

The Regional Context

Table 1 identifies variations of human development within the Asian and Pacific region. The region has been shaped by many distinctive indigenous cultures, colonization by Western and Asian powers, and the influence of major regional nations, such as the People's Republic of China (PRC) and Japan. East Asia and South Asia have distinctive subregional characteristics. In East Asia, average life expectancies, gross domestic product (GDP) per capita, and literacy rates considerably exceed world averages. South Asia, by contrast, compares unfavorably with other Asian subregions on all development indicators, and has the lowest GDP per capita and literacy rates among the world's regions. Demographic, economic, and social changes within Asia in some cases perpetuate intraregional diversity but in other cases contribute to commonality of issues and policies. These changes and their effects, as described below, can be found in patterns of economic growth, demographic structures, social institutions, and education development.

Demographic Changes

As shown in Table 2, populations of DMCs range from a few thousand in some of the Pacific DMCs to 1.2 billion in the PRC. Annual population growth rates range from -0.2 percent to 3.8 percent. Proportions of population living in urban areas range from 11 percent in Nepal to 100 percent in Singapore. As would be expected, broad differences in life expectancy rates, fertility rates, and infant mortality rates are also found. Fertility rates (measured in live births per woman) range from 1.2 in Hong Kong, China to nearly 7.2 in Marshall Islands, 6.9 in Afghanistan, and 6.7 in Maldives. Hong Kong, China has the longest life expectancy (males 76 years; females 81 years), while Afghanistan has the shortest life expectancy (males 43 years; females 45 years). Hidden in these country averages are wide variations within countries on all of these measures.

Table 1: Regional Comparisons of Human Development, 1997

<i>Region</i>	<i>Life expectancy at birth (Years)</i>		<i>Total fertility rate^a</i>	<i>GDP per capita (in 1987 US\$)</i>	<i>Adult literacy rate (%)</i>	
	<i>Male</i>	<i>Female</i>			<i>Male</i>	<i>Female</i>
East Asia except PRC	69.5	76.2	1.7	7,018	98.2	94.0
South Asia	62.3	63.1	3.3	432	65.0	38.6
SE Asia and the Pacific	63.9	67.9	2.7	1,183	92.2	84.4
All developing countries	63.0	66.1	3.0	908	80.0	62.9
World	64.7	68.9	2.7	3,610	84.3	71.1

^aLive births per woman

Source: UNDP 1999.

Table 2: Selected Demographic Conditions

<i>Economy</i>	<i>Population</i>			<i>Dependency^a ratio of 0-14 1995 (% of total population)</i>
	<i>Total 1997 (millions)</i>	<i>Average annual growth rate 1990-1997 (%)</i>	<i>Urban population 1997 (% of total)</i>	
Afghanistan	18	2.0 ^p	20 ^f	40.8
Bangladesh	124	1.6	19	39.5
Bhutan	—	—	—	41.1
Cambodia	11	2.7	22	44.9
PRC	1,227	1.2	30 ^f	26.4
Cook Islands	0.02	1.9	60 ^f	34.1
Fiji Islands	0.8	1.6	41 ^c	34.7
Hong Kong, China	7	1.9	95	19.2
India	961	1.9	27 ^f	35.2
Indonesia	200	1.7	37	33.0
Kazakhstan	16	(0.2)	60 ^f	29.8
Kiribati	0.08	2.3	36 ^c	40.3
Korea, Republic of	46	1.0	83	23.6
Kyrgyz Republic	5	0.7	39	37.1
Lao PDR	3	2.6	22	44.8
Malaysia	21	2.3	55	38.0
Maldives	262	3.5	27 ^f	46.6
Marshall Islands	0.06	3.8	69 ^f	50.6
Micronesia, F.S.	0.1	1.1	28 ^f	—
Mongolia	3	2.1	62	38.0
Myanmar	45	1.9	26 ^c	37.4
Nauru	—	1.9 ^d	14 ^f	—
Nepal	23	2.7	11	42.4
Pakistan	137	2.9	35	44.3
Papua New Guinea	5	2.3	17	39.5
Philippines	73	2.3	56	38.3
Samoa	0.1	0.4	21 ^f	46.3
Singapore	3	1.9	100	22.7
Solomon Islands	0.4	3.7	17 ^f	44.2
Sri Lanka	18	1.2	23	30.6
Taipei, China	21	1.0	57 ^f	24.1
Thailand	61	1.2	21	28.3
Tonga	0.1	0.3	41 ^f	—
Tuvalu	0.01	1.4	46 ^c	—
Uzbekistan	—	2.2 ^d	41 ^f	43.4
Vanuatu	0.2	2.7	19 ^f	39.9
Viet Nam	77	2.1	20	37.4

— Data not available.

Notes: (1) Data in parentheses are negative.

(2) Data in italics are for years or periods other than those specified in the column heading.

^a Estimated data using medium variant projections except for Cook Islands, Kiribati, and Marshall Islands.

<i>Life expectancy at birth 1996 (years)</i>		<i>Total fertility rate 1996 (per woman)</i>	<i>Infant mortality rate 1996 (per 1,000 live births)</i>	<i>Economy</i>
<i>Male</i>	<i>Female</i>			
43	45	6.9	—	Afghanistan
57	59	3.4	77	Bangladesh
—	—	5.9	—	Bhutan
52	55	4.6	105	Cambodia
68	71	1.9	33	PRC
—	—	—	—	Cook Islands
70	74	2.8	22	Fiji Islands
76	81	1.2	4	Hong Kong, China
61	61	3.2	68	India
63	67	2.6	49	Indonesia
65	74	2.3	62	Kazakhstan
56	58	3.8	65	Kiribati
69	76	1.7	9	Korea, Republic of
62	71	3.0	26	Kyrgyz Republic
52	54	5.7	101	Lao PDR
70	74	3.4	11	Malaysia
63	61	6.7	55	Maldives
61	64	7.2	55	Marshall Islands
—	—	5.1	37	Micronesia, F.S.
64	67	3.3	53	Mongolia
57	60	4.1	82	Myanmar
—	—	—	—	Nauru
57	57	5.0	85	Nepal
62	65	5.1	88	Pakistan
57	58	4.7	62	Papua New Guinea
64	68	3.6	37	Philippines
67	71	4.3	23	Samoa
74	79	1.7	4	Singapore
61	63	5.2	42	Solomon Islands
71	75	2.3	15	Sri Lanka
72	78	1.8	5	Taipei, China
67	72	1.8	34	Thailand
67	71	3.4	19	Tonga
—	—	—	38	Tuvalu
66	72	3.7	30	Uzbekistan
59	61	5.1	47	Vanuatu
66	70	3.0	40	Viet Nam

^b Figures may be influenced by refugees to an unknown extent.

^c Based on national definitions incorporated in the latest available census.

^d Annual population growth rates refer to the growth of the population for the last five years available.

Source: World Bank 1998.

The demographic change taking place in Asia is basically a transition from high mortality and fertility to lower mortality and fertility. Mortality and fertility declines have followed a pattern of demographic divergence, with Northeast Asia entering demographic transition early, and South Asia later. Variations in demographic structures help explain economic growth rates, and have given East Asia an advantage over South Asia. During the next few decades, the demographic factors that contributed to success in East Asia are likely to work to South Asia's relative advantage (ADB 1997). The impact on the age structure of Asia's population and on all social and economic sectors will continue to be enormous. Over the last three decades demographic change has contributed to economic growth and indirectly to education growth, particularly for males, by increasing the growth rate of the economically active population. This condition was most observable in East Asia. However, income growth has been retarded in countries with large youth or dependency ratios and thus with implied high-consumption needs.

The quantity and quality of schooling are influenced by demographic structures, and are sensitive to the size of school-age cohorts. Thus, richer DMCs with lower dependency ratios have been able to invest more per child with similar allocations of funds. High dependency ratios in poorer countries, by forcing choices as to which children go to school, tend to be associated with suppression of female enrollments and thus indirectly may reduce the number of opportunities in the labor market for females (Lewin 1996, 50). The projected decline in Asian dependency rates may make more resources available and provide an opportunity to concentrate on improvements in the quality of education.

The urban-rural mix of population is also changing rapidly in several DMCs. Generally, Asia is becoming increasingly urbanized, accompanying the decline in the size of the agriculture sector and the increase in industrialization. Continued urbanization can be expected in the 21st century. For example, in Indonesia 31 percent of the population in 1990 lived in urban areas. However, by 2005, it is estimated that over half of the Indonesian population will be urban dwellers. DMCs that have higher urban population ratios tend to have lower dependency ratios, longer life expectancies, lower mortality and fertility rates, and better Human Development Index (HDI), Human Poverty Index (HPI), and Gender-related Development Index (GDI) rankings. The more urban DMCs also have higher per capita incomes and higher percentages of their labor forces in industry and services. Urbanization brings new opportunities and new problems to education. Higher enrollments may be expected, and also better facilities in the urban areas. However, addressing the education needs of the growing numbers of marginalized urban poor will demand special resources and programs.

Economic Changes

Economic indicators demonstrate a broad range of rates of economic growth, incidence of poverty, and patterns of employment by sector among DMCs. The

regional average GDP per capita, in purchasing power parity (PPP) dollars in 1993, was approximately \$4,600. As shown in Table 3, GDP per capita among DMCs in 1997 ranged from \$200 to \$22,500. Other data show that the average regional economic growth rate between 1985 and 1995 was approximately 7 percent. This record has transformed many DMCs, and made Asia economically the fastest-growing continent. However, a fiscal crisis and economic downturn in East and Southeast Asia which began in 1998 significantly dampened economic growth.

Demand for schooling reflects changes in employment patterns (Table 3). In the high-performing, newly industrialized economies (NIEs) – Hong Kong,

Table 3: Economic and Social Conditions

Economy	GDP per capita		Labor Force			GDP share of agri-culture	Adult illiteracy	Population in poverty <\$1(PPP) a day 1989-1994	HDI Rank 1997
	Year 1997	Average annual growth 1996-97	Agri-culture 1997	Industry 1997	Services 1997				
	(\$)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
Afghanistan	—	—	—	—	—	—	68.5	—	—
Bangladesh	220	2.1	24	27	49	30	61.9	—	144
Bhutan	400	2.8	38	38	25	—	57.8	—	155
Cambodia	—	—	51	15	34	—	—	—	153
PRC	530	8.3	19	49	32	21	18.5	29.4	108
Fiji Islands	2,470	(0.5)	18	26	56	—	8.4	—	46
Hong Kong, China	21,650	4.8	1	15	84	0	7.8	—	22
India	320	3.2	25	30	45	30	48	52.5	138
Indonesia	880	6.0	16	43	41	17	16.2	14.5	99
Kazakhstan	1,160	(8.6)	12	27	61	44	—	—	93
Kiribati	910	(0.5)	—	—	—	—	—	—	—
Korea, Republic of	8,620	7.7	6	43	51	7	2.0	—	32
Kyrgyz Republic	630	(6.9)	45	23	33	37	—	18.9	107
Lao PDR	320	2.7	52	21	26	51	43.4	—	136
Malaysia	3,480	5.7	12	47	41	14	16.5	5.6	60
Maldives	1,150	3.3	32	31	37	—	6.8	—	111
Marshall Islands	1,770	—	—	—	—	—	—	—	—
Micronesia, F.S.	1,980	—	—	—	—	—	—	—	—
Mongolia	300	(3.8)	37	23	40	21	—	—	101
Myanmar	—	—	59	10	31	63	16.9	—	131
Nepal	200	2.4	41	22	36	44	72.5	53.1	154
Pakistan	430	1.2	25	25	50	25	62.2	11.6	139
Papua New Guinea	1,240	2.3	28	36	36	28	27.8	—	128
Philippines	950	1.5	19	32	49	22	5.4	27.5	98
Singapore	22,500	6.2	0	35	65	0	8.9	—	26
Solomon Islands	900	(1.5)	—	—	—	—	—	—	122
Sri Lanka	640	2.6	22	26	52	24	9.8	4.0	91
Thailand	2,410	8.4	11	40	49	10	6.2	0.1	59
Tonga	1,830	(0.4)	—	—	—	—	—	—	—
Uzbekistan	—	(3.9)	32	27	41	33	0.3	—	100
Vanuatu	—	—	25	12	63	—	—	—	124
Viet Nam	200	—	26	31	43	28	6.3	—	121

— Data not available.

Notes: (1) Data in parentheses are negative.

(2) Data in italics are for years or periods other than those specified in the column heading.

Sources: UNDP 1990, 1999; UNESCO, Division of Statistics 1999; World Bank 1996, 1998.

China; Republic of Korea; Singapore; and Taipei, China – industries and services together account for over 90 percent of the labor force. Increasingly, the service sectors of those economies, which dominate employment with over 50 percent of the labor force, require high information technologies, interpersonal skills, and analytical capabilities. In other country groupings the mix is quite different. Trends in the female share of the labor force are difficult to determine. Highly agricultural countries, which utilize low levels of technology, commonly employ large percentages of women. Likewise, countries with export-oriented industries may employ many women in entry-level jobs.

Data by country on any of the poverty indices are limited. From data available, the range of percentage of population in poverty (<PPP\$1 a day) varies from 0.1 percent in Thailand to 53.1 percent in Nepal. The NIEs – also known as the “four tigers” – have relatively small incidences of poverty. Higher percentages of population in poverty tend to be found in countries with high percentages of the labor force in agriculture. HDI, HPI, and GDI country rankings are correlated with each other, and the higher the rankings of countries on these indices, the lower their population growth rates, illiteracy rates, and GDP shares in agriculture.

The most impressive economic gains have been in East Asia, particularly in the NIEs, which between 1985 and 1995 averaged 6.2 percent annual growth. Other rapidly growing economies include the PRC, Malaysia, and Thailand, which (starting at lower economic levels than the NIEs) averaged 7.5 percent annual economic growth per capita between 1985 and 1995. During the same decade, significant economic advances were made by several other DMCs, including Indonesia and the Philippines. East Asia's pattern of economic growth was characterized by:

- early development of a broad base of human capital through a focus on basic education;
- an outward-looking trade strategy;
- relatively equitable distribution of benefits of economic growth;
- reforms to encourage savings; and
- a cooperative relationship between public and private sectors.

Other countries, particularly those in South Asia, have not fared so well (Table 4). Haq (1997) described South Asia as “the poorest region; the most illiterate; the most malnourished region; the least gender sensitive region; the region with highest human deprivation; and the most militarized region in the world.” South Asia, Haq concluded, followed inefficient, centralized, economic planning; had closed international markets which emphasized domestic protection; and invested relatively little in education. For example, Haq recorded, the amount invested per pupil rose by 355 percent in the Republic of Korea between 1970 and 1990, but only by 13 percent in Pakistan.

Economic growth has contributed much to national development. Growth has been associated with expansion of opportunities in education, availability of health services, and improved quality of life. Economic growth has provided employment opportunities for women, and consequently helped support

Table 4a: NIEs and South Asia Comparison

<i>Region</i>	<i>GDP per capita</i>		<i>Share of GDP in agriculture</i> 1994 (%)	<i>Adult illiteracy rate</i> 1995 (%)	<i>Dependency ratio</i> 1997 (%)
	1994 (\$)	<i>Growth rate</i> 1985-95 (%)			
NIEs	17,590	6.2	7.0	6.2	21.3
South Asia	372.5	2.1	30.8	55.5	39.3

Table 4b: NIEs and South Asia Comparison
(percent)

<i>Region</i>	<i>First-level education</i>			<i>Second-level education</i>	<i>Third-level education</i>
	<i>GER</i> 1993	<i>P/T ratio</i> 1993	<i>Repeaters</i> 1993	<i>GER</i> 1993	<i>GER</i> 1993
NIEs	97.0	26.5	1.0	92.0	37.6
South Asia	82.8	40.2	11.7	44.3	5.5

GER = Gross Enrollment Rate; P/T = Pupil/Teacher.

Sources: UNESCO 1996; UNESCO, Division of Statistics 1999; World Bank 1997.

their families. Income has in many cases added to the independence of women. However, there have been negative as well as positive consequences of economic growth. For example, much of the work in the export industries has placed women in unhealthy conditions and increased their susceptibility to certain diseases. Moreover, these industries have offered few transferable skills to allow employment in other industries.

Economic growth is generally associated with higher enrollments: an important but insufficient condition for quality education. Slower-growth countries tend to have high rates of truancy, more heavily utilize child labor, and are plagued with high repetition and dropout rates. Economic growth does not always translate into education improvements, however: per capita incomes in Pakistan and Papua New Guinea (PNG) are high compared with social sector development. Nor is a low incidence of poverty necessarily directly linked to education achievement. For example, Kerala and Rajasthan are two of India's rural states which have similar levels of poverty; but female literacy varies from 85 percent in the former to 12 percent in the latter.

Social Changes

Changes and continued diversity may be found in all social institutions. At the family level, the last few decades have seen significant changes in family size, familial roles, and intergenerational relations. The average size of families is declining in several DMCs, in some countries radically so. Smaller families and higher education and economic levels of parents, especially of mothers, tend to alter the treatment of children in the home, improve children's health, and increase children's education opportunities. However, a growing education gap between the generations and the economic mobility of younger employees – a characteristic of modern production – places stress on family relationships.

Transition from an extended to nuclear family structure is likely to continue, further altering familial relations and obligations. Reflecting the extent of social and familial change, divorce rates have risen, and new laws in Singapore and Taipei, China require children to be responsible for the welfare of their aging parents.

The rapidity of technological change as reflected in new forms of production and global communication compresses the available time for individual and social adaptation. Typically, the young, better educated, and urban populations more readily understand, accept, or learn to cope with emerging new values, attitudes, and lifestyles. At times, opportunities for added income from new industries for females has directly altered family structures. Some evidence is reported in Thailand for example, where the preference for sons is said to be disappearing. On the other hand, there are cases where the incomes from young women wage earners have been utilized by the family primarily to increase advancement opportunities for the sons.

Changes in that most macro of institutions, the state, are also evolving significantly. Many forms of government and differing roles of the state's involvement in the economic and education sectors can be found in Asia. An orientation toward capitalism and private markets has a long history in some economies, such as Hong Kong, China and the Republic of Korea. Although socialist states such as the PRC, the Lao People's Democratic Republic (Lao PDR), and Viet Nam are now more responsive to privatization, this trend cuts across economic and political differences. In the education sector this movement is particularly visible in higher education, but is growing also at the primary and secondary school levels. Even in countries where constitutional provisions guarantee free education (e.g., Cambodia, Mongolia, and Philippines), user charges are necessary to support schools even in the public sector (Bray 1996).

Paralleling or encompassing enlargement of the private sector, the locus of public decision making – traditionally centralized – is under modification or review. A distinct regional trend has been evident, albeit more pervasive in some countries than in others. PRC, India, and Thailand are among countries with far-reaching devolution of social services and institutions. Most DMCs are committed in varying degrees to the strengthening of local government and to a degree of decentralization in the delivery of education. As this trend evolves, the focal point for some social and education policy making and much planning will transfer from the center to provincial and lower levels of government.

Cultural and social changes have meant that the roles and opportunities for many Asian women have altered and will continue to evolve. Major inequities remain, but increased opportunities for work, smaller families, more schooling, and new values and role models have combined to raise consciousness about gender disparities. International organizations, nongovernment organizations (NGOs), and many governments have increased their attention to the specific problems associated with efforts to secure equitable gender treatment in the home, school, and workplace. Improvements can be demonstrated, particularly in increased opportunities in education and improved health. Yet, in 1990 less than 8 percent of the women aged 18-22

were enrolled in education institutions compared with over 11 percent for men in the same age cohort. Moreover, only 10 percent of the formal labor market in Asia were women. The main avenue of employment for women remains traditional agriculture.

Many of these demographic, economic, and social changes, including education growth, reflect the strength of national social and political commitments to improve the welfare of citizens. Generally, living standards have been on the rise in DMCs. There is a tendency for people to live longer, be more literate, eat better, and go to school for longer periods.

Along with improvements in the quality of life for many, poverty exists on a huge scale. One third of the total population of the world lives in poverty, and three quarters of the world's impoverished live in Asia. There is, for example, a 36-year difference in female life expectancy within the region. Large disparities in access to health, education, and social services exist between countries, between areas within countries, between rural and urban populations, between ethnic groups, and between the sexes.

Economic growth and social changes have not always proportionately lowered the incidence of poverty or improved the quality of life for all. Exceptions include Sri Lanka, where the incomes of the poor grew faster, and Thailand, where, despite economic growth, the incomes of the poor lagged. World Bank and ADB documents conclude that poverty is reduced most successfully through the initiation of policies along the lines of those demonstrated in East Asia. Growth strategies to yield the largest poverty-reduction benefits appear to include:

- rapid growth of labor-intensive production across a wide front, led by exports;
- expansion of poor people's access to physical and financial capital via labor-intensive manufacturing exports and agricultural productivity which promote rural development;
- mass basic education to ease the transition from the agricultural to the industrial economy; and
- an increase of human capital via targeting of the expansion of primary, nonformal, and literacy education, especially in rural and poor urban areas.

Education Development

The meanings and purposes of education and the patterns of development of education systems have been profoundly influenced by history and by recent economic and cultural changes in the region. Mass education systems utilizing local languages are a relatively recent phenomenon in many DMCs. Even more recent are the views of education as a basic human need, an integral part of quality of life, a support for moral and social values, and an instrument for economic productivity.

Table 5: Gross Enrollment Rates by Education Level, 1975-2010
(percent)

Economy	First-level education					Second-level education					Third-level education							
	1985		2000 ^a		2010 ^b		1985		2000 ^a		2010 ^b		1985		2000 ^a		2010 ^b	
	1975	1993 ^a	1975	1993 ^a	2010 ^b	1975	1993 ^a	2000 ^a	2010 ^b	1975	1993 ^a	2000 ^a	2010 ^b	1975	1993 ^a	2000 ^a	2010 ^b	
Afghanistan	25	20	48	27	23	—	—	22	11	11	1	—	—	2	2			
Bangladesh	73	64	—	80	82	19	18	—	22	23	—	5	—	4	4			
Bhutan	9	27	—	36	39	1	—	—	8	9	—	—	—	0.3	0.4			
Cambodia	—	—	118	—	—	—	—	—	25	—	—	—	—	1	—	—	—	
PRC	122	123	118	120	114	46	39	55	55	66	1	3	4	3	3			
Fiji Islands	137	122	128	122	119	44	51	64	71	78	3	3	—	15	16			
Hong Kong, China	119	105	99	108	108	49	71	85	84	87	10	13	23	26	33			
India	81	96	102	106	109	28	37	49	50	54	9	6	—	10	11			
Indonesia	86	117	115	115	111	20	41	45	63	70	2	—	9	11	13			
Kazakhstan	—	88	87	—	—	—	103	91	—	—	—	37	34	—	—			
Korea, Rep. of	107	97	95	107	107	56	92	99	101	102	10	34	55	46	51			
Kyrgyz Republic	—	123	111	—	—	—	110	86	—	—	—	28	20	—	—			
Lao PDR	67	111	107	116	121	8	23	25	27	30	37	2	2	1	2			
Malaysia	94	101	93	95	95	46	53	61	62	67	—	6	10	14	18			
Maldives	—	—	134	148	149	—	—	49	34	34	—	—	—	—	—			
Mongolia	108	101	84	97	94	81	92	60	95	101	8	22	14	20	21			
Myanmar	83	98	100	125	125	—	23	30	36	40	—	5	5	8	9			
Nepal	51	75	109	91	91	13	25	36	32	33	2	4	5	6	6			
Pakistan	41	44	69	46	49	15	17	—	20	21	2	3	—	3	3			
PNG	57	—	82	78	81	12	—	14	16	19	3	2	3	4	5			
Philippines	107	107	111	108	106	54	64	80	81	84	18	25	27	34	36			
Singapore	110	115	—	107	106	52	62	—	75	77	9	14	35	33	34			
Solomon Islands	—	79	97	—	—	—	19	17	—	—	—	—	—	—	—			
Sri Lanka	77	103	105	108	109	48	63	75	76	76	1	4	6	7	8			
Thailand	84	96	87	90	89	25	30	49	38	45	4	19	21	20	24			
Uzbekistan	—	87	77	—	—	—	107	93	—	—	—	30	32	—	—			
Vanuatu	—	100	106	—	—	—	—	—	—	—	—	—	—	—	—			
Viet Nam	107	103	114	106	105	39	43	41	49	52	2	2	3	2	2			

— Data not available.

^a Data are by approximation.^b Data for 2000 and 2010 are projections by UNESCO.

Sources: UNESCO 1989, 1993, 1996.

Table 5 shows that primary education has approached universalization in many economies. The mean gross enrollment rate (GER) for first-level education for DMCs was 100 percent in 1993 as compared with 83 percent in 1975. However, even with significant overall enrollment growth, a large percentage of girls in the age cohort remain out of school. Further, the female share of the population of teachers remained much the same between 1980 and 1995. Costly inefficiencies in primary schooling remain, as reflected in the large numbers of overage children, repeaters, and dropouts.

The development of second-level education shows large intraregional differences. In Afghanistan only 11 percent of girls are enrolled at this level as compared with 99 percent in the Republic of Korea. Kazakhstan, Kyrgyz Republic, and to a lesser extent, Philippines, Thailand, and Uzbekistan, are

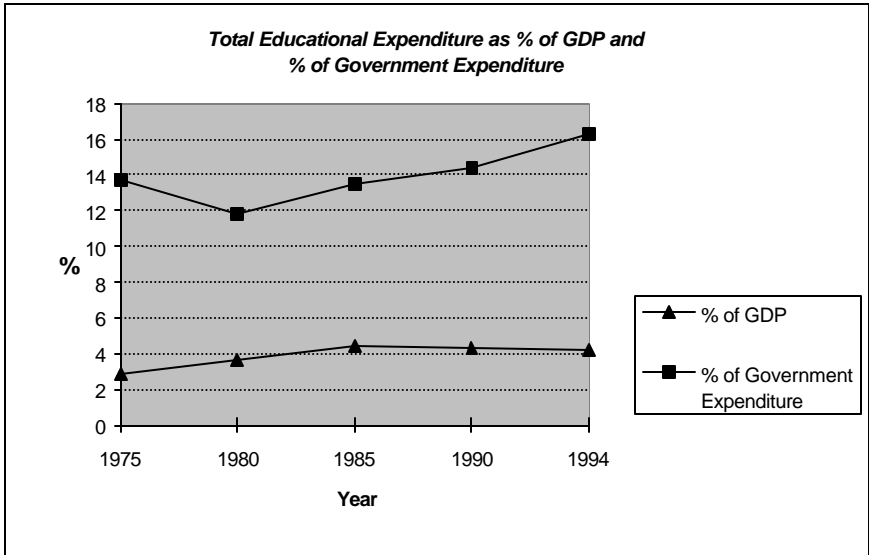
positive outliers. The trends from 1975 to 1993 generally show enrollment growth, with some areas showing considerable growth. Indonesia, for example, had over 100 percent growth. However, as shown in Table 5, the late 1980s brought a decrease in secondary enrollments, which has not yet been fully explained. In several economies, presumably some combination of wage-earning opportunities, poor quality and relevance of schooling, and the level of school fees and other costs reduced demand. Data in Table 5 for 2000 and 2010 are United Nations Educational, Scientific and Cultural Organization (UNESCO) projections, which do not always appear compatible with the data shown earlier. The projections anticipate continued upward growth patterns with some increases in efficiency in first-level education.

Generally, the pattern of education expansion follows the pattern of economic growth, with high levels of economic growth associated with high education enrollments. A sharp economic downturn in the 1990s negatively affected some countries that had a tradition of high literacy and levels of school enrollment, e.g., Kazakhstan, Kyrgyz Republic, and Uzbekistan. Yet, at any given economic level there is a wide variation in education development.

As described in the Figure and Table 6, total regional education expenditure as a percentage of GDP and as a percentage of government expenditure shows different patterns of change across the period 1975-1994.

The percentages of GDP spent on education appear to have stabilized. However, as shown in Table 6, there is room for considerable increase in countries such as Indonesia and the Philippines.

Figure: Total Regional Public Education Expenditure



Sources: UNESCO 1989, 1996.

Table 6: Total Regional Public Education Expenditure
(percent)

<i>Economy</i>	<i>Percentage of GDP</i>					<i>Percentage of government expenditure</i>				
	1975	1980	1985	1990	1995/96	1975	1980	1985	1990	1995/96
Afghanistan	1.5	2.0	—	—	—	—	12.7	—	—	—
Bangladesh	1.4	1.5	1.9	2.0	2.9	13.6	7.8	9.7	10.3	8.7
Bhutan	—	—	3.7	—	—	—	—	—	—	—
Cambodia	—	—	—	—	2.9	—	—	—	—	1.8
PRC	—	2.5	2.6	2.3	2.3	—	9.3	12.2	12.8	11.9
Cook Islands	—	—	—	—	—	—	—	9.5	—	12.4
Fiji Islands	4.7	5.9	6.0	4.7	5.4	19.5	11.3	—	—	18.6
Hong Kong, China	3.0	—	—	—	2.8	20.7	14.6	18.4	17.4	17.0
India	2.9	2.8	3.4	3.9	3.5	9.4	10.0	9.4	10.9	11.6
Indonesia	2.7	1.7	—	1.1	1.4	13.1	—	—	—	7.9
Kazakhstan	—	—	6.5	6.5	4.7	—	—	18.9	17.6	17.6
Kiribati	4.9	—	6.7	6.0	6.3	—	—	18.5	18.3	17.6
Korea, Republic of	2.2	3.7	4.5	3.5	3.7	13.9	—	—	—	17.4
Kyrgyz Republic	—	7.2	7.9	8.5	5.7	—	22.2	22.4	22.5	23.5
Lao PDR	—	—	—	2.3	2.5	—	—	—	—	—
Malaysia	6.0	6.0	6.6	5.4	5.2	19.3	14.7	16.3	18.3	15.5
Maldives	—	4.4	6.3	11.6	6.4	—	—	7.2	10.0	10.5
Mongolia	—	7.8	8.6	8.5	6.4	—	—	—	17.6	19.3
Myanmar	1.7	1.7	2.0	2.4	1.2	15.3	—	—	—	14.4
Nepal	1.5	1.8	2.6	2.0	3.1	11.5	10.5	12.7	8.5	13.5
Pakistan	2.2	2.0	2.5	2.6	3.0	5.2	5.0	—	—	8.1
Papua New Guinea	—	4.7	—	—	—	—	14.2	—	—	—
Philippines	1.9	1.7	1.4	2.9	2.2	11.4	9.1	7.4	10.1	—
Singapore	2.9	2.8	4.4	3.1	3.0	8.6	7.3	—	18.2	23.4
Solomon Islands	—	5.6	4.7	4.2	—	14.7	11.2	12.4	7.9	—
Sri Lanka	2.8	2.7	2.6	2.7	3.4	10.1	7.7	6.9	8.1	8.9
Taipei, China	—	—	—	—	—	—	—	—	—	—
Thailand	3.5	3.4	3.8	3.6	4.1	21.0	20.6	18.5	20.0	20.1
Tonga	3.0	—	4.4	4.8	4.7	12.7	11.6	16.1	17.3	17.3
Tuvalu	—	—	—	—	—	—	—	—	16.2	—
Uzbekistan	—	—	—	9.5	8.1	—	—	—	—	21.1
Vanuatu	—	—	—	4.4	4.9	—	—	—	—	—
Viet Nam	—	—	—	—	2.7	—	—	—	—	7.4

— Data not available.

Sources: UNESCO 1989, 1998.

The growth of percentage of government expenditures could climb somewhat higher, although most governments are reluctant to spend more than 20 percent of their budgets on education. Like all education indicators, those on expenditures at best tell an incomplete story. Many types of financial support for schools and other education programs are not calculated within the typically reported expenditures. Even more subtly, there is room to maneuver within the same amount of available fiscal resources. That is, talented administrators, imaginative teachers, and enthusiastic parents can obtain additional returns on given levels of resources (Bray 2002).

A caveat is necessary in discussing education development: the accuracy of the available data is questionable. Levels of enrollment, literacy rates, and

expenditures are often subject to debate. Box 1 provides an example of the uncertainty of education statistics in Nepal. The situation described is not uncommon among DMCs.

The organization of education systems and curricula vary somewhat by country. The first level of education tends to be organized into one level of primary education of four to eight years, but most typically has to five or six years. The general secondary level is commonly divided into two levels, the first of which increasingly has been associated with primary education to form formal basic education. Higher education varies widely in length depending on the course of study.

Preprimary enrollments are increasing, but still typically represent a small fraction of the age cohort. In all likelihood, given its importance, the preprimary level, although highly influenced by economic conditions, will increase in the coming decades. Basic education, which in the 1990s emerged as the highest priority, is increasingly extended to include junior secondary education. A common core curriculum of mathematics, science, and language is usually found in each country. National variations tend to be found in language of instruction, and local options, such as local language and customs, are commonly allowed within national policy.

Many systems have inequitable characteristics in the nature of expansion and development of their education systems. Particularly above the primary level, the poorest segments of the population are rarely accommodated until most middle- and upper-income groups are well represented. However, the meaning of education opportunity may not be the same for those who enter last as for those who enter early. As the system fills up, the qualifications required to obtain employment and economic benefits are raised. Thus, without powerful intervention through targeted policies, the poor may be chasing a moving target of potential rewards.

A Typology of Developing Member Countries

For convenience in intraregional analysis, DMCs are grouped into seven categories, a loose classification system used in prior ADB documents.¹ The Lewin (1996) grouping is partly defined by sets of indicators that include demographic factors, economic factors, employment factors, levels of literacy, and Human Development Index (HDI). This classification does not constitute a formal typology developed from a rigid set of common criteria, but is a device for facilitating comparisons of education development and for capturing the variations in education's external linkages with other sectors. Other groupings of DMCs will be explored as important comparisons across DMCs are examined. Moreover, even though sets of DMCs group together fairly well on certain economic and social indicators, this does not necessarily mean that similar policies need to be developed. Variations in cultural and social values

¹ See the six groups found in *Education and Development* (ADB 1991); and the seven groups found in *Access to Education in Emerging Asia* (Lewin 1996).

Box 1: Case of Inconsistent Data – Nepal

In Nepal, the gross and net enrollment rates for 1995 that were made official by the Ministry of Education and those published by the Central Bureau of Statistics, National Planning Commission, were substantially different. Neither the Ministry of Education nor the National Planning Commission made any clarification regarding such a huge discrepancy between the two sets of the same indicators. The Ministry of Education data were based on the information that the Ministry had received from schools, while the National Planning Commission data were based on a national sample survey of 3,388 households.

So far, the Ministry data have been used both nationally and internationally. But new rates that the National Planning Commission disclosed raised questions about the Ministry statistics. In any case, basic indicators such as the net and gross enrollment rates are important, and it is urgently necessary that the Government fulfill its responsibility by making public the accurate national statistics, with scientific explanations. The process of planning education resources and activities relies heavily on these indicators.

Source: Shakya et al. 1998.

and political conditions may result in a wide array of policies and programs (see Tables 7, 8, and 9).

Group 1 consists of the PRC and India, which contain over 60 percent of the population of all DMCs. The GDP per capita for these two DMCs is between \$320 and \$530. These DMCs are between 26.8 percent and 30.3 percent urbanized, and the majority of their labor forces remain in agriculture. They share low HDI rankings: 108 for the PRC and 135 for India. The economic growth rate for the PRC is much higher than that for India, while the population growth rate is much lower.

Table 7: DMC Groupings

<i>Group 1</i>	<i>Group 2</i>	<i>Group 3</i>	<i>Group 4</i>	<i>Group 5</i>	<i>Group 6</i>	<i>Group 7</i>
PRC	Hong Kong,	Indonesia	Bangladesh	Afghanistan	Kazakhstan	Cook Islands
India	China	Pakistan	Mongolia	Bhutan	Kyrgyz	Fiji Islands
	Republic of	Philippines	Myanmar	Cambodia	Republic	Kiribati
	Korea	Sri Lanka	Viet Nam	Lao PDR	Uzbekistan	Maldives
	Malaysia	Thailand		Nepal		Marshall Islands
	Singapore					Micronesia, F.S.
	Taipei,China					Nauru
						PNG
						Solomon Islands
						Tonga
						Tuvalu
						Vanuatu
						Samoa

PRC = People's Republic of China

Lao PDR = Lao People's Democratic Republic

PNG = Papua New Guinea

Group 2 includes the NIEs – Hong Kong, China; Republic of Korea; Singapore; and Taipei, China. The average GDP per capita is \$14,062, and HDI ranks are between 22 and 60. These economies are highly urbanized, and have had high economic growth rates and high indices of education development. Because of these conditions, Malaysia is sometimes associated with this group.

Group 3 comprises countries that have achieved substantial economic growth but in which GDP per capita remains significantly lower than Group 2. This group includes Indonesia, Philippines, Sri Lanka, and Thailand. Pakistan is sometimes associated with this group. The HDI rankings for this group range between 59 and 139. Agriculture remains a significant employer in these countries. Thailand is the richest and fastest-growing DMC of this group.

Group 4 contains countries with low levels of economic development and generally low levels of economic growth. Countries in this group are Bangladesh, Mongolia, Myanmar, and Viet Nam. HDI ranks for this group range between 101 and 144.

Group 5 comprises low GDP per capita countries that also have low HDI rankings. These countries are predominantly agricultural. The countries include Afghanistan, Bhutan, Cambodia, Lao PDR, and Nepal. The HDI range for these countries is between 136 and 155. On several indicators this is the poorest and least educationally developed of the seven groups.

Group 6 countries, Kazakhstan, Kyrgyz Republic, and Uzbekistan were formerly part of the Soviet Union but became independent states in 1991. These countries have low per capita GDP, with wide variations in degree of industrial development. This group has comparatively high education development, but has experienced declines in secondary and tertiary enrollment and a deteriorating quality of instruction.

Group 7 includes the Pacific DMCs, which have small populations and exhibit extensive variation on economic, social, and education indicators. Included in Group 7 are Cook Islands, Fiji Islands, Kiribati, Maldives, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. The populations of these countries range from 10,000 (Tuvalu) to nearly 5 million (Papua New Guinea). The HDI ranks fall between 46 (Fiji Islands) and 128 (Papua New Guinea).

Further examination of these country groupings reveals intragroup and cross-group similarities. The NIEs (Group 2) share the following characteristics: large urban population, high life expectancy, low fertility, low mortality, and low dependency ratio. These characteristics and the economic and education policies of Group 2 will be analyzed below. Groups 2 and 6 stand out with high literacy and enrollment rates, reflecting their already well-developed education systems. For example, in these economies, first-level education is essentially universal and second-level gross enrollment rates exceed 80 percent. Moreover, children who enroll in school tend to stay in school (children not reaching Grade 5 in Group 6 is 0 percent; in Group 2, 0.7 percent).

Groups 4 and 5 have high dropout and repetition rates, high illiteracy rates, and low enrollment rates. Of all the groups, Group 5 spends the smallest share of gross national product (GNP) on education, reflecting low economic

development. Most of the countries in Groups 4 and 5 have less than 25 percent of the age cohort finishing the basic education cycle on schedule.

Almost everybody in the countries of Group 6 is literate, both males and females, compared with a 40 percent literacy rate in Group 5. Countries with very high illiteracy rates include Nepal (72.5 percent), Afghanistan (68.5 percent), Pakistan (62.2 percent), and Bangladesh (61.9 percent). Countries with lower literacy rates tend to have larger gender gaps, although there are considerable variations within each group.

India, Maldives, and Papua New Guinea have more than 130 percent GERs at the first level of education, which implies that there are many overage children and repeaters in primary school. Bangladesh, Kazakhstan, Malaysia, Singapore, Uzbekistan, and Vanuatu have almost 100 percent intake rates with low percentages of repeaters. Afghanistan has the lowest enrollment rates for all categories: males 41 percent and females 14 percent. Group 5 has a large gender difference in the enrollment of students in the first level, while there are no gender gaps at this level in Groups 2 and 6. Groups 2 and 6 demonstrate high efficiency in the first level of education, with almost all the students reaching Grade 5. Examples are the Republic of Korea, Singapore, Uzbekistan (100 percent), and Malaysia (98 percent). In Group 5, only 60 percent of the students stay in school until Grade 5.

Table 8: Adult Illiteracy Rates, 1995
(percent)

<i>Group</i>	<i>Countries</i>	<i>Mean</i>	<i>Minimum</i>	<i>Maximum</i>
1	2	33.3	18.5	48.0
2	4	8.8	2.0	16.5
3	5	19.9	5.4	62.2
4	3	28.4	6.3	61.9
5	4	60.5	43.4	72.5
6	1	0.3	0.3	0.3
7	3	14.3	6.8	27.8
Total	22	26.0	0.3	72.7

Sources: UNESCO 1989, 1998.

Table 9: Mid-Year Population, 1995
(millions)

<i>Group</i>	<i>Countries</i>	<i>Mean</i>	<i>Minimum</i>	<i>Maximum</i>
1	2	1060.7	916.5	1204.9
2	5	19.1	3.0	44.9
3	5	94.6	18.0	195.3
4	4	59.5	2.3	116.9
5	5	11.0	1.7	20.6
6	2	10.6	4.5	16.6
7	12	0.5	0.01	4.1

Sources: UNESCO 1989, 1998.

In terms of public expenditure on education, Group 7 spends the largest share of GDP (6.9 percent) of all the groups, while Group 5 spends the smallest share (2.9 percent). Countries in Group 6 (Kyrgyz Republic at 6.8 percent) and Group 7 (Maldives 8.1 percent; Kiribati 7.4 percent) gather at the top end of percentage of GDP allocated by the government to education, while the countries in Group 5 (Lao PDR 2.3 percent; Bhutan 2.7 percent; Nepal 2.9 percent) allocate the smallest amounts to education development. The governments of about half of all the countries spend less than 3.8 percent of GDP on education. However, nongovernment expenditures may be substantial in some countries (Bray 1996; Tan and Mingat 1992).

The transition economies of the former Soviet Union (Group 6) share a heritage of pre-transition, public ownership, and a high level of provision of education and other public services relative to their economic development. Two of Group 6, Kazakhstan and the Kyrgyz Republic, can expect a slow growth of the school-age population during the next decade. Nevertheless, maintenance of a high level of public provision of schooling may be difficult.

Groups 2 and 6 reflect a high enrollment of third-level students, averaging about 2,500 per 100,000 inhabitants – more than 1,000 students greater than Group 3's enrollment average, and much higher than Group 5's enrollment figure of 228 per 100,000 population. The wide range in the number of third-level students can be at least partly explained by the range of economic and demographic differences between the countries in the region. Additional explanations center on the variation in political responses to social demand.