	37	100 (04)				
Cambodia	1 675	450	44 (06)	15 (00)	81 (00)	28 (00)	57 (00)
Indonesia	10 383	230	66 (03)			55 (03)	79 (03)
Lao PDR	1 052	650	19 (01)				
Malaysia	225	41	100 (05)				
Myanmar	3 412	360	68 (03)				
Philippines	4 363	200	60 (03)	25 (03)	92 (03)	41 (03)	79 (03)
Singapore	14	30	100 (04)				
Thailand	430	44	99 (00)				
Timor-Leste	253	660	18 (02)				
Viet Nam	2 103	130	85 (02)	58 (02)	100 (02)	82 (02)	99 (02)
South and South-West Asia							
Afghanistan	20 457	1 900	14 (03)				
Bangladesh	15 160	380	13 (04)	3 (04)	40 (04)	9 (04)	30 (04)
Bhutan	60	420	51 (05)				
India	148 968	540	48 (06)	16 (99)	84 (99)	34 (99)	73 (99)
Iran (Islamic Rep. of)	922	76	90 (00)				
Maldives	7	110	70 (01)				
Nepal	5 823	740	19 (06)	4 (01)	45 (01)	10 (01)	51 (01)
Pakistan	21 524	500	31 (05)				
Sri Lanka	295	92	97 (00)				
Turkey	995	70	83 (03)	53 (98)	98 (98)	69 (98)	88 (98)
North and Central Asia							
Armenia	20	55	98 (05)	93 (00)	100 (00)	95 (00)	99 (00)
Azerbaijan	122	94	74 (01)				
Georgia	17	32	92 (05)				
Kazakhstan	505	210	99 (05)	99 (99)	99 (99)	100 (99)	98 (99)
Kyrgyzstan	120	110	98 (05)	96 (97)	100 (97)	98 (97)	99 (97)
Russian Federation	907	67	99 (05)				
Tajikistan	190	100	71 (00)				
Turkmenistan	33	31	97 (00)	97 (00)	98 (00)	97 (00)	98 (00)
Uzbekistan	143	24	96 (00)				
Pacific							
American Samoa							
Cook Islands			98 (01)				
Fiji	15	75	99 (02)				
French Polynesia	1	20					
Guam	0	12					
Kiribati			89 (02)				
Marshall Islands			95 (02)				
Micronesia (F.S.)			88 (01)				
Nauru							
New Caledonia	0	10					
Niue			100 (05)				
Northern Mariana Is.							
Palau			100 (02)				
Papua New Guinea	577	300	42 (04)				
Samoa	1	15	100 (04)				
Solomon Islands	19	130	85 (99)				
Tonga			98 (04)				
Tuvalu			100 (02)				
Vanuatu	2	32	87 (03)				
ESCAP Developed Economies							
Australia	20	8	100 (03)				
Japan	118	10	100 (04)				
New Zealand	4	7	97 (01)				
ESCAP	251 766	330					
LLDC	5 079	818					
LDC	81 426	646					
SIDS	82	264					
ASEAN	23 658	208					
SAARC	226 077	557					
Central Asia	1 073	79					
Low-income	139 870	523					
Middle-income	86 321	94					
High-income	57	13					
Africa	261 823	834					
Latin America & Carib.	22 357	192					
North America	20	16					
Europe	793	15					
Other Asia-Pacific	3 649	231					
World			63 (05)				

5.2 Reproductive health

	Contraceptive prevalence rate		Pregnant women receiving antenatal care coverage	
	Percentage		Percentage	
	Earliest	Latest	One visit	Four visits
East and North-East Asia				
China		90 (04)		
DPR Korea	62 (92)		98 (00)	
Hong Kong, China	86 (92)			
Macao, China				
Mongolia		67 (00)		97 (01)
Republic of Korea		81 (97)		
South-East Asia				
Brunei Darussalam				100 (01)
Cambodia		24 (00)	44 (00)	9 (00)
Indonesia		60 (03)	97 (03)	81 (03)
Lao PDR		32 (00)	44 (01)	29 (01)
Malaysia	55 (94)			
Myanmar		37 (01)		76 (01)
Philippines		49 (03)	94 (03)	70 (03)
Singapore		62 (97)		
Thailand		72 (97)		86 (01)
Timor-Leste		10 (03)		
Viet Nam		79 (02)	70 (02)	29 (02)
South and South-West Asia				
Afghanistan		5 (00)	52 (03)	
Bangladesh		58 (04)	39 (00)	11 (00)
Bhutan	19 (94)			
India		48 (99)	65 (99)	30 (99)
Iran (Islamic Rep. of)		73 (97)		77 (01)
Maldives		42 (99)	98 (01)	81 (01)
Nepal		39 (01)	49 (01)	15 (01)
Pakistan		28 (01)		
Sri Lanka		70 (00)		98 (01)
Turkey		64 (98)	67 (98)	42 (98)
North and Central Asia				
Armenia		61 (00)	82 (00)	65 (00)
Azerbaijan		55 (01)	70 (01)	
Georgia		47 (05)	91 (99)	
Kazakhstan		66 (99)	82 (99)	71 (99)
Kyrgyzstan		60 (97)	88 (97)	81 (97)
Russian Federation		73 (99)	96 (99)	
Tajikistan		34 (00)	75 (00)	
Turkmenistan		62 (00)	87 (00)	83 (00)
Uzbekistan		68 (02)		
Pacific				
American Samoa				
Cook Islands		63 (96)		
Fiji				
French Polynesia				
Guam				
Kiribati				88 (01)
Marshall Islands				
Micronesia (F.S.)				
Nauru				
New Caledonia				
Niue				
Northern Mariana Is.				
Palau				
Papua New Guinea		26 (96)		78 (01)
Samoa				
Solomon Islands				
Tonga				
Tuvalu				
Vanuatu				
ESCAP Developed Economies				
Australia				
Japan		56 (00)		
New Zealand	75 (95)			
ESCAP				
LLDC				
LDC				
SIDS				
ASEAN				
SAARC				
Central Asia				
Low-income				
Middle-income				
High-income				
Africa				
Latin America & Carib.				
North America				
Europe				
Other Asia-Pacific				
World		60 (05)		