

Gender-Related Equity

Despite stated recognition of females' economic and political contributions in official documents and even in laws, in general the improvement of gender-related equity remains lip service in Asia. The UNDP *Human Development Report 1997* observes that "no society treats its women as well as its men." Gender disparity is a persistent social issue that is difficult to resolve, despite general improvements in economic and social conditions. The *Human Development Reports* underscore the shortfall of opportunities for women in the areas of economic and political participation. The reports elaborate as follows:

- (i) *No society treats its women as well as its men.* This is obvious from the GDI values. A value of 1 would indicate maximum achievement in basic capabilities with perfect gender equality. However, no society achieves such a value. As many as 29 countries in the *Human Development Report 1999* have GDI values below 0.500, showing that women suffer the double deprivation of gender disparity and low achievement. Only 40 countries in this *Report* have GDI values above 0.800, showing that substantial progress in gender equality has been made in only a few societies.
- (ii) *Gender inequality is strongly associated with human poverty.* The three countries ranking lowest in the GDI – Burkina Faso, Ethiopia, and Niger – also rank lowest in the HDI. From a different perspective, of the three developing countries ranking highest in the Human Poverty Index (HPI), two – Barbados and Uruguay – also rank among the highest in the GDI.
- (iii) *Gender equity is not necessarily associated with high economic growth.* During the 1980s and 1990s, Botswana and Thailand enjoyed high per capita income growth and also maintained GDI ranks higher than their HDI ranks. But the Republic of Korea and the Syrian Arab Republic, despite good growth rates, had GDI ranks lower than their HDI ranks.
- (iv) *The countries showing a marked improvement in their GDI ranks relative to their HDI ranks are fairly diverse.* They include industrialized countries, such as Australia and Sweden; Eastern European and Commonwealth of Independent States (CIS) countries, such as the Czech Republic and Slovenia; and less developed countries, such as Thailand and Uruguay. Thus, gender equality can be achieved across income levels, political ideologies, cultures, and stages of development (UNDP 1996, 32-3; 1997, 39; 1998, 32, 131-3; 1999, 28, 138-41).

Table 1 shows that most DMCs have GDI rankings higher than HDI rankings (in the sense that the higher the ranking, the better the status of gender and human development compared with other countries in the world).

Table 1: GDI and HDI Ranking in DMCs, 1997

<i>Economy</i>	<i>HDI Rank^a</i>	<i>GDI Rank</i>	<i>GEM Rank</i>	<i>GDI Value</i>	<i>GEM Value</i>	<i>HDI Rank minus GDI Rank</i>
Singapore	22	22	32	0.83	0.51	0
Hong Kong, China	24	24	—	0.88	—	0
Korea, Republic of	30	30	78	0.85	0.34	(1)
Malaysia	56	52	52	0.76	0.45	(1)
Fiji Islands	61	60	79	0.75	0.33	(4)
Thailand	67	58	64	0.75	0.41	2
Samoa	70	—	—	—	—	—
Kazakhstan	76	64	—	0.74	—	3
Philippines	77	65	45	0.74	0.48	3
Sri Lanka	90	76	80	0.71	0.32	2
Uzbekistan	92	—	—	—	—	—
Maldives	93	77	76	0.71	0.34	2
Kyrgyz Republic	97	—	—	—	—	—
People's Republic of China	98	79	40	0.70	0.49	2
Indonesia	105	88	71	0.68	0.36	0
Tajikistan	108	92	—	0.66	—	(1)
Viet Nam	110	91	—	0.66	—	2
Vanuatu	116	—	—	—	—	—
Solomon Islands	118	—	—	—	—	—
Mongolia	119	99	—	0.62	—	1
Myanmar	128	104	—	0.58	—	2
Papua New Guinea	129	107	91	0.56	0.26	0
India	132	112	95	0.53	0.24	(3)
Cambodia	137	—	—	—	—	—
Pakistan	138	116	101	0.47	0.18	(2)
Lao People's Democratic Republic	140	115	—	0.48	—	—
Nepal	144	121	—	0.44	—	(2)
Bhutan	145	119	—	0.44	—	1
Bangladesh	150	123	83	0.43	0.30	1
Economy with the highest HDI: <i>Canada</i>	1	1	4	0.93	0.94	0
Economy with the lowest HDI: <i>Sierra Leone</i>	174	—	—	—	0.27	—
All developing countries	—	—	—	0.63	—	—
Least developed countries	—	—	—	0.42	—	—
Industrialized countries	—	—	—	0.92	—	—
World	—	—	—	0.70	—	—

— Data not available.

GDI = Gender-related Development Index.

GEM = Gender Empowerment Measure.

HDI = Human Development Index.

Note: Data in parentheses are negative.

^a Table is sorted by this column heading.

Source: UNDP 1999, 138-45.

This seems to suggest that DMCs have paid substantial attention to gender development alongside broader human development. However, the favorable GDI rankings of DMCs, compared with the HDI rankings, should be balanced by the following considerations:

- DMCs' GDIs are generally low compared with countries outside Asia,

especially the members of the Organisation for Economic Co-operation and Development (OECD).

- The HPAEs, plus Fiji Islands, although ranked top in HDI among DMCs, all have Gender Empowerment Measure (GEM) rankings lower than their HDI ranks. For example, Singapore's HDI and GEM ranks were 22 and 32, and the Republic of Korea's ranks were 30 and 78.
- Among the 174 countries presented in the *Human Development Report 1999*, only 12 of the 29 DMCs' GDIs were in the upper-middle ranks, i.e., above the value of 0.700.
- Although their GEM ranks were not as low as their GDI ranks, as compared with a total of 102 countries being ranked, all GEM values were significantly lower than the GDI values.

These facts mean that most DMCs still rank low in gender development compared with other parts of the world.

It is not difficult to find a parallel phenomenon in education. A review of education attainments in the last two or three decades in DMCs suggests that there are overall improvements in literacy and school enrollments, but that females remain a disadvantaged group compared with males.

Literacy

According to figures from the United Nations Educational, Scientific and Cultural Organization (UNESCO), despite a general improvement in literacy in Asia, the illiterate adult population grew from 638 million in 1970 to 700 million in 1990. This was because improvements in education provision could not keep abreast with increases in population.

The growth in the size of the illiterate population was partly attributable to the increase of female illiterates from 392 million to 446 million during the period. Such an increase outweighed the effect of a decrease in male illiterates

Table 2: Estimated Change of Out-of-School Children by Gender in South Asia, 1990-1995

<i>Country</i>	<i>Female 1995 (%)^a</i>	<i>Change total ('000)</i>	<i>Male ('000)</i>	<i>Female ('000)</i>	<i>Female/Male</i>
Iran	93.8	-115	4	-119	29.8
India	75.1	4,854	1,912	2,942	1.5
Nepal	66.4	212	211	1	0
Maldives	57.1	-1	-1	0	0
Pakistan	55.7	1,358	394	964	2.5
Bangladesh	55.3	319	137	182	1.3
Afghanistan	52.5	596	279	317	1.1
Bhutan	50.2	23	15	8	0.5
Sri Lanka	25.0	-3	-2	-1	0.5
South Asia	65.9	7,127	2,885	4,242	1.5

^a Table is sorted by this column heading.

Source: UNESCO-PROAP 1996, 19.

Table 3: Adult Literacy Rates by Gender in DMCs, 1985 and 1998

<i>Economy</i>	1985 ^a			1998 ^b		
	Male (%)	Female (%)	Male/Female	Male (%)	Female (%)	Male/Female ^c
Afghanistan	37	8	4.6	47	15	3.1
Nepal	32	9	3.6	41	14	2.9
Pakistan	35	15	2.3	50	24	2.1
Bhutan	46	19	2.4	56	28	2.0
Bangladesh	40	18	2.2	49	26	1.9
India	55	26	2.1	66	38	1.7
Lao PDR	92	76	1.2	69	44	1.6
Cambodia	—	—	—	80	53	1.5
Papua New Guinea	74	52	1.4	81	63	1.3
China, People's Republic of	79	51	1.5	90	73	1.2
Indonesia	78	58	1.3	90	78	1.2
Singapore	93	78	1.2	90	73	1.2
Hong Kong, China	95	82	1.2	96	88	1.1
Malaysia	80	60	1.3	89	78	1.1
Myanmar	86	72	1.2	89	78	1.1
Sri Lanka	91	82	1.1	93	87	1.1
Viet Nam	93	83	1.1	97	91	1.1
Fiji Islands	90	84	1.1	94	89	1.1
Taipei, China	96	85	1.1	98	91	1.1
Thailand	93	85	1.1	96	92	1.0
Korea, Republic of	98	93	1.1	99	97	1.0
Kyrgyz Republic	99	96	1.0	100	100	1.0
Kazakhstan	99	96	1.0	100	100	1.0
Tajikistan	99	97	1.0	100	100	1.0
Maldives	92	92	1.0	93	93	1.0
Uzbekistan	99	96	1.0	100	100	1.0
Micronesia, Fed. States of	—	—	—	95	93	1.0
Philippines	84	83	1.0	95	94	1.0
Mongolia	89	77	1.2	—	—	—

— Data not available.

Note: Data refer to population 15-45 years old.

^a Data relate to years 1980 through 1989.

^b Data relate to years 1990 through 1998.

^c Table is sorted by this column heading.

Sources: ADB 1999, 256; UNESCO, Division of Statistics 1999.

by 5 million since 1980. Moreover, Asia and the Pacific has accounted for more than three quarters of adult illiterates in the developing world (UNESCO, Division of Statistics 1993, 8). In 1995, there were 167 million illiterate adults in East Asia, 38 million in Southeast Asia and the Pacific, and 407 million in South Asia (UNDP 1997, 27). In terms of proportion, according to a 1997 ADB report (p.279), adult female literacy rates rose from 17 percent to 35 percent between 1970 and 1993, while in East Asia they rose from 55 percent to 72 percent.

Literate females are still a minority in South Asia, and a large proportion of illiterates in Asia come from the South Asian subregion. In Bangladesh, India, Nepal, and Pakistan, women's illiteracy exceeded men's by 20 percentage points or more. The figures on illiteracy matched the growth of the out-of-school population. Between 1990 and 1995, the estimated number of out-of-school children grew by 7,127,000. Among these were 4,854,000 in India and

1,358,000 in Pakistan. However, the Maldives and Sri Lanka were successful in achieving a slight reduction in the out-of-school population: 1,000 in the former and 3,000 in the latter (Table 2).

Table 3 shows that several Asian countries have achieved an equal literacy ratio between males and females. These countries include four central Asian republics (Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan), Republic of Korea, Maldives, Philippines, and Thailand. Many other Asian economies have been able to bring the male/female literacy ratios very close to parity. They are mostly East and Southeast Asian economies, such as People's Republic of China (PRC); Hong Kong, China; Indonesia; Lao People's Democratic Republic (Lao PDR); Malaysia; Myanmar, Singapore; Taipei, China; and Viet Nam. Gender disparity in literacy is clear in South Asia. In 1998, the male/female literacy ratio was 1.5 in Cambodia, 1.7 in India, 1.9 in Bangladesh, 2.0 in Bhutan, 2.1 in Pakistan, 2.9 in Nepal, and 3.1 in Afghanistan.

There are also obvious differences between age groups among females. Improvements in literacy are evident for the younger generation. For example, in 1980 in Singapore the female literacy rate was 96 percent for the 15-24 age group, but was only 69 percent for the 35-44 age group. In Pakistan, the literacy rate among the younger age group was only 25 percent, but at 11 percent it was even lower for the older age group (ADB 1993, 73).

In addition, there is a gap between urban and rural residents. For

Table 4: Adult Illiteracy Rates by Gender in DMCs, 1995

<i>Economy</i>	<i>Female (%)</i>	<i>Male (%)</i>	<i>Female/Male^a</i>
Singapore	14	4	3.5
Hong Kong, China	12	4	3.0
Korea, Republic of	3	1	3.0
China, People's Republic of	27	10	2.7
Viet Nam	9	4	2.3
Indonesia	22	10	2.2
Mongolia	23	11	2.1
Malaysia	22	11	2.0
Myanmar	22	11	2.0
Thailand	8	4	2.0
Papua New Guinea	37	19	1.9
Sri Lanka	13	7	1.9
Fiji Islands	11	6	1.8
India	62	35	1.8
Lao People's Democratic Republic	56	31	1.8
Afghanistan	85	53	1.6
Bhutan	72	44	1.6
Bangladesh	74	51	1.5
Nepal	86	59	1.5
Pakistan	76	50	1.5
Philippines	6	5	1.2
Cambodia	9	9	1.0
Taipei, China	7	7	1.0
Maldives	7	7	1.0

Note: Data refer to population of people 15 years old and above.

^a Table is sorted by this column heading.

Sources: Lewin 1996, 92; UNDP 1997, 164-5.

example, in Afghanistan, urban female literacy rates have been recorded as eight times higher than rural female literacy rates. In the Philippines, the urban female literacy rate was recorded as 97 percent, compared with 85 percent in rural areas (ADB 1993, 73). In 1991/92, over two million children in the PRC were not enrolled in school, of whom 70 percent were girls; and in many rural areas women constitute 70 percent of the illiterate population (UNDP 1997, 50).

In conclusion, although literacy has been generally improved, females obviously constitute the larger proportion of the illiterate population in Asia (Table 4).

Education Attainments

Between 1970 and 1990, girls' participation in education improved from 41.6 percent to 43.1 percent in overall enrollment, from 43.4 percent to 45.2 percent in primary enrollment, from 39.7 percent to 42.1 percent in secondary enrollment, and from 36.6 percent to 38.0 percent in tertiary enrollment. However, in terms of absolute numbers, girls' enrollment has continued to be lower than boys' (UNESCO, Division of Statistics 1993, 12, Table 8). This pattern, and the underlying factors, are here examined by level of education.

Primary Enrollments

During the period 1980 to 1990, primary education enrollments in Asia and the Pacific grew from 348 million to 373 million, representing a steady annual growth of about 0.7 percent. However, girls' enrollments grew faster than boys'. Girls' enrollments accounted for 45.2 percent of the total at the primary level in 1990, compared with 43.7 percent in 1980. Considerable progress was seen in some low-performing Asian economies. In Bangladesh, for example, enrollments grew by 76 percent during this period, raising the proportion of girls in total enrollments from 37 percent to 45 percent in 1990 (UNESCO, Division of Statistics 1993, 14).

During the 1990s, the primary gross enrollment rates (GERs) reached nearly 100 percent for both boys and girls in most DMCs located in East and Southeast Asia, including the PRC. GERs in South Asian countries were lower during the 1980s. However, even in that region by 1998 most had exceeded 70 percent and some even approached 100 percent. The chief exception was Afghanistan where enrollment rates remained at around 50 percent (Table 5).

The male/female ratio of enrollment in Asia has tended to approach parity over time. The higher-income DMCs reached parity in the mid-1980s. In Mongolia, girls' enrollment rates have even been slightly higher than boys' (1:1.1 in 1998). DMCs where boys' primary enrollment rates remain higher than girls' are Bangladesh, Cambodia, India, Lao PDR, Nepal, Papua New Guinea, and Solomon Islands, ranging from 1.2:1 to 1.5:1. However, as shown in Table 5, the boy/girl enrollment ratios in Afghanistan (2:1) and Pakistan (2.2:1) remain notably high.

Table 5: Primary GERs by Gender in DMCs, 1985 and 1998

<i>Economy</i>	1985 ^a				1998 ^b			
	Total (%)	Male (%)	Female (%)	Male/Female	Total (%)	Male (%)	Female (%)	Male/Female ^c
<i>East Asia</i>								
Hong Kong, China	106	106	105	1.0	96	99	99	1.0
Korea, Republic of	97	100	100	1.0	101	98	99	1.0
PRC	123	132	114	1.2	118	120	116	1.0
Taipei, China	—	99	100	1.0	—	100	102	1.0
Mongolia	103	107	107	1.0	88	82	87	0.9
<i>Central Asia</i>								
Kazakhstan	88	88	87	1.0	96	86	86	1.0
Kyrgyz Republic	122	123	123	1.0	107	110	111	1.0
Tajikistan	85	86	85	1.0	91	91	88	1.0
Uzbekistan	87	88	85	1.0	77	78	76	1.0
<i>South Asia</i>								
Pakistan	44	56	30	1.9	74	94	42	2.2
Afghanistan	20	27	13	2.1	49	63	32	2.0
Nepal	80	101	47	2.1	110	130	87	1.5
Bangladesh	63	72	54	1.3	78	84	73	1.2
India	96	111	79	1.4	100	115	93	1.2
Maldives	141	156	148	1.0	134	136	133	1.0
Sri Lanka	103	104	101	1.0	113	106	104	1.0
<i>Southeast Asia and Pacific</i>								
Lao PDR	111	121	100	1.2	107	123	92	1.3
Cambodia	248	209	174	1.2	122	130	106	1.2
Papua New Guinea	63	66	51	1.3	80	88	75	1.2
Solomon Islands	80	85	65	1.3	97	104	90	1.2
Viet Nam	103	106	100	1.1	114	118	112	1.1
Fiji Islands	122	122	122	1.0	128	128	127	1.0
Indonesia	117	120	114	1.1	114	117	113	1.0
Malaysia	101	101	100	1.0	91	93	93	1.0
Micronesia, Fed. States of	—	—	—	—	—	94	94	1.0
Myanmar	98	101	96	1.1	103	112	108	1.0
Philippines	107	108	107	1.0	116	117	116	1.0
Samoa	—	87	90	1.0	116	106	107	1.0
Singapore	111	120	114	1.1	95	99	98	1.0
Thailand	96	100	97	1.0	87	98	97	1.0
Vanuatu	100	103	98	1.1	106	105	107	1.0

— Data not available.

GER = gross enrollment rate.

^a Data are for 1980-89.

^b Data are for 1990-98.

^c Table is sorted in subregional groups by this column heading.

Sources: ADB 1999, 256; UNDP 1998, 162-3; UNESCO, Division of Statistics 1999.

Secondary Enrollments

Enrollments in secondary education in Asia and the Pacific increased from 155 million in 1980 to 191 million in 1990, at an average annual growth rate of 2.1 percent. Compared with the 5 percent growth rate in the 1970s, the rate of

growth in the 1980s was much slower (UNESCO, Division of Statistics 1993, 20). While primary GERs in most DMCs approached 100 percent in the 1990s, GERs at the secondary level in about half the DMCs were below 50 percent. In South Asia, secondary schools served only about one third of the relevant age group (Table 6).

Table 6: Secondary GERs by Gender in DMCs, 1985 and 1998

<i>Economy</i>	1985 ^a				1998 ^b			
	Total (%)	Male (%)	Female (%)	Male/Female	Total (%)	Male (%)	Female (%)	Male/Female ^c
<i>East Asia</i>								
PRC	40	45	33	1.4	67	60	51	1.2
Korea, Rep. of	92	92	88	1.0	101	98	98	1.0
Taipei, China	—	89	91	1.0	—	96	99	1.0
Hong Kong, China	71	69	73	0.9	75	73	78	0.9
Mongolia	91	85	97	0.9	59	50	70	0.7
<i>Central Asia</i>								
Tajikistan	113	113	113	1.0	79	83	75	1.1
Uzbekistan	107	117	97	1.2	93	99	87	1.1
Kazakhstan	103	102	104	1.0	83	89	92	1.0
Kyrgyz Republic	109	111	108	1.0	81	84	89	0.9
<i>South Asia</i>								
Afghanistan	8	11	5	2.2	22	32	11	2.9
Nepal	25	37	12	3.1	51	46	23	2.0
Bangladesh	18	26	11	2.4	19	25	13	1.9
Pakistan	17	24	10	2.4	30	33	17	1.9
India	38	62	35	1.8	49	80	55	1.5
Maldives	21	21	22	1.0	49	49	49	1.0
Sri Lanka	63	60	60	1.0	75	71	79	0.9
<i>Southeast Asia and Pacific</i>								
Cambodia	29	36	21	1.7	27	31	18	1.7
Lao PDR	24	27	19	1.4	25	31	19	1.6
Papua New Guinea	12	15	8	1.9	14	17	11	1.5
Solomon Islands	19	22	9	2.4	17	21	14	1.5
Indonesia	41	50	41	1.2	48	49	41	1.2
Vanuatu	15	18	14	1.3	20	23	19	1.2
Fiji Islands	51	51	51	1.0	64	64	65	1.0
Myanmar	23	24	22	1.1	30	23	23	1.0
Singapore	62	89	95	0.9	73	72	74	1.0
Thailand	30	30	28	1.1	55	38	37	1.0
Malaysia	53	53	53	1.0	57	58	64	0.9
Micronesia, Fed. States of	—	—	—	—	—	78	85	0.9
Philippines	64	64	65	1.0	79	78	83	0.9
Samoa	67	61	67	0.9	47	67	71	0.9
Viet Nam	43	44	41	1.1	47	—	—	—

— Data not available.

^a Data relate to years 1980 through 1989.

^b Data relate to years 1990 through 1998.

^c Table is sorted in subregional groups by this column heading.

Sources: ADB 1999, 256; UNDP 1998, 162-3; UNESCO, Division of Statistics 1999.

While enrollment is approaching gender parity at the primary level, at the secondary level the disparity widens. Table 6 suggests that in only a few DMCs are male/female enrollment ratios 1:1. These DMCs are Taipei, China; Fiji Islands; Kazakhstan; Republic of Korea; Maldives; Myanmar; Singapore; and Thailand. In many countries, the male/female enrollment ratios are slightly higher on the male side (1.1:1 to 1.7:1), including Cambodia, PRC, India, Indonesia, Lao PDR, Papua New Guinea, Solomon Islands, Tajikistan, Uzbekistan, and Vanuatu. DMCs with significantly higher male enrollment rates (1.9:1 and above) are Afghanistan, Bangladesh, Nepal, and Pakistan. It is interesting to note that there are also some DMCs where the male enrollment rates are slightly lower than the female rates. These DMCs are Hong Kong, China; Kyrgyz Republic; Malaysia; Mongolia; Federated States of Micronesia; Philippines; Samoa; and Sri Lanka.

The gender gap is even more obvious in the completion rates. In Indonesia and Marshall Islands, the completion rate for boys has been two or three times as high as that for girls. However, in a few Asian countries the completion rates are close to equal or more favorable on the boys' side (about 1.4:1). These are Fiji Islands, Republic of Korea, Mongolia, and Viet Nam. Across time, a clear trend of improvement can be seen. For example, the male/female completion rate dropped from 4.1 in 1970 to 3.1 in 1980 in India; and between 1980 and 1990, from 3 to 1 in Maldives, and from 2.5 to 1.4 in Fiji Islands. However, in 1980, the male/female rate was as high as 9.9 in Afghanistan, 6.1 in Bangladesh, and 5.6 in Nepal (see Appendix 1, Table A1.1).

Tertiary Enrollments

Total enrollment in higher education in Asia and the Pacific grew from 11 million in 1970 to 26 million in 1990, more than doubling within two decades. However, female participation in higher education improved only slightly from 36.6 percent in 1970 to 38.0 percent in 1990 (UNESCO, Division of Statistics 1993, 25, 27). While many DMCs could only reach a male/female ratio of below 2:1 at the secondary level, in most of them the ratio was 3:1 at the tertiary level.

The largest gap was found in Bangladesh and Nepal, with respective male/female ratios of 7.3:1 and 5.0:1 around 1980 (Table 7). In the major universities in Cambodia, females accounted for only 12 to 15 percent of the student population, and their representation was as low as 1.5 percent and 4.6 percent in the technological institutes and the Royal University of Agriculture in 1993/94 (ADB 1996c, 18). The 15 percent of female representation in tertiary institutions was much lower than the 45 percent in primary schools, 40 percent in lower secondary schools, and 25 percent in upper secondary schools (UNDP 1996, 40).

In general, the higher the education level, the lower the female representation. For example, in Indonesia the percentage of female students declined from 48 percent in primary enrollments to 32 percent in tertiary enrollments (1994), from 47 percent to 30 percent in Viet Nam (1994), and from 45 percent to 16 percent in Bangladesh (1990). This pattern has remained unchanged for a long period, although the percentage of females did rise from 22 percent

in 1970 to 38 percent in 1994 in Indonesia, and from 14 percent in 1980 to 16 percent in 1990 in Bangladesh (ADB 1996e, 9; Chowdhury 1997, 6; Indonesia, Ministry of Education and Culture 1997, 74). Statistics also indicate some gender stereotyping in the fields of study. Males and females tend to cluster in different fields of study, which has implications for their occupational opportunities. In Kiribati, for example, females account for 100 percent of enrollments in home economics, 85 percent in library studies, and over 50 percent in such social science subjects as education, geography, history/politics, and sociology. Subjects that may lead to high incomes (such as economics and technology) are dominated by males, who make up over 90 percent of the enrollments. Moreover, male students have better shares in overseas scholarships for higher education or training (Emberson-Bain 1995, 22). In Cambodia, females account for less than 1 percent of the enrollments in such tertiary courses as architecture, electricity, hydrology, law and economics, but have a higher proportion of enrollments in commerce (16 percent), teacher training (23 percent), and foreign languages (23 percent) (ADB 1996c, 19). Professional courses are also dominated by males in Hong Kong, China. At the University of Hong Kong, male/female enrollment rates in the early 1990s were 32:1 in engineering, 4.3:1 in medicine, and 4.7:1 in dentistry (Westwood, Mehra, and Cheung 1995, 39).

Table 7: Population of University Graduates by Gender in DMCs, 1970s-1990s

<i>Economy</i>	<i>Circa 1970</i>			<i>Circa 1980</i>			<i>Latest</i>		
	<i>M%</i>	<i>F%</i>	<i>M/F</i>	<i>M%</i>	<i>F%</i>	<i>M/F^a</i>	<i>M%</i>	<i>F%</i>	<i>M/F</i>
Bangladesh	—	—	—	2.2	0.3	7.3	—	—	—
Nepal	—	—	—	1.0	0.2	5.0	—	—	—
Afghanistan	1.7	0.3	5.7	12.5	2.7	4.6	—	—	—
Pakistan	—	—	—	2.7	0.7	3.9	—	—	—
India	1.7	0.3	5.7	3.2	0.9	3.6	—	—	—
Korea, Republic of	6.5	1.1	5.9	10.5	2.8	3.4	12.2	3.9	3.1
Malaysia	—	—	—	1.7	0.5	3.4	—	—	—
Tonga	—	—	—	0.9	0.3	3.0	—	—	—
Taipei, China	—	—	—	6.8	2.5	2.7	—	—	—
PRC	—	—	—	1.3	0.5	2.6	—	—	—
Marshall Islands	—	—	—	—	—	—	15.7	6.8	2.3
Hong Kong, China	6.5	2.5	2.6	7.1	3.2	2.2	—	—	—
Viet Nam	—	—	—	—	—	—	3.7	1.7	2.2
Singapore	—	—	—	17.0	8.4	2.0	—	—	—
Indonesia	0.8	0.1	8.0	1.7	0.8	2.1	1.9	0.6	3.2
Vanuatu	—	—	—	4.3	2.5	1.7	—	—	—
Fiji Islands	—	—	—	4.1	2.5	1.6	5.3	3.4	1.2
Sri Lanka	1.0	0.4	2.5	2.2	1.5	1.5	—	—	—
Myanmar	—	—	—	1.4	1.2	1.2	—	—	—
Thailand	1.2	0.5	2.4	2.7	2.2	1.2	—	—	—
Maldives	—	—	—	0.1	0.0	1.0	0.3	0.1	3.0
Philippines	10.4	8.8	1.2	9.2	10.5	0.9	—	—	—

— Data not available.

^a Table is sorted by this column heading.

Source: ADB 1993, 158-60.

Gender imbalances in enrollment are also wide in vocational education programs. In Viet Nam, females are concentrated in Teachers' Colleges, Nursing Schools, and Schools of Social Work, and in courses such as library science, accounting, and secretarial work, i.e., in courses associated with the nurturing and service-sector roles that society ascribes to women. They are enrolled in only one of the three agricultural schools and the admission is limited to 20 percent of places, a situation that appears to reflect the 'invisibility' of women in the official agricultural labor force. In the 28 technical colleges, only about 30 percent of the students are women. However, they constitute 75 to 80 percent of the students in commercial courses, while the percentage receiving technical education has been minimal (McDonald 1995, 5).

Dropout and Repetition

GER, as an indication of total enrollment in education expressed as a percentage of population of relevant age group, can only represent a partial picture of access to education. This is because a high GER can be a result of significant numbers of overage enrollment and repetition. UNESCO's *Mid-decade Review* (UNESCO-Principal Regional Office for Asia and the Pacific [PROAP] 1996, 25) pointed out that "increasingly, the principal quantitative problem in the subregion is no longer that of simply enrolling children, but that of ensuring their retention and progress through their grades."

When looking at repetition and retention rates, the picture of access in education can be very different. Tables 8 and 9 show that the access rates to Primary Grade 1 are quite high across DMCs. However, the retention rates are distinctively low in South Asia. In 1992, only 32 and 39 percent of Primary Grade 1 students survived to Grade 5 in Bhutan and Pakistan respectively; and 50 and 56 percent respectively in Bangladesh and the Lao PDR. UNESCO

Table 8: Access and Retention in Primary Education in Selected DMCs, 1992

Country	Apparent access rate to Primary Grade 1 (%)	Grade 1 students get to primary		Population get to Grade 5 (%)^a	Primary internal efficiency ratio
		Grade 2 (%)	Grade 5 (%)		
Bhutan	66	93	49	32	0.6
Pakistan	74	81	51	39	0.7
Bangladesh	101	77	52	50	0.7
China, People's Republic of	104	98	88	91	0.9
Lao PDR	118	74	47	56	0.5
Nepal	125	66	52	65	0.6
India	133	97	62	82	0.7
Sri Lanka	95	98	92	87	0.9
Philippines	136	87	65	88	0.8
Indonesia	110	98	86	94	0.8
All	106	87	63	68	0.7

^a Table is sorted by this column heading.

Source: Chuard and Mingat 1996b, 3.

Table 9: Repetition and Retention Rates in DMCs, 1980s and 1990s
(percent)

Economy	Repeaters						1994 Cohort Reaching					
	Total		Male		Female		Grade 2			Grade 3		
	1985	1995	1985	1995	1985	1995	M	F	Total	M	F	Total
Afghanistan	6	9	6	9	6	9	—	—	—	—	—	—
Cambodia	—	30	—	31	—	30	84	81	83	56	42	50
PRC	7	2	—	2	—	2	99	99	99	92	92	92
Hong Kong, China	2	1	2	—	2	—	—	—	—	—	—	100
India	4	—	4	—	4	—	81	81	81	65	69	62
Indonesia	11	8	—	8	—	7	100	94	97	96	81	90
Kazakhstan	—	0	—	0	—	0	—	—	—	—	—	—
Kyrgyz Republic	—	0	—	—	—	—	—	—	—	—	—	92
Lao PDR	27	26	—	27	—	25	74	72	73	55	51	53
Malaysia	—	—	—	—	—	—	95	95	95	94	94	94
Maldives	—	—	—	—	—	—	94	96	95	91	94	93
Mongolia	—	1	—	1	—	0	95	96	96	—	—	—
Nepal	21	27	—	28	—	24	68	62	65	52	52	52
Philippines	2	—	2	—	2	—	—	—	84	—	—	70
Korea, Republic of	—	—	—	—	—	—	100	100	100	100	100	100
Singapore	1	—	1	—	1	—	—	—	—	—	—	—
Sri Lanka	8	—	8	—	9	—	100	100	100	98	98	98

— Data not available.

Source: UNESCO, Division of Statistics 1999.

figures also show that the percentages of the 1994 cohort able to survive to Grade 3 were quite close to the 1992 figures for Grade 5, i.e., about 50 percent in Cambodia, India, and Lao PDR. In Nepal, dropout rates have increased rather than decreased (Thapa 1996, 2). Repetition rates are in general below 10 percent in DMCs, but again are relatively high in South Asia. They are about one quarter in Nepal and Lao PDR, and one third in Cambodia (UNESCO, Division of Statistics 1999).

Table 9 shows that, except in Cambodia (where girls' retention rate was obviously low: 42 percent compared with boys' 56 percent), there are no distinctive gender differences in retention rates across DMCs. In some cases, girls' retention rates can even be higher than boys': for example, 69 percent versus 65 percent in India. However, this does not necessarily mean that girls have better access to education. On the contrary, this may only mean that the girls who can enter schools (probably those who are from better-off families) have a higher tendency to push through with their education. Chuard and Mingat (1996b, 3) note particularly that the relatively low coverage of primary education in South Asia concerns both boys and girls, but gender differences are on average stronger in South Asia than elsewhere in the region. The ratio between the GERs of girls and boys was estimated at 0.69, against 0.89 in other sampled countries.

Many factors can lead to dropouts. A Nepalese report (Thapa 1996) has identified a number of school-related and family-related factors that may apply to many other contexts. As shown in Table 10, school-related factors include unfavorable school facilities, low quality of teachers, medium of

Table 10: Causes of Dropout and Repetition

School-related factors	Family-related factors
1. Lack of adequate physical facilities: <ul style="list-style-type: none"> • crowded classrooms • inclusion of primary grades in secondary schools 	1. Poor economic conditions: <ul style="list-style-type: none"> • inability to purchase stationery • inability to purchase school dress • inability to provide additional financial support to school-going children
2. Teachers' performance: <ul style="list-style-type: none"> • low quality of teaching • teacher absenteeism • poor behavior with students 	2. Children have to work: <ul style="list-style-type: none"> • looking after younger siblings • doing household chores • working at farm
3. Language problem: <ul style="list-style-type: none"> • the medium of instruction in school is not a spoken language to many or most children 	3. Lack of awareness of the importance of education <ul style="list-style-type: none"> • low level of parental education • parents being indifferent to children • irregularity in school attendance
4. Student's low learning outcomes.	4. Gender discrimination: <ul style="list-style-type: none"> • girls taken out of school after reaching certain grades
5. Lack of effective need-based scholarship and studentships.	5. Sending underage children to school, but lack of preschool facilities.

Source: Adapted from Thapa 1996, 1, Table 20.

instruction, low student performance, and unavailability of studentships. Family-related factors include the requirement for children to work, a lack of awareness of the significance of education, gender discrimination, and insufficient child-care facilities.

Life Chances Beyond Education

Despite a general improvement in education opportunities for females, their participation rate in the labor force has remained more or less constant over the last 20 years. In most DMCs, women's shares of the adult labor force range between 35 and 45 percent. The greatest increases in female participation in the labor force has taken place in Fiji Islands and Sri Lanka, where the rates grew from 12 and 25 percent in 1970 to 23 and 34 percent in 1990, respectively (Table 11).

In Indonesia and Sri Lanka, the unemployment rates of women are higher than those of men across all levels of education. The Indonesian figures show that the higher their level of education, the higher their rate of unemployment. The highest rates of unemployment are among those with general upper secondary education and university education. It seems that people taking a vocational stream of secondary education stand a better chance of employment. Although this phenomenon applies to both genders, the educated females are more vulnerable to unemployment, as their unemployment rates at the diploma and university levels are over twice those of males. Such a gender differentiation also occurs among those with vocational lower secondary education. However, males with vocational lower secondary education have very low rates of unemployment, while females' rates remain high (Table 12). A similar situation exists in Sri Lanka, i.e., the higher the level of education, the

Table 11: Women's Share of Adult Labor Force in DMCs, 1970 and 1995
(percent)

<i>Economy</i>	1970	1995 ^a	<i>Economy</i>	1970	1995 ^a
Cambodia	49	52	Bhutan	40	39
Viet Nam	48	50	Indonesia	30	39
Lao PDR	45	47	Korea, Republic of	32	39
Thailand	48	47	Singapore	26	38
Mongolia	46	46	Hong Kong, China	35	37
PRC	42	45	Philippines	33	37
Myanmar	44	44	Malaysia	31	36
Bangladesh	40	42	Sri Lanka	25	34
Maldives	38	42	India	34	31
Papua New Guinea	42	41	Pakistan	22	24
Nepal	39	40	Fiji Islands	12	23

Note: Data refer to population 15 years old and above.

^a Table is sorted by this column heading.

Source: UNDP 1998, 164-5.

Table 12: Unemployment by Level of Education and Gender in Indonesia, 1994

<i>School level</i>	<i>Female (%)</i>	<i>Male (%)</i>	<i>Female/Male</i>
No schooling	0.4	0.4	1.0
Incomplete primary	1.1	0.8	1.4
Complete primary	3.2	2.0	1.6
Junior high school (General)	8.2	5.5	1.5
Junior high school (Vocational)	10.5	4.5	2.3
Senior high school (General)	24.9	13.6	1.8
Senior high school (Vocational)	14.8	8.9	1.7
Diploma	14.9	7.2	2.1
University	24.9	10.3	2.4
Total	5.1	3.9	1.3

Source : World Bank 1996b, 68.

Table 13: Unemployment by Level of Education and Gender in Sri Lanka, 1980s

<i>Level of education</i>	1981/82			1985/86		
	<i>M%</i>	<i>F%</i>	<i>F/M</i>	<i>M%</i>	<i>F%</i>	<i>F/M</i>
No schooling (Illiterate)	2.6	2.1	1.2	4.8	7.7	0.6
No schooling (Literate)	—	2.4	—	—	—	—
Primary	7.8	3.8	2.1	9.4	7.0	1.3
Secondary	33.5	9.6	3.5	25.2	12.5	2.0
GCE (Ordinary level)	42.0	14.5	2.9	35.6	14.4	2.5
GCE (Advanced level)	52.2	22.0	2.4	44.9	18.7	2.4
Undergraduates	40.0	42.9	0.9	—	—	—
Graduates and Postgraduates	12.1	8.1	1.5	6.7	3.8	1.8
Total	21.3	7.8	2.7	20.8	10.8	1.9

— Data not available.

GCE = General Certificate of Education.

Source: Jayaweera 1991, 6.

Table 14: Labor Force in Managerial and Professional Occupations by Gender in DMCs, 1970s-1990s

Economy	Circa 1970			Circa 1980			Latest		
	M%	F%	M/F	M%	F%	M/F	M%	F%	M/F
Afghanistan	—	—	—	2.9	5.4	0.5	—	—	—
Bangladesh	2.2	3.8	0.6	—	—	—	4.2	3.7	1.1
PRC	—	—	—	7.9	4.8	1.6	8.2	5.8	1.4
Cook Islands	—	—	—	17.4	23.6	0.7	—	—	—
Fiji Islands	—	—	—	7.4	20.0	0.4	7.0	14.4	0.5
Hong Kong, China	10.8	8.8	1.2	9.3	7.4	1.3	—	—	—
India	—	—	—	4.4	3.4	1.3	—	—	—
Indonesia	3.1	2.6	1.2	2.9	3.3	0.9	3.4	3.9	0.9
Kiribati	—	—	—	21.2	39.2	0.5	27.1	40.7	0.7
Korea, Republic of	5.3	2.2	2.4	6.9	3.5	2.0	9.2	7.0	1.3
Malaysia	5.6	5.3	1.1	—	—	—	—	—	—
Maldives	5.1	3.0	1.7	—	—	—	13.3	10.0	1.3
Marshall Islands	—	—	—	23.4	18.7	1.3	19.0	20.3	0.9
Myanmar	—	—	—	2.9	3.1	0.9	—	—	—
Nepal	0.8	0.2	4.0	1.5	0.5	3.0	—	—	—
Pakistan	—	—	—	4.9	17.9	0.3	—	—	—
Philippines	4.7	10.7	0.4	3.7	11.5	0.3	—	—	—
Samoa	6.4	27.3	0.2	8.4	37.5	0.2	—	—	—
Singapore	—	—	—	15.7	12.4	1.3	28.6	20.6	1.4
Solomon Islands	—	—	—	—	—	—	16.1	15.7	1.0
Sri Lanka	—	—	—	5.6	15.0	0.4	—	—	—
Taipei, China	5.7	6.6	0.9	8.2	8.9	0.9	—	—	—
Thailand	4.5	1.7	2.6	6.3	3.6	1.8	—	—	—
Tonga	—	—	—	11.4	48.3	0.2	8.6	26.1	0.3
Vanuatu	—	—	—	6.6	8.2	0.8	—	—	—
Viet Nam	—	—	—	7.0	4.9	1.4	—	—	—

— Data not available.

Note: Data refer to population 25 years old and above.

Source: ADB 1993, 191-3.

higher the rate of unemployment, and females' unemployment rates exceed males' across all levels of education. Also, females' unemployment rates among those with secondary education, General Certificate of Education (GCE) and degrees are over twice those of males (Table 13).

Looking at access to managerial and professional occupations, the situation varies across DMCs. Some countries have more males than females in these occupations, such as PRC, Republic of Korea, Maldives, and Singapore. However, the difference is not big, as in general the male/female ratio is about 1.3:1. Moreover, a number of DMCs have more females than males in these positions, for example Fiji Islands, Indonesia, Kiribati, Marshall Islands, and Tonga (Table 14). However, this does not necessarily mean that women are enjoying higher social status. For example, in Pakistan, while 18 percent of women and 5 percent of men are classified as professional and managerial, the majority of women (65 percent) but a minority of men (20 percent) are teachers (ADB 1993, 105).

Gender disparity in life chances is clearer if administrative and managerial positions are separated from other occupations. UNDP figures (1998, 154-5,

188) show that female representation is the weakest in administrative and managerial occupations, compared with the other three categories, namely, professional and technical, sales and service workers, and clerical workers. The highest representation of women in administrative and managerial occupations is found in the Philippines, where they hold about one third of the positions. The lowest representation is in India, Republic of Korea, Pakistan and Solomon Islands, where the figure is only 2 to 4 percent.

Women hold 30 to 40 percent of professional and technical positions in most DMCs, with a few at or below 20 percent (Pakistan and Sri Lanka). Sri Lanka has the lowest representation rate (19 percent), and the Philippines the highest (64 percent). Female representation in the other two types of occupations are higher than in the professional and technical occupations. In most DMCs, average female representation moves up to 40 to 50 percent for sales and services occupations, and further up to 50 to 60 percent for clerical occupations. Thus despite an improvement in access and equity for the females in education, their life chances are more open at the lower end rather than the upper end of the occupation hierarchy, except in a few DMCs where females' enrollments at all levels are comparable to or even slightly higher than those of males (see Appendix 1, Table A1.2).

In Mongolia, where females' literacy and enrollment rates are comparable to males', the occupations in which females outnumber males are nursing, sewing, food/restaurant-related work, civil service, doctors, and teaching at all levels (including professorships). However, men outnumber women in "specialist" professions, such as engineers, economists, lawyers, veterinary surgeons, and agronomists. The picture is very mixed in Mongolia, but a gender division of labor seems to be easily identified in that females mainly work as teachers whereas males work as specialists (Table 15).

Table 15: Female and Male Representation in Occupations in Mongolia, 1990

<i>Occupation</i>	<i>Male (%)</i>	<i>Female (%)</i>	<i>Male/Female</i>
<i>People with higher education</i>	57.5	42.5	1.4
Engineers	76.4	23.6	3.2
Veterinary surgeons	74.6	25.4	2.9
Lawyers	73.4	26.6	2.8
Livestock specialists	70.5	29.5	2.4
Economists	58.1	41.9	1.4
Computer and electronic technology engineers	57.6	42.4	1.4
Agronomists	55.4	44.6	1.2
Teachers and Professors	44.8	55.2	0.8
Doctors	31.7	68.3	0.5
Public servants	25.9	74.1	0.3
<i>People with vocational training</i>	38.3	61.7	0.6
Technicians/Operators	61.4	38.6	1.6
Elementary schoolteachers	26.2	73.8	0.4
Food industry	21.2	78.8	0.3
Nurses	16.9	83.1	0.2
Sewing	11.4	88.6	0.1
Restaurant cooks	12.2	87.8	0.1
Kindergarten teachers	1.1	98.9	0.0

Source: Kajima 1995, 5.

Breaking down managerial positions by types of occupations, in the Kyrgyz Republic females account for about half of the managers in three types of occupations: trade (54 percent), education (51 percent), and health and social protection (48 percent), but they remain a low proportion at between 15 and 30 percent in all other types of occupations such as industry, agriculture, transport and construction, and government administration (Bauer, Green, and Kuehnast 1997, 30). This seems to suggest that women have higher chances of development in the social sector, whereas the technical, specialist, and government administrative positions are still dominated by men.

However, in some DMCs professional and managerial occupations are clearly male empires. The Lao PDR is an example. Unskilled and laboring jobs are largely undertaken by women (with a male/female ratio of about 1:2.5), while professional and managerial jobs are largely dominated by men, with men outnumbering women by 20 times (Table 16).

Gender disparity in wages is also clear. Apart from service and farm jobs, men's wages are 1.2 to 2 times higher than women's in nearly all kinds of occupations (see Appendix 1, Table A1.3); and men's advantage over females in wages occurs across all levels of education (see Appendix 1, Table A1.4). According to UNDP figures in 1998, in most DMCs, women's share of earned income is only 25 to 40 percent (see Appendix 1, Table A1.5). Given that women in general account for 35 to 45 percent of the adult labor force (see also Table 11), there is an obvious gender disparity in wages. In Hong Kong, China, females exceed males among the lower-income working population and among unpaid family workers, but the pattern is reversed among the upper-income population across all education levels (see Appendix 1, Table A1.6). Nonetheless, according to figures from Indonesia, despite disparity in wages, the impact of additional schooling on earnings is higher for females than for males. This means that education is still an important key for females to enhance their life chances and earnings (see Appendix 1, Table A1.7).

Table 16: Employment by Occupation and Gender in the Lao PDR, 1992 and 1994

Occupation	1992			1994		
	M%	F%	M/F	M%	F%	M/F
Administrator/Manager	2.58	0.13	19.8	3.07	0.35	8.8
Professional/Scientific worker	8.93	6.99	1.3	8.34	3.94	2.1
Technician	2.07	1.87	1.1	13.68	20.09	0.7
Clerk	10.61	4.65	2.3	12.03	11.90	1.0
Service worker	0.77	2.14	0.4	3.03	5.02	0.6
Farm worker	38.90	46.93	0.8	5.49	4.82	1.1
Craft and related trades/Skilled worker	18.56	10.48	1.8	12.18	8.22	1.5
Semi-skilled worker	5.80	0.28	20.7	—	—	—
Unskilled worker	11.78	26.53	0.4	—	—	—
Plant and machine operator	—	—	—	13.62	4.98	2.7
Elementary occupation	—	—	—	20.96	35.91	0.6
Armed forces	—	—	—	3.89	0.40	9.7
Not stated	—	—	—	3.71	4.36	0.9

— Data not available.

Women still seem to have little influence in social and political decisions. Not only do women in general account for a low proportion of administrative and managerial positions that involve everyday decisions at the microscopic social level; at the macroscopic government level, women are still a clear minority. Looking at gender distribution in government, women in most DMCs constitute below 5 percent of ministerial or subministerial positions. The few exceptions are Philippines (23 percent), Fiji Islands (15 percent), and Maldives (13 percent). Even taking into account these few countries with more women representatives, at the maximum they hold only one quarter of positions at subministerial level. They are still a clear minority in the government body (see Appendix 1, Table A1.8). It is therefore worth noting that the GEM values in DMCs are all lower than the GDI values (Table 1).

Policy Implications

From the above analysis, eight major policy implications emerge. These are presented below.

- (i) *Population control and increase of school places.* The size of the illiterate population has not been reduced over the last 20 years. This suggests the need for strategies to enhance access to education. First is the old but still significant issue of population control, which remains a major agenda item for many DMCs. Where the school-aged population is growing rapidly (India 2.1 percent, Nepal 2.3 percent, Bangladesh 2.7 percent, Mongolia 2.7 percent, Lao PDR 2.8 percent, Pakistan 2.9 percent, and Afghanistan 4.8 percent), school places may have to be doubled within 20 years to maintain today's enrollment rates. The same increase takes over 70 years with a 1 percent annual increase rate (Lewin 1996, 32, 61). Family planning and various other types of intersectoral planning affecting population growth are crucial to the delivery of education.
- (ii) *Increasing education for females should be a priority.* Given that the growth of the illiterate population is obviously attributable to the increase of female illiterates, enhancing education opportunities for females should be a priority. UNESCO (1996, 20) argues that enrollments for girls should be "the priority of priorities." It is widely pointed out that returns from education are higher for females than for males, and that there is a positive correlation between the education of females and poverty reduction, improved health, nutrition of women, and reduced fertility rates (ADB 1994b, 23; Todaro 1997, 383).
- (iii) *Enhancing retention rates should be a priority in primary schooling.* Measures to retain children in schools should be a priority for many DMCs, especially those in South Asia. This is important both to improve access and equity in education, and to enhance internal efficiency in education investment. For example, the ADB report (1996e, 13) on human development in Viet Nam estimates that if measures are not taken to reduce dropouts and repeaters, Viet Nam would require 37,000 additional classes,

18,000 additional classrooms, 41,000 extra teachers, an extra \$131 million in capital costs, and \$75 million to \$90 million in recurrent costs by 2010. Chuard and Mingat's (1996b) study of dropouts in South Asia shows that repetition can be a cause for dropping out. Their study also identifies a number of factors that may be related to dropouts, which have significant implications for policymakers:

- (a) *Preschooling* helps achieve higher levels of learning in primary education, even up to Grade 4. The logical policy implication is to encourage preschooling, but this will cause dilemmas for low-income countries as preschooling is very costly.
- (b) *Improving the quality of teachers* is important, as students whose teacher ratings were better had a significantly higher probability of not dropping out.
- (c) *The school factor* is significant in retaining students. Surveys found that:
 - large schools may be able to achieve better learning outcomes;
 - complete schools are crucial to retain students when they see that higher grades are available in the school;
 - good multigrade teaching has a positive impact on learning, and helps implement the policy of complete schools;
 - providing food for students has a positive influence on school outcomes, both in terms of learning and student retention; and
 - running large classes is not counter to learning outcomes, and teacher training can incorporate techniques of how to manage classes of 50 or 60 students (Chuard and Mingat 1996b, 31; Mingat and Chuard 1996, 59).
- (iv) *Specific programs and measures are required to reduce repetition and dropout of children already attending schools.* These programs may include awareness programs for students concerning the significance of schooling, medical programs to ensure student health, school textbook rental programs to enhance accessibility of learning materials, and reforms in curriculum and pedagogy to allow students to understand fully their lessons, etc. Further, to enhance retention, a number of policies need to be considered, in view of the discussions above, such as placing the best teachers in early grades to give children a good start, parental involvement, community participation, peer tutoring, and reducing absenteeism of teachers and students.
- (v) *Primary education must remain a priority in development.* Primary education is still a priority in development that cannot be bypassed (Chuard and Mingat, 1996b, 3). Concerning Nepal, Bajracharya, Thapa, and Chitrakar (1997, 40) point out that most external assistance has been provided for technical and higher education. They indicate that the significance of re-emphasizing investments in primary education has begun to be realized, and has to be consolidated. However, at present it seems that there is more rhetoric than action in reinstating primary education, espe-

cially when considering the higher investments in secondary, tertiary, and vocational/technical education.

- (vi) *Development programs need to be more gender-specific.* When presenting policies on gender equity, it is common for governments to justify equity by legislative availability of equal or open access to education and employment. However, if women are a disadvantaged group, such gender-neutral policies can only be regarded as a passive measure (McDonald 1995, 55). Not only is such a passive measure not helpful for females, it sometimes produces negative effects. ADB (1994b, 1) points out that:

... it became increasingly clear that the rewards and benefits of development had not always been distributed and shared equally by males and females. Development projects in some instances had either ignored women altogether or marginalized them, while in other instances, projects may have resulted in negative consequences for women such as an increase in their workload, diminished access to fuelwood, depletion and pollution of water sources, domestic violence and decreased control over traditionally inherited land. Rather than enhancing women's economic, social, and political status, development activities have sometimes reinforced existing gender inequalities, or generated and promoted new forms and patterns of discrimination against women.

Gender-specific measures to enhance females' access to education may include:

- affirmative measures to increase the proportion of females given studentships and scholarships;
 - awareness campaigns for girls' enrollments, recruitment of female teachers, and increased access for girls; and
 - concentration on gender parity in teaching, managing, and policy making.
- (vii) *Different priorities for different levels of schooling.* While consolidating primary education, there are certainly pressures to increase enrollments in secondary and tertiary education. Efforts should certainly be made to increase enrollments at the secondary level, as well as increasing retention and reducing repetition. How much expansion should be sought for the tertiary sector remains a complicated issue. However, in terms of equity and access, it is obvious that:
- *Rationalization of expenditure distribution across the three levels of education* needs to be sorted out, as the small proportion of students studying at the tertiary level enjoy a large proportion of education resources. One possible solution for governments is to provide basic education largely free or at highly subsidized

rates, and leave higher education to the private sector so that those who can afford the high fees have to pay (with the provision of scholarships for those who cannot afford, on a merit basis) (see ADB 1995, 28).

- *Increasing female participation in secondary and tertiary education* should be a significant item. While gender parity in primary enrollment seems to be less of an issue in most DMCs, as the review above shows, in about half the DMCs boys' enrollments exceed girls' by 1.1 to 2.9 times in secondary education, and by 1.1 to 3 times in tertiary education, with a few even up to 5.4 times.
- *The specific tasks for the different levels of education* seem to be improving the quality of primary education and its internal efficiency (in terms of reducing repetitions and dropouts) when primary education is almost universal; aiming at universalization of lower secondary education for most DMCs; and enhancing female enrollments in both secondary and tertiary education.
- *Vocational and technical education needs more studies.* Such education is more emphasized in some countries and less in others within DMCs, but how far this should be expanded or strengthened requires more detailed examination. Taipei, China used to have 70 percent of upper secondary students enrolled in vocational and technical education, and the PRC had a target of reaching a 50:50 ratio of academic to vocational and technical streams at upper secondary level. However, the former has begun to cut down the proportion of the vocational and technical stream, while the latter varies in ratio by region. Governments need to be cautious about overinvestment in vocational and technical education, as it may not be able to fit a fast-growing economy when the requirements of new techniques emerge faster than formal schooling can offer (see Bray 2002).
- *A cautionary note is needed on the consolidation of primary education and expansion of secondary education.* In addition to the retention of primary students, and as a part of strategies to achieve the goal, attention should be paid to the extent to which students actually receive second class primary education in the process of its universalization, especially girls. It is quite common that the speed of universalizing education is achieved by providing extensive schools with insufficient facilities and underqualified teachers. This may cause another form of inequity.

(viii) *Helping women help women.* Women's groups have been active for a long time, but they need the opportunity to develop their organizational, management, programming, and technical skills. Training opportunities for staff in nongovernment organizations (NGOs) in these areas should be more widely available. Projects are needed to improve the organizational

and management capacity of women's NGOs in order to equip them to run more efficiently and effectively (Emberson-Bain 1995, 57).

Box 1: The Primacy of Primary Education

The advanced Asian economies emphasized primary education at a very early stage of their development, before they entered the high-growth phase. For instance, in 1960, just before the high-growth phase, these economies had enrollment rates of 4 to 10 percent in higher education but already had nearly universal primary enrollment.

The effectiveness of this strategy is demonstrated by high retention rates in schools, higher learning achievements than even the OECD countries, and the robust statistical association between primary-level enrollment rates and subsequent high growth. This evidence reinforces the conclusions of earlier studies that have demonstrated the high rates of return from primary education and its positive impact on labor productivity, health, and other social objectives.

These conclusions suggest that the prioritization of different levels of education services in many DMCs today is quite the opposite of the priorities that may be necessary for education to serve as an effective instrument for promoting either equity or rapid economic growth.

Source: ADB 1995, 22-3.