Demographic Dynamics in the ESCAP Region: Implications for Sustainable Development and Poverty

Population ageing, rapid urbanization and international migration are issues challenging several countries in the ESCAP region

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The ESCAP region has undergone a substantial change in the growth and structure of the population over the past several decades. Several countries and areas of the ESCAP region have completed the demographic transition, reducing fertility and mortality to low levels, while in many others both fertility and mortality rates remain high. Levels of urbanization and

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growth of the urban population also vary across the region. This article examines the size, growth and distribution of the population and provides an overview of the patterns of urbanization and urban growth in the ESCAP region. It discusses new and emerging issues of demographic dynamics in the region, in areas such as the economic and social impact of ageing and international migration. Finally, it highlights the implications of the process of urbanization for promoting gender equality and equity, for sustainable development and for reducing the incidence of poverty.

Population size and growth

In 2000, the population of the world reached 6.1 billion people; the population of the ESCAP region is 3.8 billion people, or 62 per cent of the global population (United Nations, 1999a). The ESCAP region has exhibited a substantial decline in the growth rate of population over the past several decades. The average annual population growth rate during the period 1990-2000 fell to 1.4 per cent. The growth rate is expected to decline further, i.e. to 1.1 and 0.9 per cent annually during the periods 2000-2010 and 2010-2020 respectively (table 1).

There are considerable differences in the growth rate by subregion and by country. During the period 1990-2000, North and Central Asia witnessed the lowest population growth rate of 0.2 per cent per year, while East and North-East Asia experienced a moderate growth rate of 1 per cent per year. South and South-West Asia exhibited the highest growth rate, i.e. 1.9 per cent per year, followed by South-East Asia with 1.6 per cent and the Pacific with 1.4 per cent.

It is noteworthy that the ESCAP region contains the two most populous countries in the world. In 2000, with a population of 1.3 billion, China was the country with the largest population in the world, followed by India, with 1 billion. The number of countries with 100 million inhabitants or more in the ESCAP region also increased from five in 1975 to seven in 2000. There will be a total of 18 countries in the world with 100 million inhabitants or more in 2050, of which 11 will be in the ESCAP region. By 2050, India is expected to be the country with the largest population in the world, 1.53 billion people, followed by China with 1.48 billion.

Components of population growth

Fertility

According to the 2001 ESCAP Population Data Sheet, the total fertility rate is estimated to be 2.5 births per woman in the ESCAP region.

The total fertility rate varies considerably, from 1.5 and 1.6 births per woman respectively in North and Central Asia and East and North-East Asia to 3.4 births per woman in South and South-West Asia. South-East Asia and the Pacific have moderately high fertility, with total fertility rates of 2.6 and 2.3 births per woman respectively (United Nations, 2001).

Fertility has dropped to the below-replacement level (2.1 births per woman) in all the populations of East and North-East Asia with the exception of Mongolia, where the total fertility rate is 2.4 births per woman. Below-replacement fertility has been reached in Singapore and Thailand in South-East Asia, while Sri Lanka is the only country in South and South-West Asia exhibiting below-replacement fertility. Armenia, Azerbaijan, Georgia, Kazakhstan and the Russian Federation in North and Central Asia, and Australia and New Zealand in the Pacific have also experienced below-replacement fertility.

Table 2 shows the classification of countries and areas in the ESCAP region by total fertility rate in the periods 1970-1975 and 1995-2000. It is interesting to note that a large number of countries and areas experienced marked declines in fertility, from a very high level (5 or more children per woman) to a moderate level (2.11 to 3.49) during those years, whereas in countries such as Afghanistan, Bhutan, the Lao People's Democratic Republic, Maldives and Pakistan, fertility remained at a high level. However, a sustained decline in fertility was observed in countries where total fertility rates had been high or moderate in the period 1970-1975. Of particular importance are Azerbaijan, China, the Republic of Korea, Sri Lanka and Thailand, which exhibited remarkable declines in fertility, going from high to below-replacement levels.

Mortality

As with fertility, there is a substantial variation in mortality among subregions and countries and areas within the subregion. According to the 2001 ESCAP Population Data Sheet, life expectancy at birth for males and females exceeds 60 years in all the subregions. Life expectancy at birth for females has reached 77 years in the Pacific (owing to high life expectancy in Australia and New Zealand), while it is 74 years in East and North-East Asia and 72 years in North and Central Asia.

Massive reductions in infant and under-five mortality rates have been attributed as key factors in the sharp rise in the expectation of life at birth in the ESCAP region (Leete and Alam, 1999). As shown in the 2001 ESCAP Population Data Sheet, the infant mortality rate for the ESCAP region has

		Average annual rate of growth					
	1990	2000	2010	2020	1990- 2000	2000- 2010	2010- 2020
ESCAP	3,276,462	3,753,774	4,176,146	4,551,179	1.4	1.1	0.9
East and North-East Asia	1,350,465	1,485,217	1,587,798	1,670,413	1.0	0.7	0.5
China	1,155,305	1,277,558	1,372,920	1,454,462	1.0	0.7	0.6
Democratic People's Republic of Korea	20,461	24,039	26,451	28,372	1.6	1.0	0.7
Hong Kong, China	5,705	6,927	7,552	7,751	1.9	0.9	0.3
Japan	123,537	126,714	127,315	123,893	0.3	0.0	-0.3
Macao, China	372	473	500	522	2.4	0.5	0.4
Mongolia	2,216	2,662	3,083	3,518	1.8	1.5	1.3
Republic of Korea	42,869	46,844	49,976	51,893	0.9	0.6	0.4
South-East Asia	440,225	517,655	587,138	652,244	1.6	1.3	1.1
Brunei Darussalam	257	328	384	436	2.4	1.6	1.2
Cambodia	8,652	11,168	13,250	15,545	2.6	1.7	1.6
Indonesia	182,812	212,107	238,012	262,291	1.5	1.2	1.0
Lao People's Democratic Republic	4,152	5,433	6,965	8,757	2.7	2.5	2.3
Malaysia	17,845	22,244	25,919	29,254	2.2	1.5	1.2
Myanmar	40,520	45,611	50,903	55,960	1.2	1.1	0.9
Philippines	60,687	75,967	90,544	102,404	2.2	1.8	1.2
Singapore	3,016	3,567	3,885	4,091	1.7	0.9	0.5
Thailand	55,595	61,399	66,511	70,975	1.0	0.8	0.6
Viet Nam	66,689	79,832	90,764	102,532	1.8	1.3	1.2
South and South-West	1,244,297	1,501,481	1,743,308	1,962,908	1.9	1.5	1.2
Afghanistan	14 755	22 720	32 902	40 701	13	37	2.1
Bangladesh	100 465	120,155	151 700	170 104	4.5	1.6	2.1
Bhutan	109,405	2 124	2 754	3 500	1.7	2.6	1.1 2.4
India	850 785	2,124	2,754	1 272 166	1.2	1.0	1.0
Iran (Islamic	56 200	67 702	76 022	20 105	1.0	1.5	1.0
Republic of)	50,509	07,702	70,932	89,105	1.0	1.5	1.5
Maldives	216	286	373	464	2.8	2.7	2.2
Nepal	18,772	23,930	29,715	35,517	2.4	2.2	1.8
Pakistan	119,155	156,483	199,745	244,211	2.7	2.4	2.0
Sri Lanka	17,045	18,827	20,870	22,772	1.0	1.0	0.9
Turkey	56,098	66,591	76,054	84,187	1.7	1.3	1.0

Table 1. Population size and growth rate of countriesand areas in the ESCAP region, 1990-2020

		Average annual rate of growth					
	1990	2000	2010	2020	1990- 2000	2000- 2010	2010- 2020
North and Central Asia	215,078	219,042	223,741	227,689	0.2	0.2	0.2
Armenia	3,545	3,520	3,697	3,893	-0.1	0.5	0.5
Azerbaijan	7,159	7,734	8,411	9,139	0.8	0.8	0.8
Georgia	5,460	4,968	5,011	5,141	-0.9	0.1	0.3
Kazakhstan	16,742	16,223	16,492	17,352	-0.3	0.2	0.5
Kyrgyzstan	4,395	4,699	5,188	5,769	0.7	1.0	1.1
Russian Federation	148,292	146,934	144,418	140,639	-0.1	-0.2	-0.3
Tajikistan	5,303	6,188	7,134	8,317	1.5	1.4	1.5
Turkmenistan	3,668	4,459	5,219	5,922	2.0	1.6	1.3
Uzbekistan	20,515	24,318	28,170	31,518	1.7	1.5	1.1
Pacific	26,397	30,377	34,162	37,924	1.4	1.2	1.0
American Samoa	47	68	95	126	3.8	3.3	2.8
Australia	16,888	18,886	20,615	22,321	1.1	0.9	0.8
Cook Islands	18	20	21	23	0.6	0.7	0.8
Fiji	726	817	936	1,050	1.2	1.4	1.1
French Polynesia	196	235	273	307	1.8	1.5	1.2
Guam	134	168	194	216	2.2	1.5	1.1
Kiribati	72	83	96	111	1.4	1.4	1.4
Marshall Islands	46	64	86	113	3.3	3.0	2.7
Micronesia (Federated States of)	971	191	441	74	2.1	2.0	1.8
Nauru	10	12	14	16	1.9	1.8	1.7
New Caledonia	168	214	246	272	2.5	1.4	1.0
New Zealand	3,360	3,862	4,207	4,540	1.4	0.9	0.8
Niue	2	2	2	1	-2.0	-1.5	-0.9
Northern Mariana Islands	43	78	131	203	5.9	5.1	4.4
Palau	15	19	24	30	2.4	2.3	2.1
Papua New Guinea	3,839	4,807	5,917	7,008	2.2	2.1	1.7
Samoa	160	180	217	254	1.2	1.9	1.6
Solomon Islands	321	444	588	742	3.2	2.8	2.3
Tonga	96	99	101	104	0.3	0.3	0.3
Tuvalu	9	12	15	19	2.8	2.5	2.2
Vanuatu	149	190	240	293	2.4	2.3	2.0

Table 1. (continued)

Source: United Nations (1999). World Population Prospects: The 1998 Revision, Volume I: Comprehensive Tables (New York, Department of Economic and Social Affairs)

Total fertility rate in	Total fertility rate in 1995-2000									
1970-1975	Very high (5.00 or higher)	High (3.50 to 4.99)	Moderate (2.11 to 3.49)	Low (2.10 or lower)						
Very high 5.00 or higher	Afghanistan	Nepal	Democratic People's Republic of Korea							
	Bhutan	Tajikistan	Mongolia							
	Maldives	Turkmenistan	Bangladesh							
	Pakistan	Cambodia	India							
	Lao People's Democratic Republic	Philippines	Iran (Islamic Republic of)							
		Papua New Guinea	Uzbekistan							
		Samoa	Brunei Darussalam							
		Solomon Islands	French Polynesia							
		Vanuatu	Turkey							
			Indonesia							
			Malaysia							
			Myanmar							
			Viet Nam							
High			Kyrgyzstan	China						
3.50-4.99			Fiji	Republic of Korea						
			Guam	Thailand						
			New Caledonia	Sri Lanka						
				Azerbaijan						
Moderate			Kazakhstan	Hong Kong, China						
2.11-3.49				Japan						
				Macao, China						
				Singapore						
				Armenia						
				Georgia						
				Australia						
				New Zealand						
Low				Russian Federation						
2.10 or lower										

Table 2. Classification of countries and areas in the ESCAPregion by total fertility rate, 1970-1975 and 1995-2000

Source: United Nations (1999). World Population Prospects: The 1998 Revision, Volume I: Comprehensive Tables (New York, Department of Social and Economic Affairs).

dropped to 54 infant deaths per thousand live births and under-five mortality to 73 per thousand live births. However, these aggregate data conceal the wide disparity in the infant and under-five mortality rates prevailing in the subregions and countries within the subregions.

Table 3 presents a classification of countries and areas by infant mortality rate in the periods 1970-1975 and 1995-2000. It is apparent that many countries and areas in the ESCAP region have reduced their infant mortality level to below 25 per thousand. A rapid fall in infant mortality rates, from a very high level of 100 or more per thousand in the period 1970-1975 to a moderate level of 25 to 49 in the period 1995-2000, has occurred in Indonesia, the Islamic Republic of Iran, Turkey and Viet Nam. Similarly, countries and areas such as Brunei Darussalam, the Democratic People's Republic of Korea, French Polynesia, Samoa, Solomon Islands and Sri Lanka have demonstrated marked reductions in infant mortality, from a high level of 50 to 99 per thousand to a low level of below 25 during the past 25 years. Although a decline is under way, high levels of infant mortality (50 to 99 per thousand) in the period 1995-2000 are reported in several countries: Bangladesh, Bhutan, India, Maldives, Nepal and Pakistan in South and South-West Asia; the Lao People's Democratic Republic and Myanmar in South-East Asia; and Papua New Guinea in the Pacific.

Migration

Another emerging issue that is becoming more significant demographically is international migration. Both economic and demographic factors have stimulated such migration and currently many Asian countries either deploy or receive hundreds of thousands of international migrant workers per year.

According to United Nations estimates for the period 1995-2000, in the ESCAP region as a whole emigration has reduced population growth by about 2 per cent. However, in some countries such impacts are far greater. For example, emigration has a negative impact on the growth rates of population observed in the North and Central Asian countries, except the Russian Federation. In the Russian Federation, despite immigration, the population growth rate has become negative. In the Pacific, Australia has a net gain of population of 80,000 annually, contributing more than 40 per cent to the annual population growth rate. Countries such as Bangladesh, India and Pakistan in South and South-West Asia have experienced emigration of over 100,000 annually, thus reducing their population growth to some extent. Similarly, population growth has been negatively affected by emigration in China in East and North-East Asia, and Indonesia and the Philippines in South-East Asia (United Nations, 1997).

Infant mortality rate (per 1.000	Infant mortality rate (per 1,000 births) in 1995-2000									
births) in 1978-1975	Very high (100 or more)	High (50 to 99)	Moderate (25 to 49)	Low (less than 25)						
1978-1975 Very high 100 or more	(100 or more) Afghanistan Cambodia	(50 to 99) Bangladesh Bhutan India Maldives Nepal Pakistan Lao People's Democratic Republic Myanmar Panua New Guinea	(25 to 49) Indonesia Viet Nam Iran (Islamic Republic of) Turkey	(less than 25)						
High 50 to 99		Mongolia Tajikistan Turkmenistan	China Philippines Thailand Kazakhstan Kyrgyzstan Uzbekistan Vanuatu	Democratic People's Republic of Korea Brunei Darussalam Sri Lanka French Polynesia Samoa Solomon Islands						
Moderate 25 to 49			Azerbaijan	Macao, China Republic of Korea Malaysia Georgia Russian Federation Fiji New Caledonia						
Low Less than 25			Armenia	Hong Kong, China Japan Singapore Australia Guam New Zealand						

Table 3. Classification of countries and areas in the ESCAPregion by infant mortality rate, 1970-1975 and 1995-2000

Source: United Nations (1999). World Population Prospects: The 1998 Revision, Volume I: Comprehensive Tables (New York, Department of Economic and Social Affairs).

The ESCAP region has experienced the most varied and dynamic types of international migration flows. As a result, foreign workers now constitute a significant proportion of the labour force in many Asian countries and areas (Migration News, 2001). A United Nations study reveals that immigrants originating in Asia account for a major share of total immigration to Australia, Canada and the United States of America. In addition, the oil-producing countries of Western Asia have attracted migrant workers from Asian countries, and the rapidly growing economies of East and South-East Asia, together with Japan, have also become poles of attraction for labour migration. The study further indicated that in the past most migrants admitted by Gulf Cooperation Council members had been of Arab origin, but by the second half of the 1970s workers were recruited in Bangladesh, India, Indonesia, Pakistan, the Philippines, the Republic of Korea and Thailand. During the early 1990s, a majority of migrant workers in Western Asia were from Bangladesh, India, Pakistan, the Philippines and Sri Lanka (United Nations, 1997).

During the 1980s, the newly industrialized economies of East and North-East Asia and South-East Asia and Japan began to attract migrant workers from the less prosperous countries in the region. The sustained growth of the Japanese economy and that of the newly industrialized economies, Hong Kong, China; the Republic of Korea; and Singapore, has widened the income disparities among countries in the region and contributed to the generation of jobs that have been attracting migrant workers. As a consequence, migration flows from the labour-exporting countries in East and North-East Asia and South-East Asia have been redirected to Japan and the newly industrialized economies.

Changing age structure

The age structure of the population is largely the outcome of the regime of fertility and mortality that prevailed in the past. One of the implications of demographic transition (declining fertility and declining mortality) is population ageing. In developed countries, the proportion of the population in the older age groups is very high and increasing, while in the developing countries it is still low and increasing at a moderate pace. In the ESCAP region as a whole, the proportion of persons aged 60 years and older is expected to increase from 9 per cent in 2000 to 14 per cent in 2020 and 24 per cent in 2050. The proportion of older persons in the total population is likely to be much greater in East and North-East Asia and North and Central Asia than in other subregions.

For example, in Japan the proportion of persons aged 60 and older is expected to increase rapidly, reaching a high of 38 per cent in 2050. In other countries, such as the Republic of Korea, the Russian Federation, Singapore and Thailand, the population is ageing very fast, with 30 to 33 per cent of the population projected to consist of persons aged 60 and older in 2050.

The changes in the age structure of the population are more revealing in countries where declines in fertility and mortality occurred much earlier and at a faster rate. Japan has witnessed a considerable drop in the proportion of the population of working age; by 2050, less than half the population of Japan will be of working age. Other countries, such as the Republic of Korea, the Russian Federation, Singapore and Thailand, will also experience a decline in the working age population, reaching around 53-56 per cent in 2050 (United Nations, 1999a).

Urbanization

One of the salient features of demographic dynamics has been the increasing concentration of population in urban places, a process termed urbanization. This process involves the movement of people from rural-agricultural settings to urban-industrial, commercial and administrative centres in search of employment, education and a better standard of living.

The countries and territories of the ESCAP region had an estimated total population of 3.27 billion in 1990, which, by the turn of the century, had increased to 3.75 billion. This represents an increase of about 480 million people and a growth rate of 1.4 per cent per year. During the same period, the urban population of the region increased by 310 million, from 1.11 to 1.42 billion, with an average annual growth rate of 2.5 per cent and representing 64 per cent of total population growth (table 4). In short, urban areas absorbed nearly two thirds of the total population growth in the ESCAP region during the period 1990-2000.

As mentioned previously, during the next two decades, according to United Nations estimates, the total population of the ESCAP region will increase by 800 million, to 4.55 billion, and the urban population will increase by 760 million, to 2.18 billion. Thus, during the next two decades, nearly all of the population increase taking place in the ESCAP region (nearly 40 million per year on average) will be absorbed by urban areas, with the population in rural areas remaining about the size it is currently.

The ESCAP region as a whole is still predominantly agricultural and rural. The population living in urban areas comprised only about 37.7 per cent of the total population in 2000, up from 33.8 per cent in 1990. By 2020,

the proportion is expected to reach 48.0 per cent. The rate of growth of the urban population for the region as a whole will remain above 2 per cent a year, with a gradual decline from 2.5 per cent during the 1990s to 2.1 per cent during the period 2010-2020 (table 4).

Just as population growth varies across the region, so do levels of urbanization. In the Pacific, Australia and New Zealand are highly urbanized, with over 85 per cent of inhabitants living in urban areas, whereas in many island countries of the Pacific, less than half the population is urban. In North and Central Asia, which includes the Russian Federation and several newly independent countries of the former Union of Soviet Socialist Republics, two thirds (67.3 per cent) of the population of 219 million live in urban areas. In the other three subregions, the levels are below 40 per cent, with South and South-West Asia having only about a third of its population in urban areas. Table 4 also shows that, while only modest increases in the urban percentage are projected to take place in the Pacific subregion and in North and Central Asia, significant increases (more than 10 percentage points) are expected in all other regions. This broad geographical pattern, however, masks the significant differences with regard to urbanization, urban growth and their prospects for change that exist among the countries within each of the subregions.

An important dimension of urban demographic dynamics is the changing age structure. This is particularly important for most countries, with the exception of the developed countries and those in North and Central Asia. Rural-to-urban migration will swell the youth population of the cities or urban areas of those countries in the coming decades. Providing these young people with employment, health care, including reproductive health care, and other services will be a major challenge in the coming decades.

Of the adverse implications of urbanization, especially when it results in the growth of megacities, i.e. cities with over 10 million inhabitants (table 5), the most serious is its impact on the environment. The expansion of urban areas depletes productive agricultural land. Moreover, rising income levels result in increased consumption and utilization of resources and contribute to the deterioration of the environment. Water, which is becoming a scarce resource, is increasingly polluted with urban and industrial waste. These are matters of grave concern. These adverse impacts are aggravated by continued high rates of population growth in many countries of the ESCAP region.

Major area, region	Urb	an populatio	n (thousands)			Percent	age urban	ı	R	ate of gr	owth
and county	1990	2000	2010	2020	1990	2000	2010	2020	1990- 2090	2000- 2010	2010- 2020
ESCAP region	1,107,106	1,415,337	1,774,666	2,183,493	33.8	37.7	42.5	48.0	2.5	2.3	2.1
East and North-East Asia	463,095	571,674	689,195	816,628	34.3	38.5	43.4	48.9	2.1	1.9	1.7
China	316,563	409,965	516,426	637,913	27.4	32.1	37.6	43.9	2.6	2.3	2.1
Democratic People's Republic of Korea	11,946	14,481	16,801	19,255	58.4	60.2	63.5	67.9	1.9	1.5	1.4
Hong Kong, China	5,701	6,927	7,552	7,751	99.9	100.0	100.0	100.0	1.9	0.9	0.3
Japan	95,575	99,788	102,483	102,333	77.4	78.8	80.5	82.6	0.4	0.3	0.0
Macao, China	367	468	495	518	98.7	98.8	99.0	99.1	2.4	0.6	0.5
Mongolia	1,285	1,691	2,108	2,548	58.0	63.5	68.4	72.4	2.7	2.2	1.9
Republic of Korea	31,658	38,354	43,330	46,310	73.8	81.9	86.7	89.2	1.9	1.2	0.7
South-East Asia	133,002	192,621	259,947	329,350	30.2	37.2	44.3	50.5	3.7	3.0	2.4
Brunei Darussalam	169	237	296	349	65.8	72.2	76.9	80.1	3.4	2.2	1.6
Cambodia	1,090	1,778	2,681	3,985	12.6	15.9	20.2	25.6	4.9	4.1	4.0
Indonesia	55,923	86,833	120,692	152,636	30.6	40.9	50.7	58.2	4.4	3.3	2.3
Lao People's Democratic Republic	750	1,275	2,055	3,152	18.1	23.5	29.5	36.0	5.3	4.8	4.3
Malaysia	8,891	12,772	16,536	20,082	49.8	57.4	63.8	68.6	3.6	2.6	1.9
Myanmar	9,984	12,628	17,014	22,402	24.6	27.7	33.4	40.0	2.3	3.0	2.8
Philippines	29,612	44,530	59,278	71,579	48.8	58.6	65.5	69.9	4.1	2.9	1.9
Singapore	3,016	3,567	3,885	4,091	100.0	100.0	100.0	100.0	1.7	0.9	0.5
Thailand	10,410	13,252	17,449	23,082	18.7	21.6	26.2	32.5	2.4	2.8	2.8
Viet Nam	13,157	15,749	20,061	27,992	19.7	19.7	22.1	27.3	1.8	2.4	3.3
South and South West	350,515	482,266	647,356	848,714	28.2	32.1	37.1	43.2	3.2	2.9	2.7
 Afghanistan 	2,692	4,971	8,873	13,587	18.2	21.9	27.0	33.3	6.1	5.8	4.3
Bangladesh	21,090	31,665	46,506	63,302	19.3	24.5	30.6	37.2	4.1	3.8	3.1
Bhutan	87	152	272	471	5.2	7.1	9.9	13.5	5.6	5.8	5.5
India	217,254	288,283	380,168	498,997	25.5	28.4	33.0	39.2	2.8	2.8	2.7
Iran (Islamic Republic of)	31,720	41,709	51,195	63,151	56.3	61.6	66.5	70.9	2.7	2.0	2.1
Maldives	56	75	108	161	25.9	26.1	29.0	34.7	2.9	3.6	4.0
Nepal	1,680	2,844	4,684	7,335	8.9	11.9	15.8	20.7	5.3	5.0	4.5
Pakistan	37,987	57,968	86,685	121,699	31.9	37.0	43.4	49.8	4.2	4.0	3.4

Table 4. Selected indicators of urbanization and urban growth in the
ESCAP region, 1990, 2000, 2010 and 2020

Sri Lanka	3,625	4,435	6,023	8,042	21.3	23.6	28.9	35.3	2.0	3.1	2.9
Turkey	34,324	50,164	62,842	71,969	61.2	75.3	82.6	85.5	3.8	2.3	1.4
North and Central Asia	141,833	147,436	154,060	161,418	65.9	67.3	68.9	70.9	0.4	0.4	0.5
Armenia	2,391	2,462	2,705	2,982	67.5	70.0	73.2	76.6	0.3	0.9	1.0
Azerbaijan	3,897	4,429	5,174	6,069	54.4	57.3	61.5	66.4	1.3	1.6	1.6
Georgia	3,060	3,015	3,278	3,592	56.0	60.7	65.4	69.9	-0.1	0.8	0.9
Kazakhstan	9,546	9,157	9,665	10,967	57.0	56.4	58.6	63.2	-0.4	0.5	1.3
Kyrgyzstan	1,645	1,563	1,747	2,154	37.4	33.3	33.7	37.3	-0.5	1.1	2.1
Russian Federation	109,733	114,141	116,541	116,913	74.0	77.7	80.7	83.1	0.4	0.2	0.0
Tajikistan	1,679	1,704	1,984	2,721	31.7	27.5	27.8	32.7	0.1	1.5	3.2
Turkmenistan	1,652	1,997	2,478	3,138	45.1	44.8	47.5	53.0	1.9	2.2	2.4
Uzbekistan	8,230	8,968	10,488	12,882	40.1	36.9	37.2	40.9	0.9	1.6	2.1
Pacific	18,661	21,340	24,108	27,383	70.7	70.3	70.6	72.2	1.3	1.2	1.3
American Samoa	22	36	55	80	48.1	52.7	57.9	63.2	4.9	4.2	3.7
Australia	14,369	15,994	17,581	19,388	85.1	84.7	85.3	86.9	1.1	0.9	1.0
Cook Islands	11	12	13	15	57.7	59.4	61.6	65.4	0.9	0.8	1.4
Fiji	302	404	531	659	41.6	49.4	56.7	62.8	2.9	2.7	2.2
French Polynesia	110	124	144	172	56.1	52.7	52.9	56.0	1.2	1.5	1.8
Guam	51	66	84	108	38.2	39.2	43.4	49.9	2.6	2.4	2.5
Kiribati	25	33	43	56	34.6	39.2	44.6	50.5	2.8	2.6	2.6
Marshall Islands	30	46	66	89	65.7	71.9	76.2	79.3	4.3	3.6	3.0
Micronesia (Federated States of)	26	34	47	67	26.4	28.3	32.3	38.3	2.7	3.2	3.5
Nauru	10	12	14	16	100.0	100.0	100.0	100.0	1.8	1.5	1.3
New Caledonia	103	165	210	242	61.6	76.9	85.4	89.0	4.7	2.4	1.4
New Zealand	2,848	3,314	3,660	4,013	84.7	85.8	87.0	88.4	1.5	1.0	0.9
Niue	1	1	1	1	30.8	31.7	36.6	42.1	0.0	0.0	0.0
Northern Mariana Islands	23	41	71	119	52.7	52.7	54.5	58.5	5.8	5.5	5.2
Palau	11	14	18	24	69.5	72.4	75.3	78.3	2.4	2.5	2.9
Papua New Guinea	576	837	1,255	1,870	15.0	17.4	21.2	26.7	3.7	4.1	4.0
Samoa	34	39	53	76	21.0	21.5	24.4	29.8	1.4	3.1	3.6
Solomon Islands	47	87	150	236	14.6	19.7	25.5	31.7	6.2	5.4	4.5
Tonga	31	37	45	52	32.6	38.0	44.0	50.3	1.8	2.0	1.4
Tuvalu	4	6	9	12	40.9	52.2	60.9	66.5	4.1	4.1	2.9
Vanuatu	27	38	58	88	18.2	20.0	24.0	30.1	3.4	4.2	4.2

Source: United Nations (2000). World Urbanization Prospects: The 1999 Revision (New York, Department of Economic and Social Affairs)

1	975	200	0	2015	;
City	Population (millions)	City	Population (millions)	City	Population (millions)
Tokyo	19.8	Tokyo	26.4	Tokyo	26.4
Shanghai	11.4	Bombay(Mum	bai) 18.1	Bombay (Mun	nbai)26.1
		Calcutta	12.9	Dhaka	21.1
		Shanghai	12.9	Karachi	19.2
		Dhaka	12.3	Jakarta	17.3
		Karachi	11.8	Calcutta	17.3
		Delhi	11.7	Delhi	16.8
		Jakarta	11.0	Metro Manila	14.8
		Osaka	11.0	Shanghai	14.6
		Metro Manila	10.9	Istanbul	12.5
		Beijing	10.8	Beijing	12.3
		0 0		Osaka	11.0
				Tianjin	10.7
				Hyderabad	10.5
				Bangkok	10.1

Table 5. Populations of megacities^a in theESCAP region, 1975, 2000 and 2015

Source: United Nations (2000). World Urbanization Prospects: The 1999 Revision (New York, Department of Economic and Social Affairs), table 5, p. 8.

Megacities = cities with over 10 million inhabitants.

Components of urban growth

Urban population growth and urbanization can be accounted for by natural increase, net migration, the reclassification of rural areas into urban areas and the extension of urban boundaries. A comprehensive and timely assessment of the relative contributions of these factors is hampered by a number of factors, including the paucity of relevant data. *A priori* one could assume that their relative contributions would change over time depending upon a number of factors, including the stages of demographic and urban transition and the pace and patterns of urban and spatial development and economic growth.

Estimates of the above components are derived from data provided in a recent publication (United Nations, 2000) on the assumption that natural increase is the same in both urban and rural areas and that migration between the broad subregions of ESCAP is of relatively minor importance. These estimates are provided in table 6. The contributions made by reclassification and annexation have been included as part of migration and

Subregion	1990-2000 2000-2010			0-2010	2010-2020		
	(thou- sands)	(percen- tage)	(thou- sands)	(percen- tage)	(thou- sands)	(percen- tage)	
ESCAP	157,668	51	208,415	58	256,211	63	
East and North-East Asia	64,534	59	79,340	68	92,475	73	
South-East Asia	38,069	64	43,066	64	42,067	61	
South and South-West Asia	65,896	50	93,073	56	124,553	62	
North and Central Asia	3,013	54	3,495	53	4,663	63	
Pacific	59	2	261	9	759	23	

Table 6. Contribution of net migration^a to urbangrowth in the ESCAP region, 1990-2020

Source: Computed from data given in United Nations (2000). World Urbanization Prospects: The 1999 Revision (New York, Department of Economic and Social Affairs). a Net migration = including reclassification and annexation.

available evidence suggests that the relative contributions of reclassification and annexation, though generally small, could be significant during periods of rapid urbanization, as in South-East Asia (United Nations, forthcoming).

In short, for the ESCAP region as a whole, nearly 40 million people are added to the urban population each year, with about half, or about 20-25 million people, moving to urban centres in search of a better life. Nearly half of this urban migration is taking place in South and South-West Asia. The difference between East and North-East Asia (which includes China) and South and South-West Asia (which includes India) is striking. During the period 1990-2000, both regions had approximately the same number of net rural-to-urban migrants, but while in East and North-East Asia the number is expected to increase by 50 per cent, in South and South-West Asia it is expected to double by the period 2010-2020. The contribution of net migration to total growth, however, is higher in East and North-East Asia than in South and South-West Asia and will continue to be so. This situation clearly reflects the fact that a high rate of natural increase contributes significantly to urban growth also, through an increased volume of migration from rural to urban areas.

Rural-urban differentials

Studies have nevertheless indicated the general pattern of differences between urban and rural areas. For example, mortality during infancy and early childhood is considerably higher in rural than in urban areas, reflecting the generally poorer health services in rural areas.¹ Similarly, rural areas exhibit higher levels of fertility (as measured by total fertility rate and crude birth rate) than urban areas and the differences are striking, on the order of 25-30 per cent in many countries.

How does urbanization, which involves significant rural-to-urban migration, affect gender equality and equity? The mechanisms that influence gender equality and equity are varied, but in general, migration and urbanization have favourable effects on gender equality and equity.

A new study indicates a gradual increase over time in the proportion of women among rural-to-urban migrants who move independently (United Nations, forthcoming). This increasing proportion of females among rural-to-urban migrants is likely to continue because of the opportunities for gainful employment in the formal and non-formal sectors in urban areas. The continuing pace of urban growth and urbanization, together with increasing female education in both rural and urban areas, can only add to this trend. Even women who are left behind by the migration of their spouses to cities may find that the separation helps to improve their status by enabling them to manage household resources and make independent decisions (Hadi, 1999).

These observations should not, however, diminish the importance of some of the adverse conditions such as trafficking, sexual abuse and harassment, and unequal treatment in the workplace that women continue to face in the cities, the incidence of which may well be on the rise.²

On balance, however, migration from rural to urban areas can provide women with opportunities for education and employment and reduce their dependence on men in making decisions (Skeldon, 1998). The increasing volume of female migration will be significant for the future status of women.

Urbanization and poverty

The question of how rural-to-urban migration, urbanization and poverty are linked has been the subject of policy debate for some time. It was noted previously that the ESCAP region is still predominantly rural. The majority of the world's poor, estimated at over one billion, live in the ESCAP region, and some of the extreme forms of poverty and deprivation are also to be found there. Moreover, a majority of the poor are to be found in rural areas. Yet poverty is also a major concern in urban areas, as can be seen from the squatter settlements of the region's metropolises and the poor living conditions of a significant part of the urban population. It is often argued that increased rural-to-urban migration transfers rural unemployment, underemployment and poverty to urban areas. Evidence suggests that, though rural-to-urban migrants may be less well off than non-migrants in the receiving areas, their participation in the labour force is higher as they are absorbed into a variety of formal and informal sector occupations. Thus, it is indicated that "the majority of migrants to the cities of developing countries are generally absorbed into the social fabric of the cities; they are not necessarily thrust into poverty" (Skeldon, 1997:10).

Evidence also suggests that rural-to-urban migrants are generally better educated and better off than those who remain in the rural areas. Moreover, they are also generally motivated and entrepreneurial. With regard to its impact on rural poverty, it may seem that rural-to-urban migration can aggravate rural poverty by draining rural areas of their valuable human resources, but it should be noted that rural-to-urban migrants constitute a valuable network, which enables a flow of communication and a diffusion of ideas, including in matters related to fertility and family planning. They also contribute to the income of families and consequently to investment in rural areas, thus contributing to the mitigation of poverty there (Skeldon, 1997; Guest, 1998). Thus, although migration to urban centres can indeed have negative consequences for the sending communities, on balance the net impact on poverty appears to be positive.

It can therefore be concluded that rural-to-urban migration and urbanization per se would not contribute to an increase in poverty. On the contrary, they may actually be contributing to its mitigation in the rural areas and among rural-to-urban migrants. However, rural-to-urban migration and urbanization may lead to a situation where the number of urban poor may increase, even when the proportion of the poor in urban areas may be decreasing. A recent study conducted by ESCAP also indicates that, in recent decades, the level of poverty has declined in urban and rural areas, but the rate of decline in urban areas is either equal to or more than that of rural areas during a period of rapid urbanization. However, because of rapid urban population growth, in some countries the number of urban poor has increased during the same period (United Nations, 1999b).

Emerging issues and policy implications

This article has described the demographic dynamics of the ESCAP region. It has revealed that rapid population growth, resulting from high

fertility and declining mortality, was the major population concern in the ESCAP region during the latter half of the twentieth century. Recently, low fertility and mortality, resulting in lower population growth rates and in population ageing, have emerged as new issues challenging several countries in the ESCAP region.

As a consequence of low fertility and increased longevity, some countries will have smaller and older populations. Evidence from European countries shows that although fertility may rebound, it is highly unlikely that in most countries fertility will recover sufficiently to reach the replacement level in the foreseeable future. Mortality reduction will continue to be an overriding policy goal, which would further enhance the ageing process.

It is also noteworthy that, in spite of the decline in fertility to below the replacement level, several populations in the ESCAP region will continue to have positive growth owing to built-in population momentum. However, the decline in fertility and mortality will result in population ageing in many countries of the ESCAP region. It is projected that by 2050, between 30 and 33 per cent of the populations of countries such as the Republic of Korea, the Russian Federation, Singapore and Thailand will be aged 60 and older, while in Japan older persons will constitute about 38 per cent of the total population.

The implications of such population ageing and associated growth in the size of elderly populations are far-reaching and profound. They include serious burdens for economic and social support and health care systems. The rising number of elderly on the one hand and the declining number of younger people on the other will also mean that there will be a shortage of care-givers for the elderly population.

Because females generally live longer than males, there will be an excess of elderly women, which is typically viewed as problematic since it reflects high levels of widowhood. Elderly women, and especially those without spouses, suffer greater disadvantages than elderly men because they are less likely to have occupational skills, pensions or resident care-givers.

As several million Asians become international migrants each year and remit several billion US dollars to their families, international migration is clearly an important economic and social phenomenon, with political implications. Myriad policy issues concerning migration have arisen. A few of the issues surrounding protection of the migrants are noted.

When overseas labour migration occurs as planned by the migrant, it can bring career and financial benefits to the migrant and his or her family. The existence of thousands of recruitment agencies, however, means that they are difficult to regulate and some of them defraud potential and actual migrants, sometimes by not delivering the services promised and sometimes by grossly overcharging for services. Migrants overseas are often very vulnerable to exploitation because they do not know the language or the laws of the host country or how to seek redress for grievances. Unauthorized migrants are especially vulnerable, as they fear that they would be expelled if they file any complaint with authorities (Abdul-Aziz 2001).

Female domestic workers and service workers may be the most vulnerable to exploitation and harassment because they usually work in family situations with few or no co-workers present. High proportions of male migrants work in construction or industry; thus, many are engaged in somewhat hazardous occupations yet often lack health insurance. An accident can leave the worker injured and in debt.

The demand for inexpensive labour and the poverty of large segments of the population in Asia have resulted in human trafficking on a large scale. Many of those trafficked are women and children, of whom it is estimated that a quarter million a year are trafficked in South-East Asia alone.

While Governments accept that a certain number of international labour migrants may be beneficial for the economy, they usually intend that such migrants should reside in the country only temporarily. Large flows of migration nearly always lead to some amount of long-term or permanent settlement, however, and few Governments have addressed the consequences of such settlement (see, for example, Komai, 2000).

Given the magnitude and economic importance of international migration flows within the region, it is perhaps surprising that Governments have been reluctant to deal with the issue in regional political or economic forums (Battistella and Asis, 1999). Some agreements have been formulated between two concerned Governments, but the main issues have not been put on the agenda of regional institutions. As the importance of international labour migration increases, however, it is likely to generate expanded intergovernmental discussion and planning, especially within subregional groupings.

In terms of implications for poverty, urbanization and rural-to-urban migration are likely to contribute to the alleviation of poverty in both rural and urban areas. Similarly, urbanization and rural-to-urban migration are likely to enhance women's status and promote gender equality and equity. Policies that restrict movement, therefore, are unlikely to be beneficial in terms of poverty alleviation and gender equity. More efficient management of the inevitable process of urbanization and urban growth and the harnessing of the benefits of rural-to-urban migration should be given high priority. Of particular importance in this regard is improving the management of megacities.

Policies and programmes aimed at increasing employment in urban areas are of particular importance in alleviating poverty. As the youth population will continue to increase during the coming decades in many countries of the ESCAP region and young people will be disproportionately found in urban areas, employment generation in urban areas should be emphasized.

Urban policies and programmes, however, should not be promoted at the expense of rural areas, and rural development should receive added attention. Although they are likely to increase the pace of rural-to-urban migration, policies and programmes designed to reduce rural poverty and improve the standard of living of the rural population should be given high priority on the policy agenda. In addition to enhancing productivity and increasing employment in rural areas, they will contribute positively to urban development by improving the skills and qualifications of ruralto-urban migrants.

Policies and programmes aimed at reducing fertility and population growth are likely to have much greater impact on containing urban growth and on alleviating poverty than those designed specifically to stem the flow of rural-to-urban migration. This is true for countries, particularly those in South Asia, where fertility continues to be high. In this regard, it should be noted that improving access to health care, including reproductive health care, and promoting education and employment, particularly for women in both rural and urban areas, should be high on the policy agenda, as these actions would contribute to the reduction in fertility and population growth. As noted previously, bridging the rural-urban gap in education.

As further urbanization is inevitable, the future will be an urban one. Managing this process so as to contribute to the alleviation of poverty, to promote gender equality and to ensure sustainable development is the challenge that planners and policy makers will face in the coming decades. Globalization is likely to add to the pace of urbanization, but, as witnessed in recent years, fluctuations in the world economy, closely interconnected through emerging information technologies, will influence the process. Globalization will therefore need to be closely monitored through in-depth studies.

Endnotes

1. There is, however, increasing evidence indicating that infant and under-five mortality is higher in megacities because of the poorer living conditions of a significant part of the population in these cities (see, for example, Brockerhoff and Brenanan, 1997).

2. The adverse consequences for females who move independently to cities are highlighted in the recent publication, *Migration*, *Urbanization and Development: New Directions and Issues*, Richard E. Bilsborrow (ed.), 1998.

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