DOCUMENTATION

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Urbanization Patterns and Problems into the Twenty-First Century in Asia and the Pacific

NOTE BY THE SECRETARIAT

Introduction

Traditionally Asian populations comprised mostly farmers growing rice or another staple grain. Currently, however, the number of such peasants has stabilized and that image of the region is rapidly changing. Increasingly Asians and Pacific islanders are urbanites.

In 1990, one in three persons in the region lived in urban areas, and by the turn of the century that proportion will reach two in five. Soon after the year 2005, the rural population of the ESCAP region will begin to decline in absolute numbers and soon after 2010 a majority of the region's population will reside in urban areas.

These changes herald more than a change in patterns of residence, but also in industrial structure and social systems. A typical Asian today is as likely to be a factory worker or service worker as a rice farmer. Large numbers now live in rural areas but earn most of their income from non-farm sources.

The shift from rural to urban is most significant for females as it usually entails a change in status from unpaid family worker in rural areas to employee or self-employed in urban areas. For many persons, migration from a rural to urban area frees them from various social constraints and permits them to make a more productive contribution to development. Improved access to education for migrants and their children is a major benefit of moving, and frequently is the major reason for moving.

The urbanization of Asia and the Pacific is creating much more complex economies and social systems that require more sophisticated planning and management than in the past. It is the failure of that

planning and management, rather than any inherent quality of urbanization, that has produced the readily apparent urban problems of unemployment, inadequate shelter and other physical infrastructure, and deteriorating environment and quality of life.

In spite of the severe problems faced by cities in the region, it is urban-based industry and services that contribute most to economic output and growth in the region. As the region will soon be predominantly urban, it is imperative that solutions to urban problems be found in order to afford a reasonable quality of life to the populations of countries in Asia and the Pacific.

I. Trends in Urbanization in the ESCAP Region

A. Percentage Urban

If the percentage urban follows an S-shaped curve, beginning gradually, then rising steeply, then slowly levelling off, urbanization in the Asian and Pacific region is currently on the steepest part of the curve. According to the most recent United Nations urban projections, 33.3 per cent of the population of the region lived in urban areas in 1990 (Table 1). That proportion will have risen to 41.4 per cent by the end of the century, and is projected to reach 48.4 per cent by 2010.

Such regional averages should be interpreted with caution, however, because of problems arising from the concept and definition of urban areas.

Clearly, the concept of an urban area is not uniform across the vast ESCAP region. In the developed countries of the region, persons residing in rural areas generally have high incomes and access to a wide range of services such as electricity, telephones, schools and health care. On the other hand, in some of the least developed countries, a majority of the residents of some urban areas work in agriculture and have very limited access to telephones, a water and sewerage system, and good quality education and health care.

Another discrepancy in cross-national comparisons occurs because the definitions of urban areas employed by different countries vary widely. Urban definitions within countries also are subject to change over time.

In Japan, for example, urban areas are defined to be urban municipalities, which usually have 30,000 or more inhabitants. In Thailand, urban areas are defined as designated municipalities. In 1980 their population equalled 17.0 per cent of the total. These exclude many smaller areas of an urban nature, however. If urban sanitary districts, with a total population of 2.96 million, were included, the proportion urban would have equalled 23.6 per cent.

In the Republic of Korea, Thailand and many other countries, much recent growth has occurred on the edges of designated urban areas. As a consequence, sizeable populations of an urban nature are recorded as rural residents in population censuses.

By way of contrast, in the Philippines, a *barangay* (the smallest political unit) with at least 1,000 persons may be considered urban if it has a street pattern, six establishments and three public buildings (Philippines, no date).

In China the number of persons in urban areas increased from 206 million in 1982 to 540 million in 1989 according to official definition. Most of the increase resulted from changing definitions, however, as city boundaries were greatly enlarged to incorporate rural areas and the criteria for classifying small locations as towns were liberalized (Goldstein and Goldstein 1991).

Because of the effect that the large population of China has on regional and subregional averages, it is often useful to consider trends in those areas separate from China. Aside from China, East Asia is highly urbanized and further urbanization will be gradual, although the pace of urbanization in the Republic of Korea is expected to remain rapid for the remainder of this decade (Table 1).

TABLE 1
Percentage of Population Residing in Urban Areas, by Subregion and Country or Area, 1980–2020

Subregion, country or area[a]	*1980*	*1990*	*2000*	*2010*	*2020*
ESCAP	25.4	33.3	41.4	48.4	55.1
East Asia	26.9	39.1	51.2	59.1	65.0
China	19.6	33.4	47.3	56.1	62.8
Hong Kong	91.6	94.1	95.7	96.6	97.1
Japan	76.2	77.0	77.7	78.8	79.9
Mongolia	51.4	52.3	55.1	60.2	66.4
Republic of Korea	56.9	72.0	81.4	86.1	88.3
South-east Asia	24.0	29.9	36.9	44.4	51.9
Cambodia	10.3	11.6	14.5	19.7	26.5
Indonesia	22.2	30.5	39.5	47.7	55.3
Lao PDR	13.4	18.6	25.1	32.6	40.6
Malaysia	34.7	43.0	51.2	58.4	64.8
Myanmar	24.0	24.8	28.4	35.4	43.4
Philippines	37.4	42.6	48.8	55.6	62.4
Singapore	100.0	100.0	100.0	100.0	100.0
Thailand	17.3	22.6	29.4	37.3	45.2
Vietnam	19.3	21.9	27.1	34.8	42.8
South Asia	23.1	27.3	32.8	39.9	47.7
Afghanistan	15.7	18.2	22.2	28.2	35.9
Bangladesh	11.3	16.4	22.9	30.3	38.2
Bhutan	3.9	5.3	7.8	11.4	16.2
India	23.1	27.0	32.3	39.3	47.3
Iran, Islamic Rep. of	49.6	56.7	63.4	69.4	74.2
Nepal	6.1	9.6	14.3	20.0	26.8
Pakistan	28.1	32.0	37.9	45.4	53.1
Sri Lanka	21.6	21.4	24.2	30.7	38.6
Pacific	71.2	70.6	71.3	73.3	75.9
Australia	85.8	85.5	86.4	88.3	90.1
Fiji	37.7	39.3	42.8	48.7	56.1
New Zealand	83.3	84.0	85.2	87.0	89.0
Papua New Guinea	13.1	15.8	20.2	26.7	34.3

[a] The subregions contain some small populations of areas which are not members of ESCAP.

SOURCE: *World Urbanization Prospects 1990* (United Nations publication, Sales No. E. 91. XIII. 11).

In terms of urbanization, the Pacific is essentially two subregions. Australia and New Zealand are both at least 84 per cent urban, while the remainder of the Pacific is well under 50 per cent urban.

South-east and East Asia are both currently less than 30 per cent urban, although Malaysia and the Philippines are both 43 per cent urban, and the proportion in the Islamic Republic of Iran is 57 per cent. The least urbanized countries in Asia are Bhutan, 5.3 per cent; Nepal, 9.6 per cent; and Cambodia, 11.6 per cent.

B. Urban Growth Rates

The growth rate of the urban population in the ESCAP region equalled 4.5 per cent a year during the period 1980–1985 but is projected to decline to 4.2 per cent during the period 1990–1995, and to drop sharply to 3.1 per cent in the period 2000–2005 (Table 2). The declines in the urban growth rate greatly exceed those projected for the total population. The growth rate of the total population is estimated to remain at 1.8 per cent per annum both between 1980 and 1985 and between 1990 and 1995. By the period 2000–2005, the growth rate is projected to decline to 1.4 per cent.

These contrasting growth rates indicate that the pace of urbanization is slowing in the region. As will be seen later, that conclusion is somewhat misleading because the high growth rate of the urban population in China during the period 1980–1985 (resulting primarily from changes in the definition of urban areas) strongly affects the average growth rate for the region. In fact, in South-east and South Asia, although urban growth rates are declining, the pace of urbanization is accelerating because rural growth rates are declining more rapidly.

In general, rates of urban growth in the region are higher in countries at a low level of urbanization (compare Tables 1 and 2). The growth of the urban population during the period 1990–1995 is projected to equal or exceed 4.5 per cent per annum in Bangladesh, Bhutan, China, Indonesia, Lao People's Democratic Republic, Nepal, Pakistan and Papua New Guinea.

Conversely, in areas which have reached a high level of urbanization, urban growth rates are currently low. The rate of urban growth during the period 1990–1995 is projected to be under 1.5 per cent a year in Australia, Hong Kong, Japan, New Zealand and Singapore, each one a developed economy.

C. Rural growth rates

Until the last decade, the ESCAP region remained at a low level of urbanization in spite of relatively high rates of urban growth because rural growth rates were also high. Although the urban population of the region grew by an annual average of 3.0 per cent between 1960 and 1980, the proportion urban increased only from 21.5 to 25.4 per cent because the rural population was expanding at an average annual rate of 1.9 per cent.

Since 1980, rural population growth rates have fallen sharply, especially in East and South-east Asia (Table 3) because of declining fertility rates and rural-urban migration. The change in urban definition in China also affected the average rural growth rates of East Asia and the ESCAP region.

The rate of growth of the rural population in South Asia for the period 1990–1995 is projected to equal 1.6 per cent and to exceed 1.0 per cent in every country except the Islamic Republic of Iran. In South-east Asia, on the other hand, the average rate is projected to equal 0.95 per cent, with rates of well under 1.0 per cent in Indonesia, Malaysia and Thailand.

In East Asia, the rural population has been declining at least since 1980 in China, Hong Kong, and the Republic of Korea. In Japan the growth rate of the rural population is essentially zero and will soon become increasingly negative. Only in Mongolia is the rural population currently expanding at a substantial rate.

TABLE 2
Average Annual Rate of Change of Urban Population by Subregion and Country or Area, 1980–2025
(Percentages)

Subregion, country or area[a]	*1980–85*	*1990–95*	*2000–05*	*2010–15*	*2020–25*
ESCAP	4.50	4.16	3.08	2.39	1.96
East Asia	4.93	4.36	2.50	1.52	1.22
China	6.72	5.41	2.89	1.76	1.42
Hong Kong	1.88	1.05	0.44	0.12	–0.12
Japan	0.81	0.50	0.44	0.01	–0.20
Mongolia	2.94	3.09	3.24	3.16	2.58
Republic of Korea	3.97	2.32	1.40	0.67	0.39
South-east Asia	4.33	4.09	3.47	2.84	2.32
Cambodia	3.55	4.20	4.31	4.49	3.69
Indonesia	5.37	4.56	3.36	2.60	2.13
Lao PDR	5.59	6.01	5.13	4.03	3.21
Malaysia	4.87	4.11	2.88	2.37	1.97
Myanmar	2.13	3.23	3.84	3.51	2.84
Philippines	3.97	3.61	3.17	2.72	2.09
Singapore	1.16	1.08	0.64	0.42	0.18
Thailand	4.66	4.02	3.70	2.99	2.36
Vietnam	3.22	4.16	4.39	3.47	2.98
South Asia	4.15	4.03	3.87	3.33	2.64
Afghanistan	–0.47	8.50	4.50	4.19	3.41
Bangladesh	6.57	6.14	5.37	4.09	3.31
Bhutan	4.71	5.94	6.09	5.55	4.64
India	3.80	3.82	3.66	3.22	2.57
Iran, Islamic Rep. of	5.43	3.20	3.49	2.76	2.00
Nepal	7.20	6.47	5.51	4.46	3.72
Pakistan	5.01	4.48	4.28	3.67	2.79
Sri Lanka	1.23	2.19	3.16	3.40	2.74
Pacific	1.37	1.41	1.36	1.31	1.11
Australia	1.32	1.26	1.14	1.03	0.82
Fiji	2.36	2.21	2.48	2.41	1.88
New Zealand	0.93	0.94	0.80	0.72	0.53
Papua New Guinea	4.03	4.61	4.69	4.25	3.51

[a] The subregions contain some small populations of areas which are not members of ESCAP.
SOURCE: *World Urbanization Prospects 1990* (United Nations publication, Sales No. E. 91. XIII. 11).

TABLE 3
Average Annual Rate of Change of Rural Population by Subregion and Country or Area, 1980–2025
(Percentages)

Subregion, country or area[a]	*1980–85*	*1990–95*	*2000–05*	*2010–15*	*2020–25*
ESCAP	0.80	0.51	0.08	–0.31	–0.64
East Asia	–0.39	–0.94	–1.19	–1.04	–1.18
China	–0.37	–0.94	–1.22	–1.07	–1.22
Hong Kong	–1.93	–2.54	–2.10	–1.59	–1.66
Japan	0.26	0.04	–0.15	–0.52	–0.39
Mongolia	2.57	2.21	1.39	0.47	0.03
Republic of Korea	–2.70	–3.48	–2.53	–1.31	–1.53
South-east Asia	1.45	0.95	0.28	–0.21	–0.54
Cambodia	2.47	1.92	0.88	0.62	0.02
Indonesia	1.00	0.48	–0.17	–0.46	–0.73
Lao PDR	1.73	2.13	1.41	0.54	–0.06
Malaysia	1.29	0.75	–0.09	–0.40	–0.61
Myanmar	2.08	1.71	0.93	0.09	–0.35
Philippines	1.79	1.22	0.48	–0.13	–0.57
Singapore	...	...	...	...	...
Thailand	1.38	0.50	0.11	–0.37	–0.78
Vietnam	1.93	1.62	0.74	0.03	–0.23
South Asia	1.87	1.59	0.88	0.09	–0.38
Afghanistan	–2.32	6.25	1.49	0.57	0.01
Bangladesh	2.19	1.93	1.48	0.53	–0.03
Bhutan	1.67	2.04	1.93	1.45	0.72
India	1.70	1.40	0.71	–0.09	–0.51
Iran, Islamic Rep. of	2.58	0.35	0.77	0.30	–0.31
Nepal	2.25	1.85	1.31	0.60	0.06
Pakistan	3.33	2.06	1.26	0.53	–0.13
Sri Lanka	1.79	1.00	0.29	–0.16	–0.59
Pacific	1.83	1.24	0.53	–0.02	–0.37
Australia	1.83	0.75	–0.34	–0.89	–1.05
Fiji	1.70	1.05	0.35	–0.64	–0.95
New Zealand	0.42	0.18	–0.56	–1.23	–1.40
Papua New Guinea	2.01	1.81	1.21	0.58	0.06

[a] The subregions contain some small populations of areas which are not members of ESCAP.
SOURCE: *World Urbanization Prospects 1990* (United Nations publication, Sales No. E. 91. XIII. 11).

D. Pace of Urbanization

Of the possible measures of the pace of urbanization, perhaps the most intuitively understandable is the difference between the growth rate of the urban population and that of the rural population, commonly referred to as the urban-rural growth difference, or URGD.

As shown in Table 4, the URGD in the ESCAP region has remained essentially constant at about 3.7 between the periods 1980–1985 and 1990–1995. The URGD is then projected to decline to 3.0 in the period 2000–2005. That decline is not representative of the entire region, however. Rather, it results from a sharp drop in East Asia that overshadows smaller increases in the other three subregions. In East Asia, large declines in the URGD are expected over the next decade in China, Hong Kong and the Republic of Korea.

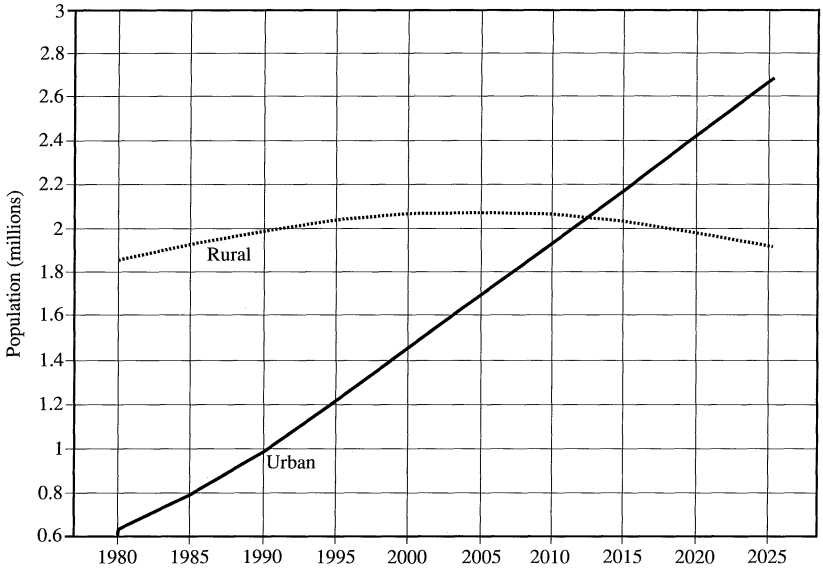
In South-east Asia, the URGD is expected to increase slightly up to the period 2000–2005, and then to begin declining gradually. The pace of urbanization is expected to decline substantially in Indonesia and Malaysia over the next decade, but to increase substantially in Cambodia, Myanmar, the Philippines and Vietnam.

In South Asia, the pace of urbanization is projected to increase until the period 2010–2015, when it will reach 3.2. The trend in South Asia is propelled by that for India, which will increase to 3.3 by the period 2010–2015. Aside from India, only Afghanistan and Sri Lanka, two countries with small urban populations, will continue to experience substantial increases in the pace of urbanization between the periods 2000–2005 and 2010–2015.

Each of the four Pacific countries shown in Table 4 is projected to experience large increases in the pace of urbanization both during the next decade and the following decade.

In the region as a whole, the pace of urbanization will be supported by the declining rural population after 2005. The region will become 50 per cent urban soon after 2010 (Figure 1).

FIGURE 1
Urban and Rural Population of
ESCAP region, 1980–2025



SOURCE: *World Population Prospects 1990* (United Nations publication, Sales No. E. 91. XIII. 4), p. 292.

TABLE 4
Difference between Urban and Rural Average Annual Population Growth Rates, by Subregion and Country or Area, 1980–2025
(Percentages)

Subregion, country or area[a]	*1980–85*	*1990–95*	*2000–05*	*2010–15*	*2020–25*
ESCAP	3.69	3.66	3.00	2.69	2.60
East Asia	5.32	5.29	3.69	2.57	2.41
China	7.09	6.35	4.12	2.83	2.64
Hong Kong	3.81	3.59	2.54	1.71	1.54
Japan	0.54	0.45	0.59	0.53	0.19
Mongolia	0.36	0.88	1.85	2.69	2.55
Republic of Korea	6.67	5.80	3.93	1.98	1.92
South-east Asia	2.88	3.14	3.19	3.04	2.86
Cambodia	1.08	2.28	3.43	3.87	3.67
Indonesia	4.37	4.08	3.53	3.07	2.86
Lao PDR	3.86	3.88	3.72	3.49	3.27
Malaysia	3.59	3.37	2.97	2.76	2.58
Myanmar	0.05	1.52	2.90	3.42	3.19
Philippines	2.18	2.39	2.70	2.85	2.66
Singapore	1.16	1.08	0.64	0.42	0.18
Thailand	3.28	3.51	3.59	3.36	3.14
Vietnam	1.29	2.54	3.65	3.43	3.21
South Asia	2.29	2.44	2.98	3.24	3.02
Afghanistan	1.85	2.26	3.01	3.62	3.40
Bangladesh	4.38	4.21	3.89	3.56	3.34
Bhutan	3.04	3.90	4.16	4.10	3.92
India	2.09	2.41	2.94	3.31	3.08
Iran, Islamic Rep. of	2.85	2.85	2.72	2.46	2.32
Nepal	4.95	4.62	4.20	3.85	3.66
Pakistan	1.69	2.42	3.02	3.13	2.92
Sri Lanka	–0.56	1.19	2.88	3.55	3.33
Pacific	–0.46	0.17	0.83	1.33	1.48
Australia	–0.50	0.50	1.48	1.92	1.87
Fiji	0.67	1.16	2.13	3.05	2.83
New Zealand	0.51	0.76	1.36	1.94	1.92
Papua New Guinea	2.02	2.81	3.48	3.66	3.45

[a] The subregions contain some small populations of areas which are not members of ESCAP.
SOURCE: *World Urbanization Prospects 1990* (United Nations publication, Sales No. E. 91. XIII. 11).

E. Urban Concentration

A paradox of urbanization in the ESCAP region is that although the region is only one third urban it contains many of the world's largest cities. In 1990, five of the ten largest urban agglomerations in the world were in Asia, as well 11 of the 20 largest and 16 of the 30 largest agglomerations (Table 5). During the decade of the 1990s, the proportion of large agglomerations in Asia will increase to equal six of the largest ten, 11 of the largest 20, and 17 of the largest 30.

The number and size of urban agglomerations in India is worth noting. The number among the 30 largest is projected to increase from four to five by the year 2000 as Bangalore exceeds 8 million population. During the 1990s, Delhi is likely to join Calcutta and Bombay on the list of the world's ten largest urban agglomerations.

The ESCAP region contains 106 cities with populations of at least one million persons. Thirty-eight of these are in China and 24 in India. There are six cities with at least a million population in each [of these countries:] Indonesia, Japan, Pakistan and the Republic of Korea (United Nations 1989).

The large cities in India are also noteworthy for their high rates of growth. During the period 1990–1995, nine cities in Asia exceeding a population of one million are projected to grow by more than 5 per cent a year. Four of those are in India: Bangalore, Bhopal, Patna and Surat. Another 16 large cities are projected to grow at a rate between 4 and 5 per cent a year, and six of those are in India.

F. Components of Urban Growth

During the period 1980–1985, only 38 per cent of the urban growth in the ESCAP region resulted from natural increase, with the remainder coming from rural-to-urban migration and the reclassification of rural areas as urban areas (Table 6). The proportion of urban growth resulting from natural increase is projected to increase only to 41 per cent during the period 1990–1995 and to 43 per cent during the period 2000–2005.

In fact, these figures are greatly influenced by the urban population of China, which increased by 6.7 per cent per annum between 1980 and 1985, with most of the change attributable to changes in the definition of urban areas. The proportion of urban growth in China attributable to natural increase is also low because of the low crude birth rate in that country.

If China is excluded from the calculations, the proportion of urban growth in the ESCAP region resulting from natural increase equalled 62.8 per cent during the period 1980–1985, and is projected to equal 58.8 per cent during the period 1990–1995 and 50.4 per cent during the period 2000–2005. If China is again excluded, the share of urban growth resulting from natural increase in East Asia equals about two-thirds in each of the three periods observed.

The estimates in Table 6 were obtained by assuming that the rate of natural increase (RNI) in the urban areas of a country equals that for the whole country. This assumption overestimates the contribution that natural increase makes to urban growth if the urban RNI is lower than the national RNI.

In South-east Asia, South Asia, and the Pacific, the share of urban growth contributed by net migration and reclassification is projected to increase between the periods 1980–1985 and 2000–2005. In South-east Asia, that proportion is projected to increase from 51 to 58 per cent. In South Asia it is expected to increase from 44 to 47 per cent. In the Pacific, which is highly urbanized, the proportion of urban growth resulting from net migration and reclassification is projected to increase from 14 per cent in the period 1980–1985 to 34 per cent during the period 2000–2005.

In sum, migration and reclassification will account for roughly half of urban growth in South-east and South Asia during the period 2000–2005, and about one third of urban growth in East Asia (excluding China) and the Pacific.

TABLE 5

World's 30 Largest Urban Agglomerations, Ranked by Population Size in Millions, 1990 and 2000

Rank	*Agglomeration*	*Country*	*1990*	*Agglomeration*	*Country*	*2000*
1	Mexico City	Mexico	20.2	Mexico City	Mexico	25.6
2	Tokyo	Japan	18.1	Sao Paulo	Brazil	22.1
3	Sao Paulo	Brazil	17.4	Tokyo	Japan	19.0
4	New York	United States of America	16.2	Shanghai	China	17.0
5	Shanghai	China	13.4	New York	United States of America	16.8
6	Los Angeles	United States of America	11.9	Calcutta	India	15.7
7	Calcutta	India	11.8	Bombay	India	15.4
8	Buenos Aires	Argentina	11.5	Beijing	China	14.0
9	Bombay	India	11.2	Los Angeles	United States of America	13.9
10	Seoul	Republic of Korea	11.0	Jakarta	Indonesia	13.7
11	Beijing	China	10.8	Delhi	India	13.2
12	Rio de Janeiro	Brazil	10.7	Buenos Aires	Argentina	12.9
13	Tianjin	China	9.4	Lagos	Nigeria	12.9
14	Jakarta	Indonesia	9.3	Tianjin	China	12.7
15	Cairo	Egypt	9.0	Seoul	Republic of Korea	12.7
16	Moscow	USSR	8.8	Rio de Janeiro	Brazil	12.5
17	Delhi	India	8.8	Dhaka	Bangladesh	12.2
18	Osaka	Japan	8.5	Cairo	Egypt	11.8
19	Paris	France	8.5	Metro Manila	Philippines	11.8
20	Metro Manila	Philippines	8.5	Karachi	Pakistan	11.7
21	Lagos	Nigeria	7.7	Bangkok	Thailand	10.3
22	Karachi	Pakistan	7.7	Istanbul	Turkey	9.5
23	London	United Kingdom	7.4	Moscow	USSR	9.0
24	Bangkok	Thailand	7.2	Osaka	Japan	8.6
25	Chicago	United States of America	7.0	Paris	France	8.6
26	Teheran	Iran, Islamic Rep. of	6.8	Teheran	Iran, Islamic Rep. of	8.5
27	Istanbul	Turkey	6.7	Bangalore	India	8.2
28	Dhaka	Bangladesh	6.6	Lima	Peru	8.2
29	Lima	Peru	6.2	Madras	India	7.8
30	Madras	India	5.7	London	United Kingdom	7.5

SOURCE: *World Urbanization Prospects 1990* (United Nations publication, Sales No. E. 91. XIII. 11), p. 186.

TABLE 6
Components of Urban Growth, by Country or Area
(Percentage of urban growth)

Subregion, country or area[a]	*1980–1985*		*1990–1995*		*2000–2005*	
	Natural increase	*Migration and reclassification*	*Natural increase*	*Migration and reclassification*	*Natural increase*	*Migration and reclassification*
ESCAP	37.8	62.2	40.7	59.3	42.6	57.4
East Asia	21.9	78.1	28.0	72.0	30.3	69.7
China	15.9	84.1	23.7	76.3	27.2	72.8
Hong Kong	61.0	39.0	58.2	41.8	75.3	24.7
Japan	81.5	18.5	78.5	21.5	70.3	29.7
Mongolia	93.6	6.4	85.6	14.4	73.4	26.6
Republic of Korea	35.5	64.5	38.8	61.2	50.7	49.3
South-east Asia	49.1	50.9	44.9	55.1	41.7	58.3
Cambodia	70.9	29.1	49.5	50.5	30.6	69.4
Indonesia	35.2	64.8	37.0	63.0	36.7	63.3
Lao PDR	43.8	56.2	44.7	55.3	43.8	56.2
Malaysia	50.3	49.7	52.4	47.6	50.0	50.0
Myanmar	110.0	–10.0	63.2	36.8	44.5	55.5
Philippines	66.0	34.0	62.4	37.6	57.0	43.0
Singapore	100.1	–0.1	100.1	–0.1	98.9	1.1
Thailand	39.6	60.4	31.4	68.6	31.2	68.8
Vietnam	71.7	28.3	50.5	49.5	38.1	61.9
South Asia	56.0	44.0	54.4	45.6	47.0	53.0
Afghanistan	–589.1	689.1	30.4	69.6	46.1	53.9
Bangladesh	37.6	62.4	39.9	60.1	41.9	58.1
Bhutan	41.5	58.5	34.8	65.2	34.1	65.9
India	55.6	44.4	52.1	47.9	44.8	55.2
Iran, Islamic Rep. of	56.0	44.0	81.4	18.6	71.0	29.0
Nepal	31.9	68.1	32.5	67.5	32.6	67.4
Pakistan	69.0	31.0	67.8	32.2	54.9	45.1
Sri Lanka	170.8	–70.8	66.8	33.2	33.6	66.4
Pacific	85.5	14.5	74.8	25.2	66.2	33.8
Australia	61.9	38.1	52.6	47.4	45.7	54.3
Fiji	96.2	3.8	78.8	21.2	58.9	41.1
New Zealand	85.0	15.0	79.4	20.6	66.7	33.3
Papua New Guinea	54.3	45.7	46.3	53.7	39.1	60.9

[a] The contribution of natural increase is calculated by assuming that the urban population has the same rate of natural increase as the national or regional population. The category of migration and reclassification is calculated as a residual.

SOURCE: *World Urbanization Prospects 1990* (United Nations publication, Sales No. E. 91. XIII. 11).

II. Challenges of Urbanization

A. Urban administration

1. Decision making The urbanization of Asian and Pacific populations, concomitant with their industrialization, holds the promise of human development that would increase each individual's contribution to social and personal well-being. It is in urban areas, with all of their ills, that education, health standards, productivity and income are higher. The concentration and agglomeration of population that are the distinguishing features of urbanization allow for more cost-effective delivery of educational and health services, and employment opportunities.

Yet, because of rapid urbanization, governments are often overwhelmed by the demand for such services. As a result, high proportions of urban populations sometimes live in slum and squatter settlements. These are frequently marked by high person to room ratios, lack of private or adequate public toilet facilities, and no drainage or open drainage facilities. As a consequence, the slum environment is extremely prone to disease.

One reason that governments are unable to meet the demand for public infrastructure and social services is that those are provided to a much lesser degree in rural areas. Thus, when a person moves from a rural to an urban area, a demand for the government to provide shelter, sanitation and health care is created where none existed before.

Another reason that governments lag behind in providing urban infrastructure and services is that national governments are normally responsible for education and health services, and often for public infrastructure as well, but the demand is localized. Thus, cities that are affected by burgeoning populations frequently do not have the authority to meet many of the basic requirements of their people.

In some countries of the region, governors and mayors are appointed by the central government, and members of parliament elected from a constituency are not required to be resident there. In such cases, urban areas effectively lose their voice in national affairs that determine social and infrastructure projects.

Managing large cities is complex because they usually cover several local municipalities and parts of more than one province. Special administrative structures are then required for urban management. In some cases the central government directly controls metropolitan government, as in Beijing and Shanghai. The metropolitan area may be designated a special province in which local and provincial governments are merged into one, as in Bangkok and Jakarta. Other approaches followed in the region include a two-tier system, creation of a development authority, a single-tier metropolitan government, and intermunicipality government (Cheema 1987).

In order to enhance urban institutional capabilities, Cheema (1987) recommends a number of measures, beginning with strengthening administrative capacities of urban local governments. He also recommends that the roles of special authorities in urban development be redefined and that linkages be established between the existing institutions with redefined responsibilities. Cheema further recommends a division of responsibilities among the levels of urban management, streamlining co-ordination systems in cities, reorganizing the internal structures of special authorities, ensuring community participation and investing in training and human resources development.

2. Financial management The most important requirement for effective urban management is the ability of an urban government to control its financial resources needed to support the city administration, maintain infrastructure, make investments and service debt. Yet this is one of the most problematic areas for urban governments. They are frequently called upon to provide greater services

and infrastructure but not allowed the means to increase revenues sufficiently for these purposes. Central governments tend to retain the more elastic revenue sources, such as income and sales taxes, leaving the less elastic sources to local governments (Linn 1987).

Experience in Asian cities has shown that some revenue sources may be employed effectively by urban governments. One of these is a property tax. To be administered well, the property tax requires good land mapping and cadastral services. Increases in tax rates usually encounter political opposition, but the property tax is a relatively equitable instrument because property owners are most likely to benefit from provision of urban services and infrastructure.

Taxation of motor vehicles is also an effective source of revenue. Automobile ownership is expanding rapidly in most cities of the region and their use is a major cause for public expenditure.

A source of revenue usually not fully exploited is user charges for urban services. For political reasons, water, electricity, transport, sewerage, and solid-waste disposal are frequently provided at subsidized rates. In fact, full charges for these services are fair and indicate to users their economic costs (Linn 1987).

As a substantial proportion of urban revenues consists of transfers from the central government, the criteria for distribution of public sector finance should be changed to take into account factors such as population, per unit cost of services, density of population, and the cost of maintaining existing services (Cheema 1987).

B. Urban infrastructure

1. Housing Perhaps the major urban problem in the ESCAP region is the shortage of affordable housing for low-income households. As a consequence, in many cities in the region, a third or more of the population lives in slums and squatter settlements. Thus, high proportions of urban populations live in overcrowded and unsanitary conditions, many in one-room dwellings without running water or toilet facilities. The problem of housing is exacerbated because many of the dwellings are temporary or semi-permanent.

The conventional approach to problems of shelter used to be for governments to carry out public housing programmes. These usually met only a small percentage of the demand, however, because the standards and prices were set above what low-income families could afford. Thus, such programmes benefited mainly the better-off segments of the urban population (Linn 1987).

Because of these problems, the United Nations Centre for Human Settlements (HABITAT 1987, p. 175) recommends that squatter-settlement upgrading and sites-and-services schemes should be affordable for the urban poor. Projects should be self-financing and have high levels of cost recovery. Projects should lead to the gradual improvement of housing on the basis of realistic standards and low overall costs.

HABITAT also recognizes that a settlement requires the integration of housing with the social and economic environment of the community. Thus, it recommends that projects provide for income generation and employment creation and that they provide for systematic and coordinated delivery of physical and social infrastructure.

An important issue in the provision of housing is the proper role of the public sector. Linn (1987, p. 245) argues that, "Public intervention in the urban housing sector works best when it permits the private housing supply to expand and itself provides those elements of housing that the public sector is best equipped to supply — in particular public services at rates that most of the urban population can afford."

2. *Transport and communications* Transport requirements grow much more rapidly than city populations because as a city grows there is usually an increase in personal incomes, in distances travelled and in the complexity of transport routes. Most countries in the region have exacerbated transport congestion by implementing policies biased toward automobile transport. These policies have resulted in increased traffic congestion and made travel by low-income persons more difficult because road construction has diverted funds away from modes of transport that would benefit the society as a whole. Measures to improve traffic flow often restrict other forms of transport by narrowing footpaths and banning slower vehicles such as pedicabs and motorized rickshaws.

International experience indicates that rates of automobile ownership can be influenced by taxation of motor vehicles and gasoline. Such monetary disincentives may have limited impact, however, if feasible alternative means of transport are not available.

The most important form of mass transit in most Asian cities is bus transportation. In spite of this, many public bus services provide poor service and operate at a loss. In contrast, private transport services using minibuses, three-wheeled vehicles and motorcycles operate at a profit because they are better adapted to the market in terms of vehicle size and routes.

Rapid-rail mass transit is a subject of intense debate. Such systems clearly can transport large numbers of people quickly over long distances, but their cost per passenger kilometre are much higher than for other forms of urban transport. Such systems are rarely self-supporting, so that it is questionable if they are more beneficial to an urban area than other modes of transport (Linn 1987, pp. 237–244).

Many experts feel that transportation will remain a problem as long as cities continue to grow richer and are based on a predominant city centre. They recommend that urban agglomerations be restructured into largely self-contained modules so as to reduce the need for long distance journeys. They recommend avoiding single-purpose zoning patterns that separate large residential areas from zones of concentrated employment and service centres (HABITAT 1987, p. 155).

Communications become more complex as city size increases and can easily become a bottleneck for economic growth. HABITAT recommends that communications not be viewed merely as a service demand in urban areas, but that they be used to bring about an efficient use of resources. As such, communications planning must be integrated with investment and strategies in other sectors (HABITAT 1987, p. 160).

3. *Land use* HABITAT (1987, p. 130) has estimated that the size of built-up urban areas in developing countries will more than double between 1980 and the year 2000. Thus, increased pressure will be put on land prices which had soared prior to 1980.

Urban land prices in Seoul increased at an average annual rate of 34.5 per cent between 1963 and 1974, when the consumer price index rose at a rate of 11.9 per cent. In New Delhi between 1957 and 1977, the two rates of increase were 24.3 and 6.4 per cent, respectively. In Manila between 1973 and 1977, the rates of increase were 21.5 and 13.3 per cent (HABITAT 1987, p. 131).

Urban land prices have increased much more rapidly than population or cost of living because of obstacles to bringing adequate amounts of land steadily into economic use. In some countries the land-delivery system is weak because of a poorly developed land market, unclear or inefficient land transaction procedures and the lack of alternative avenues for investment.

Land speculation could be curbed by taxation, to bring the profitability of land transactions in line with the returns from other investments with similar levels of risk.

Governments may also improve the land-delivery system by modernizing cadastral and land registration systems so as to speed up land development. Public agencies can also increase the supply of serviced land by accelerating the provision of basic urban infrastructure to new areas and providing transport to them (HABITAT 1987, pp. 130–145).

4. Water and waste disposal systems Only about half of the population of the ESCAP region (excluding China) in 1983 had access to safe drinking water and only one-fifth had sanitation services. On average, the situation is better in urban than rural areas. In urban areas, 67 per cent of the population had safe drinking water and 48 per cent had sanitation services. In rural areas, the respective percentages were 44 and 9 (HABITAT 1987, pp. 78–83).

Regional averages conceal wide disparities between and within cities. Slums and squatter settlements are the most poorly served. In Jakarta, for example, in 1985 less than 25 per cent of the population had access to piped tap water, with the percentage varying from 42 in Central Jakarta to 14 in North Jakarta (Selvaratnam 1991, p. 28).

Selvaratnam (1991, p. 28) argues that the water supply shortage in most of the large Indian cities has reached near crisis proportion. He notes that water supply in Bombay is often restricted to between two and eight hours per day and that water supply in Madras is 40 per cent below the requisite level.

Selvaratnam further points out that in Delhi only about 30 per cent of the population has access to water-borne sewerage and that virtually no one in unauthorized colonies is so served. He indicates that in both Dhaka and Karachi water-borne sewerage systems serve about 20 per cent of the population.

HABITAT (1987, p. 82) states that there are no reliable statistics on solid-waste management coverage in developing countries but that between 25 and 55 per cent of all solid-waste generated in large cities is collected by municipal authorities.

5. Environment The administrative and infrastructural weaknesses described above, particularly in the large cities of the region, have led to severe environmental degradation that extends far beyond the boundaries of those cities. The lack of water, sewerage and solid-waste systems can contribute to flooding and disease. The emphasis on automobile transport causes traffic congestion and air pollution.

Large cities affect the environment in rural areas. Their demand for food and fuel leads to soil erosion and deforestation, although it is not likely that less deforestation would occur if the population remained in rural areas. Pollutants discharged into the air and water in large cities affect the environment and livelihood of people over great distances.

Rees (1987, pp. 229–231) states that the solution to these problems calls for dynamic environmental planning and management strategies that provide for continuous and interactive adjustment to political and social as well as physical and economic factors. He argues that urban environmental problems make it necessary to implement environmental policies on an integrated basis. He calls for three major activities in environmental policy making. The first is to ensure that suitable environmental practices are integrated in the design and planning of development projects. The second is to create an integrated environmental regional master plan. The third activity is to carry out physical development programmes to alleviate existing environmental problems, for example, water resources management, drainage, flood control, pollution abatement and waste management.

C. Conclusion

Urbanization of Asian and Pacific nations provides the potential for economic prosperity and an improved quality of life for their populations. For that potential to be realized will require solutions to severe problems of administration and physical infrastructure that plague nearly all large cities in the region.

To solve those problems will require substantial restructuring of policy and planning arrangements and of the physical shape of cities. Much greater decision-making power must be transferred from central governments to regional and municipal bodies. Local communities need to have more involvement in planning, management and revenue collection. For this to happen will require greater political representation of municipal areas.

The greater complexity of management, services and infrastructure in large urban agglomerations necessitates greater cooperation between various administrative areas and levels.

Economic growth has been the guiding principle of national development planning in the region, but has led to rapid urbanization and an unsatisfactory quality of life for much of the urban population. Future national and urban planning should adopt guiding principles that stress human resources development, the environment and quality of life.

NOTE

The above documentation was first circulated as a Note by the Secretariat at the Pre-Conference Seminar on Migration and Urbanization: Inter-relationships with Socio-economic Development and Evolving Policy Issues. This meeting was organized by the United Nations Economic and Social Commission for Asia and the Pacific and the United Nations Population Fund held on 21–25 January 1992 in Seoul. It is being prepared as a United Nations publication which will be available at the Fourth Asian and Pacific Population Conference which is scheduled to be held in Bali, Indonesia in August 1992. This document is published in good faith without formal editing as a timely service to readers as well as a service to UNESCAP/UNPF.

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Address by His Excellency President Soeharto of the Republic of Indonesia at the United Nations Conference on Environment and Development

Rio de Janeiro, 12 June 1992

Mr Chairman, Excellencies, Distinguished Delegates, Ladies and Gentlemen,

It is indeed a distinct honour and pleasure for me to participate in this historic and auspicious Summit. The exquisite natural setting and striking beauty of Rio de Janeiro underscores the truly important and universal significance of the purposes for which we are gathered at this Earth Summit. I should therefore like to take this opportunity to thank the Government and people of Brazil for the warm welcome extended to us and the extensive facilities and preparations they have provided for this Conference.

As requested, I shall abbreviate my speech. The unabridged version will be distributed to all delegates. May I ask your kind assistance, Mr. Chairman, to put this on record as my official speech in its entirety.

In an era of pervasive change and profound transformation, the United Nations Conference on Environment and Development stands out as a major milestone for Mankind. No one can deny that the world is facing increased danger of environmental catastrophe, of diminishing quality of life and a grave threat to the long-term survival of the global ecosystem. It is now being increasingly recognized that the problem is global in scope and nature and therefore requires a commensurate, globalized and balanced approach that integrates the efforts and commitments of the entire international community. This requirement is graphically reflected in the various documents now before us for further deliberation and adoption at this Conference.

The relationship between Man and his environment, especially since the Industrial Revolution, has been an exploitative and predatory one. Until the early seventies, little or nothing was done. In the absence of global accountability, greatly accelerated economic activities as well as population pressures combined to erode the carrying capacity of the global ecosystem, to destroy natural resources and habitats, and bring about widespread pollution of air and water as well as the degradation of the soil. Then, twenty years ago, at the first U.N. Conference on Human Environment in Stockholm, the world was put on notice concerning the dangers and impact of such excesses on the global environment. The issue of environmental degradation took centre stage at that Conference. Now, two decades later, with the provisions of the Stockholm Declaration largely unfulfilled and the dangers to the environment still rapidly escalating, the international community is again urgently reminded of this clear and persistent danger, most notably by the World Commission on Environment and Development in its report "Our Common Future".

This Report, together with the findings of many scientists, scholars and environmentalists as well as the indispensable work of the UNEP, has underlined the magnitude of the risks and imminent dangers

confronting Mankind. Alarming statistics, reflecting wasteful patterns of production and consumption, inter alia resulting in global warming and the progressive depletion of the ozone layer, have jolted the world into renewed and heightened concern. Unless these self-destructive practices are halted or drastically reduced, our planet is doomed to ecological catastrophe. Life as we know it is at stake. Conditions in the developing South also have an adverse impact on the environment. But here, degradation of the environment primarily results from population pressures and their corollary, pervasive poverty. The General Assembly responded decisively to the continuing deterioration of the environment in resolution 44/228 by calling for a conference that would initiate steps to reverse these adverse trends and to enable a rapid transition to a sustainable way of life in the 1990s and beyond. The present Conference, while building on the foundation of Stockholm, has also added the dimension of development as an essential corrective to the earlier perspective.

This is indeed a necessary and timely correction. For it is obvious by now that we cannot effectively address the problem of environmental degradation without at the same time resolving the problems of development and in particular of human poverty.

The poor and disadvantaged are unavoidably the first victims of environmental degradation. To lift them from their abject misery is therefore a matter of social justice. Moreover, in response to the imperative of daily survival the poor will, however inadvertently, continue to inflict damage to the environment. It is therefore a matter of practical prudence that they be the major beneficiaries of economic development so that they too will contribute constructively to that development.

We therefore have before us two sets of vital concerns: the environment and development. The integration of these two concerns in practice is central to the purposes of this Conference and would constitute a major breakthrough for Mankind. It should be noted, however, that the ability of the developing countries to tackle global environmental tasks while simultaneously pursuing their development objectives will ultimately depend on whether a supportive economic environment is in place or not. This fact underscores the basic truth that environmental protection should not be undertaken at the expense of development, and that economic development is the fundamental right of all peoples and countries. It logically follows that natural resources in the developing countries should not be designated as global commons while unsustainable consumption patterns in the developed countries are left unresolved. Otherwise the burden of environmental responsibility will be unfairly shifted to the developing countries of the South — which will certainly be unacceptable.

To us, the interaction among development, environment and population is a cornerstone of national policy. We have learned to be concerned not only with population growth rates but also with the quality of the population, the levels of education that the people attain, and the skills and capabilities that they acquire. We have to consider the rights of individuals as they constitute population and a society, such as the right of men and women alike to determine the size of their families, the right to further the interests of the communities to which they belong, and other rights guaranteed under our laws. Such rights, together with the right to development and to obtain the best possible quality of life, as well as the right to a proper social and physical environment, are part of the spectrum of human rights that we uphold.

Mr Chairman,

In this light, let us consider the various decisions and measures that have been proposed for adoption by this Conference. The drafts before us not only define the problems and the steps that will bring us to their solution, but they also specify the rights and obligations of all of us who are committed to the cause of environment and development.

I should like to stress that these obligations must be allocated and shared as equitably as possible. That means that we should take into consideration the differences in levels of financial, technological

and institutional capabilities of all the countries concerned. It seems clear that our common cause will be best served if we continue to develop and share all our human capabilities. This is true of our environmental efforts, and even more so of our development efforts.

Development has many facets, including social and cultural, but development is primarily an economic endeavour comprising the pursuit of material wealth, of income and earning capacity. Aware as we are of the link between development and environment, we are convinced that when a country is able to increase its material wealth and financial resources, to the same degree it is able to strengthen its pursuit of sustainable development. By serving the cause of economic development we thus serve the cause of the environment.

Therefore, a major objective of international cooperation, within as well as outside the context of UNCED, should be to enable the developing countries to reach self-sustained growth and achieve sustainable development within the shortest possible time.

One of the means by which that objective can be attained is for the developing countries to be allowed to obtain better and more equitable prices for the commodities extracted from their natural resources — prices which reflect both environmental and resource-renewal costs. Another way is for developing countries to be allowed to achieve higher value-added earnings by processing the yield of their natural resources themselves before exportation. In brief, it is high time that we abandon the colonial heritage whereby developing countries are relegated to the function of mere plantation economies.

This will not be an easy task since vestiges of colonialism still persist in the patterns of international relations, in the patterns of trade and resource flows which greatly favour the industrialised countries to the inherent disadvantage of the developing countries. And at present we also witness the painful paradox of financial resource flows from the developing to the developed countries exceeding those from the rich to the poor countries.

Indeed the possession of greater wealth and more advanced technology has provided the industrialised countries with the comparative advantage that enables them to unilaterally set the terms of their relations with the developing countries. This has resulted in a further accumulation of material wealth in the industrialised countries, further strengthening their dominant position in the world. This is a vicious spiral that has to be broken.

For today it has become imperative that we undertake joint efforts globally to safeguard the viability of the entire planet. But even in this context, the industrialised nations would still wish to impose their terms on our common efforts. This they do with the full knowledge that all nations, without exception, are under the same threat of an environmental catastrophe. They persist, even in the face of the fact that industrialised countries bear the greater responsibility for the acceleration of global environmental degradation as evidenced by the fact that their consumption patterns are many times more wasteful and waste-producing than those of the developing countries.

This is an inequity that cannot be justified by the certainty that they will have to make substantial financial contributions to the global programme for the environment. The fact is that they also stand to reap substantial benefits that are proportionately larger than all the benefits to be gained by developing countries. It is obvious that the industrialised countries will derive more than just environmental benefits from such a programme. In embarking on these environmental efforts, it is not our purpose to perpetuate the gap between rich and poor countries. Yet that is how it would appear in the light of this inequity. In the process, neither the cause of the environment nor the cause of development will be adequately served.

Such a course of events would relegate the developing countries to second class status in the community of nations. It does not require much imagination to realise that such a situation could become the seedbed for potential global conflict on a scale more perilous than any we have experienced before.

Mr Chairman,

Sustainable development implies the integration of two elements: environment and development. Both must be simultaneously and equally attended to and their respective objectives reconciled and harmonised. One cannot be sacrificed for the sake of the other. And its implementation requires above all the equitable sharing of responsibilities as well as of opportunities.

On the global scale, it requires the re-integration of all our efforts for the sake of preserving and enhancing the viability of this planet at the same time as we pursue global development. We must overcome the disintegrative and centrifugal forces that only serve short-term economic expediency and the self-centred pursuit of material gain. Our common objectives cannot be achieved when nations and peoples become alienated from one another and lose their sense of global solidarity.

We must therefore learn to nurture the habits and practices of global cooperation, to sharpen the awareness of our shared humanity and of the fact that we are the steward of a single vulnerable environment. We must arrive at a new global partnership. We can forge that partnership not only by adopting a global-environmental programme but also by establishing new patterns of relations between nations in terms of trade, in terms of investments, of capital and other resource flows. As we seek to establish such a new global partnership, we will have to reconsider, rethink and perhaps create a new pattern for the division of labour among nations.

We see this Earth Summit as a vital step towards the establishment of that new global partnership. We hope that the Rio Declaration, Agenda 21, and all the other agreements that we will adopt here at this Conference will bring us closer to its realisation. It is therefore vitally important that we ensure the successful implementation of these agreements. This, we believe, will be one of the most important tasks of the United Nations in the coming years.

In this context, we realise that the United Nations System must undergo some necessary adjustments. The United Nations System, after all, was established almost half a century ago when issues were less complex and inter-related than they are today. Already it is difficult enough to monitor and coordinate the myriad efforts of all the UN bodies, agencies and programmes.

This could become a problem of even greater magnitude when it comes to the implementation of a global programme of sustainable development, which is cross-sectoral in nature and spans almost all of the UN agencies and programmes.

We believe that it is essential to establish, within the United Nations, an entity which is mandated and entrusted with the task of coordinating the global pursuit of sustainable development in all its aspects. In particular, this entity should coordinate, monitor, and ensure the implementation of Agenda 21 and the other agreements adopted by this Earth Summit.

For administrative and organisational purposes, this entity could be placed under the purview of ECOSOC, but for substantive and policy issues, it should have direct access to the highest decision-makers in the United Nations.

I am gratified that developments at the Conference have led towards the establishment of a High Level Commission on Sustainable Development. The specific organisational modalities for the work of this Commission will be determined by the General Assembly at its 47th Session.

I believe that it would be desirable for the High Level Commission to convene at the level of Heads of State/Government at an appropriate and mutually agreed-upon time. This would lend the necessary weight to the High Level Commission and ensure that follow-up of this Conference will meet our hopes, expectations and aspirations.

I should like to seek your views and support for this proposal and to assure you that Indonesia stands ready to undertake further activities and discussions to explore its practical realisation.

We submit this proposal in the awareness that the pursuit of sustainable development, the integration and reconciliation of environment and development, requires a concentrated and unrelenting effort

involving the highest decision-makers in the community of nations. The stakes are high and they include the future of this planet as a life-support system, the capacity of nations to share the one world in which we live, and the ability of all Mankind to practise their shared humanity.

Let us not squander the environment which has been placed in our trust, nor lose this opportunity to bring about harmony among all human beings and all peoples of the world as well as harmony between humanity and the planet that supports its teeming life. That harmony shall be our worthiest tribute to God's Providence for all His Creation.

May God grant us wisdom and bless this our common endeavour.

Thank you.

SOURCE: This unofficial translation was provided by the State Secretariat of the Republic of Indonesia.

Statement by His Excellency Prime Minister Dr Mahathir Mohamad of Malaysia at the United Nations Conference on Environment and Development

Rio de Janeiro, 13 June 1992

Mr Chairman,

I would like to thank our host, President Fernando Collor de Mello, and the Government of Brazil for the hospitality extended to us at this conference.

2. Malaysia has come to this conference because we are concerned about the environment. We are here to seek ways to achieve sustainable development and to establish a solid foundation for worldwide cooperation on environment and development. We appreciate that if anything is to be done towards sustainable development then all countries everywhere must work together. The boundaries of nations do not limit the pollution caused by them. Neighbours, both far and near, are affected by the pollutants produced by any nation.

3. Presently, Malaysia is well able to cope with its own pollution. In a country about the size of Britain, we have a population only one third as big. We are a developing country with a per capita income one-tenth of the developed countries. Our capacity for wasteful consumption is therefore very limited — roughly one thirtieth that of the developed countries.

4. On the other hand, our capacity to deal with our own waste is far in excess of our needs. Our land is almost 60 percent covered with self-regenerating tropical rain forest, with an additional 15 percent covered by tree plantations. Any carbon dioxide we produce we can absorb.

5. If pollution can be contained within the boundaries of a country, then Malaysia has nothing to worry. But Malaysia has to deal with cross-border pollution. Most developed countries have already destroyed their capacity to deal with their own waste. Not only have they clear-felled their forests but their production of waste is so great that they must rely on the poor countries to dispose of this waste.

6. Malaysia is prepared to do its bit. But can nothing be done to reduce the waste? Is it right that the poor be forced to clean up the mess created by the rich? Should there not be some sharing of the task, the responsibility and the cost for cleaning up? These are the questions we would like answered at this conference.

7. For the right answers there must be a modicum of sincerity and honesty on the part of everyone. We talk a lot now about a new world order, human rights, democracy and justice. Let there be evidence of all these when we try to identify the causes and to resolve the problems of sustainable development.

8. We recognise that man in his pursuit of development is the cause of the pollution and degradation of the environment. We cannot stop development altogether but we can at least minimise the pollution caused by it.

9. If we are to achieve sustainable development then we must all be prepared to make the necessary adjustments. But if we begin by saying that our life-style is sacred and not for negotiation then it would be meaningless to talk of development and the environment.
10. It is claimed that one of the causes of environmental degradation is the size of the population of some developing countries. We dispute this assumption.
11. However we note that rich developed communities tend to have low birth rates. If we want to reduce population growth then we must help poor communities to become developed. Yet we hear from the rich, proposals which would result in stopping the development of poor countries in order to reduce pollution. You may be able to reduce pollution but you will end up with massive overpopulation in the poorest developing countries.
12. We know that the 25 percent of the world population who are rich consume 85 percent of its wealth and produce 90 percent of its waste. Mathematically speaking, if the rich reduce their wasteful consumption by 25 percent, worldwide pollution will be reduced by 22.5 percent. But if the poor 75 percent reduce consumption totally and disappear from this earth altogether the reduction in pollution will only be by 10 percent.
13. It is what the rich do that counts, not what the poor do, however much they do it. That is why it is imperative that the rich change their life-styles. A change in the lifestyle of the poor only, apart from being unfair, is quite unproductive environment-wise. But the rich talk of the sovereignty of the consumers and their right to their life-styles. The rich will not accept a progressive and meaningful cutback in their emission of carbon dioxide and other greenhouse gases because it will be a cost to them and retard their progress. Yet they expect the poor peoples of the developing countries to stifle even their minute growth as if it will cost them nothing.

Excellencies,
14. One of the major issues we are expected to resolve is Global Warming. Here one of the major industrialized countries could not agree to cut-back on its emission of carbon dioxide at the rate generally accepted by others. Since it is the major source of industrial pollution its decision has rendered the agreement inequitable and meaningless.
15. Malaysia has for several years been cutting back on the emission of carbon dioxide. We impose a tax of 300 percent on cars with large capacity engines. Even small cars are heavily taxed. But in most developed countries the tax on automobiles and petrol is minimal thus accounting for the high car/population ratio. Surely a reduction in the number of private cars and better public transport would not change the life-style too much. Yet it will do wonders for Global Warming.
16. The other issue before us is bio-diversity. The poor countries have been told to preserve their forests and other genetic resources on the off-chance that at some future date something is discovered which might prove useful to humanity. This is the same as telling these poor countries that they must continue to be poor because their forests and other resources are more precious than themselves. Still they are not rejecting the value of bio-diversity, at least not totally.
17. Denying them their own resources will impoverish them and retard their development. Surely if something is discovered in their forests, they should be entitled to some returns.
18. But now we are told that the rich will not agree to compensate the poor for their sacrifices. The rich argue that the diversity of genes stored and safeguarded by the poor are of no value until the rich, through their superior intelligence, release the potential within. It is an intellectual property and must be copy-righted and protected.
19. Developing countries which met in Kuala Lumpur in April have agreed on a plan to reafforest the whole world. A Fund for this Greening of the World was proposed. But the North are resisting this proposal. Perhaps it is considered to be yet another attempt by the developing countries to squeeze the

rich using the environmental issue. The rich North can only see the chiselling ways of the South and is determined that they will not be squeezed. Yet the North demands a forest convention.

20. Obviously the North wants to have a direct say in the management of forests in the poor South at next to no cost to themselves. The pittance they offer is much less than the loss of earnings by the poor countries and yet it is made out as a generous concession.

21. We will accept the Global Environment Facility, and we will accept that it be administered by the OECD dominated World Bank. But can we not have a little say; can we not have more transparency in the administration of this Fund? Surely, this does not amount to the South squeezing the North.

22. The poor is not asking for charity. When the rich chopped down their own forests, built their poison-belching factories and scoured the world for cheap resources, the poor said nothing. Indeed they paid for the development of the rich. Now the rich claim a right to regulate the development of the poor countries. And yet any suggestion that the rich compensate the poor adequately is regarded as outrageous. As colonies we were exploited. Now as independent nations we are to be equally exploited.

Excellencies,

23. Malaysia was disillusioned about these inequities long before we reached Rio. In a world that has been won for democracy, we find powerful nations laying down terms even for participating in a democratic process. We find scant regard for the principles of fairness and equity. We find that even the Rio Declaration and Agenda 21 have been watered down upon insistence from the powerful and the rich.

24. Notwithstanding all these, we still have high expectations of this conference and we consider this Conference on the Environment and Development a success if there emerged a better understanding of the enormity of the problems we face and the need for us to cooperate on an equitable basis. Malaysia will do what can reasonably be expected of it for the environment.

SOURCE: Prime Minister's Office, Malaysia.

Statement by His Excellency Dr Ahmad Mattar Minister for the Environment, Singapore at the United Nations Conference on Environment and Development

Rio de Janeiro, 11 June 1992

Mr President, Your Excellencies, Distinguished Delegates, Ladies and Gentlemen

It is a great honour and pleasure for me to address this historic Conference on Environment and Development. I would like to express my profound admiration to the Government and the people of Brazil for making the Earth Summit possible and for the excellent arrangements for the Conference.

Mr President,

2 On behalf of the Singapore delegation, I would also like to congratulate you upon your election as President of this Conference. I trust that with your wisdom, you will bring this historic Conference to a successful conclusion.

3 The world is faced with widespread environmental degradation. The continued deterioration of our natural environment has threatened the ecological balance of our life supporting system. If this deterioration is left unchecked, the very survival of mankind will be at stake. There is an urgent need for the international community to commit its resources to arrest the present decline and to work towards a future of sustainable development.

4 Sustainable development is the key to ensure the well-being of our common future. It ensures that economic growth and the use of natural resources are achieved within the tolerance of Earth's ecological capacity. It is the only assured way to attain the twin objectives of economic development and environmental protection.

Mr President,

5 The 2-year old UNCED process has contributed to a dramatic increase in environmental awareness and concern among individuals and governments. We must seize this unique opportunity to transform such environmental awareness and concern into action.

6 The preparation for this Conference has been in itself a formidable task. In response to this global environmental challenge, the international community has been able to come together to produce a comprehensive framework for action. My delegation welcomes this comprehensive framework as contained in the draft Rio Declaration and Agenda 21. We are pleased that the Main Committee of this Conference has completed its work and we look forward to the adoption of these important documents by consensus on the 14th of June.

7 The Conventions on Climate Change and Biodiversity are two other important landmarks of this Conference. With the successful adoption of these Conventions, a firm foundation for international action to overcome global warming and to preserve biological diversity has been laid. In this regard, I am pleased to announce that Singapore will be signing both the Framework Convention on Climate Change and the Biodiversity Convention.

Mr President,

8 Agenda 21 contains many useful action programmes which would help us in halting and reversing the effects of environmental degradation. I am confident that the document will serve as a good basis upon which environmentally sound policies and measures could be formulated for the decades ahead.

9 The successful implementation of Agenda 21 however depends on a number of factors. The most important of these is the question of financial resources. Without adequate financial resources, it would be difficult for developing countries to implement Agenda 21. I hope that the Earth Summit will result in an assured flow of new and additional financial resources to assist the developing countries. In this context, we must also bear in mind that a supportive international economic environment would also help the developing countries in generating their own resources for development.

Mr President,

10 Developing countries require technology, particularly environmentally sound technology, in order to achieve sustainable development. The timely application of appropriate technology will help developing countries to avoid environmental pitfalls experienced by the developed countries. Many of the action programmes under Agenda 21 are technology-related. The process of technology transfer and sharing must therefore be accelerated in order to provide the developing countries with the capacity and means to undertake early action in these areas.

11 The successful implementation of the outcome of UNCED will also depend on how countries cooperate with each other under a new global partnership. We hope that the spirit of cooperation which has been evident during the preparatory process for this Conference will continue to prevail after Rio.

12 Singapore is honoured to be given a significant role in chairing the UNCED preparatory process. We will continue to help forge an international consensus on environment and development. In the regional context, Singapore will continue to work closely with her ASEAN partners on environmental matters. At the recent ASEAN Summit held in Singapore, the ASEAN Heads of Government reiterated their commitment to the principle of sustainable development. The ASEAN Environment Ministers also adopted the Singapore Resolution on Environment and Development and agreed to work towards the harmonization of environmental standards within the region.

Mr President,

13 Singapore believes that the real solution to global environmental problems begins at home. The protection of the local environment by individual nations is the first step towards safeguarding the global environment. After Rio, individual nations must undertake to translate the outcome of this Summit into national policies and programmes. This must include the setting up of national priorities for action.

14 Singapore attaches great importance to national action on the environment. We began our own programmes to protect the environment some 30 years ago at the time when Singapore started to industrialize. As a result, we were able to put into place the necessary legislation and infrastructure for environmental protection. This has contributed greatly to our ability to ensure compatibility between economic progress and the enhancement of the environment.

15 Singapore also believes that with proper land-use planning and the sound application of the "pollution prevention" principle, the twin objectives of economic development and environmental protection are achievable.
16 Singapore aspires to be a Green City by the year 2000. It will be a city of quality environment with a people committed to the cause of environmental protection. To achieve these goals, we have produced the "Singapore Green Plan" which charts the strategic directions for our environmental policies over the next decade.
17 Singapore would be pleased to share her experience in urban environmental management and protection with other countries. We hope to be able to facilitate the transfer of environmental technology in the Asia-Pacific region.

Mr President,
18 The outcome of the 1992 Earth Summit will be a good measure of our political commitment to sustainable development. The Summit marks the beginning of a long-term endeavour to save our planet Earth. I am confident that the adoption of the Rio Declaration will bring about a new world ethic towards our living environment.
19 We are at the turning point of a new era of global environmental partnership. Individually and collectively, nations must now commit themselves to achieve the noble goals set at this historic Conference. It is our duties to do so as inhabitants and custodians of Planet Earth.
20 Thank you.

SOURCE: Ministry for Foreign Affairs, Singapore.