

Appendixes

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Education and development

1. Education is universally acknowledged as an essential element in the process of national development. The fundamental purpose of investment in education is to empower people with the knowledge, skills, values, and attitudes to improve their quality of life, enhance their productivity and their capacity to learn new skills, and enable them to participate more fully in the development process. So essential is education to human development that access to basic education is now considered a human right, and not merely an ingredient in the recipe for economic development. The right to education is recognized in the Universal Declaration of Human Rights, adopted by the United Nations General Assembly in 1948 (*Box A1.1*), and in a series of treaties including the International Covenant on Economic, Social, and Cultural Rights (1966), the Convention on the Elimination of All Forms of Discrimination Against Women (1981), and the Convention on the Rights of the Child (1990).

Box A1.1: Article 26, Universal Declaration of Human Rights

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.

2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance, and friendship among all nations, and racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

3. Parents have a prior right to choose the kind of education that shall be given to their children.

Source: United Nations. 1948. *Universal Declaration of Human Rights*. New York.

A. Education and human development

2. Access to education is essential for social development. In particular, investment in the education of women (*Box A1.2*) yields high development dividends in the form of reduced fertility rates, lower infant mortality, improved child nutrition, and greater likelihood of enrolling children in school. Generally, a country's literacy rate and primary and lower secondary participation rates are accurate predictors of performance on a range of other key social development indicators. Investment in education is closely linked with several key social indicators and therefore creates synergy with investments in other sectors, particularly health and nutrition (*Box A1.3*). The literacy and primary education enrollment rates (especially those for women) of a country are the most effective proxy indicators of the country's overall level of human development.

Box A1.2: Impact of Women's Education

Investing in women's education results in substantial gains and economic benefits. Female education produces social gains by improving health, increasing child schooling, and reducing fertility by increasing the demand for family planning and promoting more effective contraceptive use. Economic benefits are increased by female education as it increases the value of women's time in economic activities by raising labor productivity, level of employment, and wages; and creates competition for women's time spent in child bearing and rearing in favor of smaller family size. The impact on social gains and economic benefits to be derived from educating women provides strong justification and rationale for the Asian Development Bank and its developing member countries to invest in women's education.

Social Gains. Educated women have fewer children, thus improving family income and access to health, family planning, and educational services. In South Asia, women with no education have seven children on average; women with at least 7 years of education have fewer than four children. Educated women have healthier children; in Africa, one out of five children dies before the age of 5 if the mother has no education; the probability is more than halved for children whose mothers have 7 years of education.¹ Educating women has a stronger positive effect on children's health than educating men as mothers spend a higher proportion of their own income on children than do fathers. Mothers are also much more

¹ Birdsall, N. 1993. *Social Development in Economic Development*. Working Paper, WPS 1123, World Bank, Washington, D.C.

Box A1.2: Impact of Women’s Education (*continued*)

closely involved in the immediate care of children and in the critical decisions about food, sanitation, and general nurturing, all of which affect children’s health and development. Longer spacing between births leads to healthier children.

Economic Benefits. Economic benefits are derived from female education as it provides women with greater opportunities for employment and income, and increases the opportunity cost of their time in economic activities, compared with child rearing. Such economic gains motivate families to have fewer children, build the demand for family planning services and more effective use of contraceptive methods, and lead to fertility decline. The vicious cycle of high birthrates, high maternal and infant mortality, and endemic poverty has been transformed into a virtuous circle by investing in human capital-enhancing labor productivity, reducing fertility and mortality, raising economic growth, and thus securing domestic resources for investments in people.²

² Birdsall, N. and R. Sabot. 1993. *Virtuous Circles: Human Capital, Growth and Equity in East Asia*. World Bank, Washington, D.C.

Source: Asian Development Bank. 1994. *Population Policy Paper: Framework for Assistance in the Population Sector*. Manila.

B. Education and sustainable economic growth

3. In an increasingly competitive international economic environment, investment in education becomes an indispensable instrument to help maintain comparative advantage. Successful transitions from subsistence agriculture to modern agriculture, from basic industry to higher technology, from manufacturing to provision of services, all depend on the quality of human capital; and the quality of human capital depends to a large extent on investment in the social sectors, including education, health, and nutrition. Investment in education, especially in basic education, has a high rate of return—that is, the value of the benefits to the individual and to society exceed the cost of the investment by a large margin. Experience clearly demonstrates that investment in basic education is a prerequisite for economic development, and that continuing investment in education quality at all levels, together with development of appropriate skills for the workforce, is a prerequisite for continuing economic growth, particularly in an era of rapid and revolutionary advances in information and communications technology (ICT). Workforce skill development facilitates

the shift to higher-order technology, improves productivity, and helps to maintain economic competitiveness. Higher education sharpens the cutting edge of development by fostering capacity for innovative research, strengthening higher-level management skills, and enhancing local research and development capacity. Continuing and adult education programs allow individuals to pursue both professional and personal development over a lifetime.

Box A1.3: Education and Nutrition: Some Disturbing Facts

- Children with iodine or iron deficiency or severe protein-energy malnutrition have lower intelligent quotients.
- Malnourished and frequently ill preschoolers are listless, play less, and learn less at home.
- Malnourished and frequently ill children have poor school attendance and are more likely to drop out of school.
- Malnourished children have a shorter attention span and less learning capacity.

Source: Various research reports.

C. Education and social development

4. Education, as the primary instrument for the transmission of social and cultural values, plays an essential role in social development. Education is an important means of facilitating and directing social change. Children (and adults) who attend school are exposed to new ideas, concepts, and attitudes that form part of the basis for social change. The process of attending school has a profound impact on the development of what is often called “modernity,” that is, the set of values and attitudes essential for functioning effectively in the evolving societies of the developing world. Education promotes peace and stability through, for example, peace education, including equity, justice, security, and intercultural education. The socialization obtained by attending school includes such values as punctuality, following instructions, managing time, planning work, focusing attention, adhering to rules, and being receptive to new concepts, thus helping to develop persons better suited to function effectively in a changing society. Finally, education plays an important role in cultural transmission. Transmission of culture, appreciation of cultural heritage, understanding of national history, and inculcation of basic cultural values are all increasingly left to the schooling process as traditional societies change.

D. Education and governance

5. Education is a powerful tool for introducing members of a society to the system of government, and the concept of governance. The school curriculum always includes considerable attention to the essential ideas of nationhood and government, and to the operation and structure of government. Participation by children in classroom committees and school government lays the foundation for participation as adults in local government. Educated persons are more likely to vote and participate in local and national government. They avail more frequently of government services such as health and agricultural extension training. They are more likely to demand better and more accountable government, thus creating demand for improved governance. Improving school governance by increasing community involvement offers an excellent opportunity to inculcate appropriate skills and attitudes in the community as a whole. Education empowers, and a major manifestation of empowerment is the demand for better governance. Perhaps the single most important thing that can be done to promote good governance is to facilitate access to information and knowledge since this forms the basis of decision making and concerted action.

Education in the region

1. In a region as socially and economically diverse as Asia and the Pacific, the status of education varies greatly. While generalizations may be difficult, development of a framework is still possible—even essential—to guide education sector investment based on current and emerging issues. Trends must be analyzed, and good practices and successful policies identified to guide future investment. Perhaps the most important considerations are (i) reflecting individual country differences when planning an education investment strategy; and (ii) developing a responsive and adaptive, rather than prescriptive and preemptive, policy to fit changing national and regional contexts.

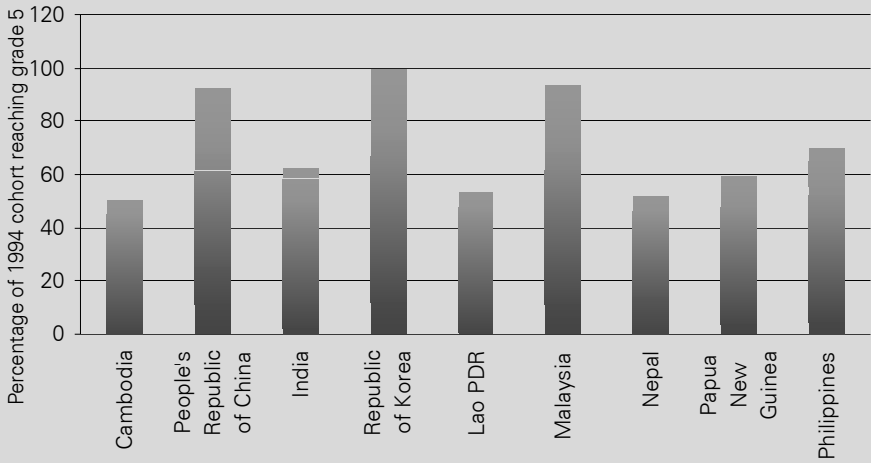
2. **Access and Equity.** Access to education improved substantially over the last 20 years. Since 1980, the regional adult literacy rate, a key indicator of human development has risen from 61% to 73%, but female literacy rates overall are still only half the rate for males. In absolute terms, the number of illiterates in the region has increased from 647 million to 651 million, and the number of female illiterates from 410 million to 422 million. Illiterates, particularly female illiterates, are heavily concentrated in South Asia. Despite its progress, the Asia and Pacific region still accounts for almost three fourths of the world's illiterates, and it is the illiterates who are poor.

3. Universal primary education has nearly been achieved in most countries of East and Southeast Asia and the Pacific, and many countries are now increasing the period of compulsory basic education to include primary and lower secondary schooling (9 years). However, many South Asian countries continue to invest too little in primary and lower secondary education, with the result that many children, especially girls, do not have access to schooling. Enrollment rates in higher education have also increased since 1985: in South Asia from 5.3% to 6.5%, and in East Asia from 5.4% to 8.9%, but these are still lower than the demand for higher-level skills experienced in many countries. Increased enrollment figures in basic education mask the fact that poor children are not enrolled: children of minority groups, children in remote areas, working children, street children, and disabled

children. Equity of access is a continuing problem. Furthermore, the children of poor families are most likely to drop out before completing primary schooling, or are least likely to make the transition to secondary school even when access is available (*Figure A2.1*), leading to even greater inequity of opportunity for the poor in accessing higher education and skills training.

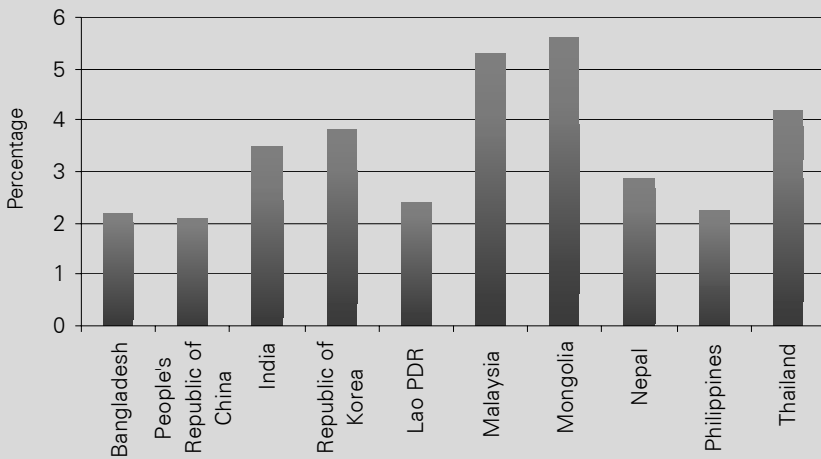
4. **Quality.** Simply having access to school and attending classes is not sufficient to make a difference in the lives of children if the quality of education, that is, the degree of mastery of core skills and knowledge, is inadequate. Most countries of the region have a continuing problem with quality, manifested by the large number of children who complete basic schooling but who still lack the literacy and numeracy skills necessary to improve the quality of their lives or to become productive workers. The children of the poor are most likely to receive poor quality education. Poor quality is a function of inadequate investment, insufficiently trained teachers, inadequate instructional materials, poor classroom management, and often the language of instruction (which may be different from the mother tongue of the child). These are compounded by the fact that children of poor families receive inadequate health care and nutrition from birth (or even before birth), thus reducing their mental and physical capacity to learn. Improving access to quality education for the poor must be an essential element of a poverty reduction strategy. The quality of higher education is often poor as well, and programs of study frequently do not reflect the types of skills needed by the economy. Education at all levels often focuses on teaching facts for memorization and recall, rather than teaching the application of knowledge, and the critical thinking and problem-solving skills called for in modern economies. Furthermore, quality is often monitored by poorly designed national examinations that reinforce rote memorization, and provide insufficient feedback for teachers to use in improving classroom practice.

Figure A2.1: Primary School Retention Rate in Selected Countries



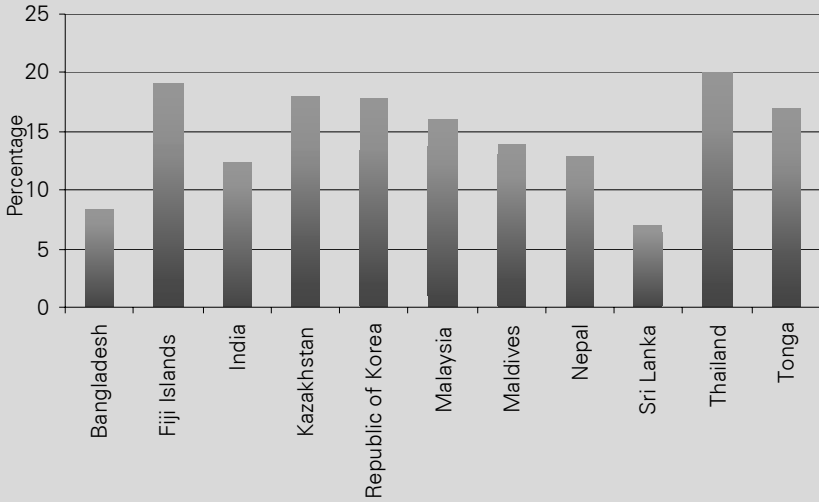
Source: United Nations Educational, Scientific, and Cultural Organization. 1998. *World Education Report 1998*. Paris.

Figure A2.2: Public Expenditure on Education as a Percentage of Gross Domestic Product, 1995



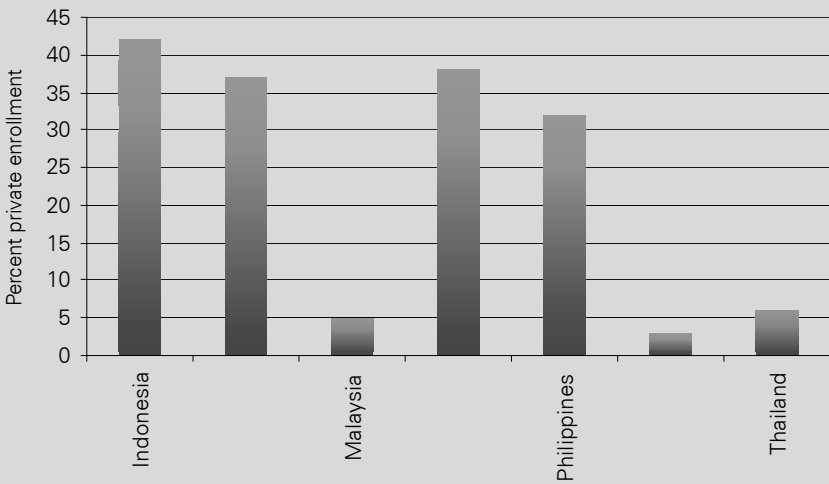
Source: United Nations Educational, Scientific, and Cultural Organization. 1998. *World Education Report 1998*. Paris.

Figure A2.3: Public Expenditures on Education as a Percentage of Total Government Expenditure, 1995



Source: United Nations Educational, Scientific, and Cultural Organization. 1998. *World Education Report 1998*. Paris.

Figure A2.4: Private Enrollment as a Percentage of Total Total Secondary Enrollment, 1995



Source: United Nations Educational, Scientific, and Cultural Organization. 1998. *World Education Report 1998*. Paris.

5. **Decentralized Management.** Many countries are increasingly aware that education can be more effective (and perhaps less costly) by decentralizing management, that is, making communities and lower levels of government responsible for basic education management and planning, and individual higher education institutions more autonomous. They are also moving to increase institutional autonomy in higher education. The People's Republic of China, for example, has substantially devolved higher education management from the central ministry to institutions. Indonesia is decentralizing basic education management to the district level.

6. Delegating budgeting and decision-making authority to local education offices or schools and institutions has usually not been accompanied by enhanced attention to developing more capacity in the many skills essential for effective education management. Relatively little attention has been given to redefining the role of the central education ministry to focus on setting standards, formulating policy and monitoring, and providing technical support to universities and local education agencies. Decentralization of education management is a clear trend, but still an act in progress with much to be learned about how best to support it.

7. **Financing Education.** The percentage of gross domestic product and national budget allocated to education varies widely among the developing member countries (*figures A2.2 and A2.3*). How education is financed has profound implications for access, equity, and quality. The era of predominantly government financing, especially at levels above basic education, may well be coming to an end as governments seek to diversify the sources of education, finance education by cost sharing and cost recovery, and thus relieve some of their burden. Primary education is generally considered to be a public good to be provided by government free of charge. Despite the free tuition policies of most governments, primary schools often impose a variety of user fees that constitute a considerable burden for poor families. Decentralization can require increased contributions to primary schooling by local communities causing inequities in the provision of primary education, because poor communities are unable to generate the needed resources for quality education. The challenge is to develop funding policies that encourage local participation and ownership, and reduce the government's burden while not disadvantaging poor communities with reduced opportunities for generating revenues to support education. In government-provided higher education and postsecondary technical and vocational training, user fees are increasingly being introduced in the

broader context of instituting fuller cost recovery. Since the benefits of higher education accrue more directly to the individual through increased earnings over a lifetime, the equity argument for higher user charges is strong, especially with scholarships and loans being available for lower-income students to ensure equal opportunity of access. Vouchers are being used in some developed countries in an attempt to enable students, especially poor students, to obtain an education at an institution of their choice; this experiment also forces schools to compete for students by improving the quality of their services. Finally, some of the resources for education must come from improving internal efficiency, by reducing unit costs through such measures as more appropriate teacher-student ratios, and consolidating inefficient schools through rigorous school-mapping exercises. However, most developing member countries have not made substantial progress in doing so.

8. **The Private Sector.** Many countries in the region increasingly seek to involve the private sector in providing education, especially secondary (*Figure A2.4*) and higher education, and postsecondary technical and vocational training. In Indonesia and the Philippines, for example, about one third of secondary school enrollment is in private schools, and in the Philippines over 80% of postsecondary education is provided by private sector institutions. ADB has provided a private sector education project to Viet Nam to establish an international university of world class.¹ Private sector provision of on-the-job skills training for workers is common in many countries. Public-private partnerships are becoming more frequent (*Box*), but the potential for substantially increasing such partnerships has not been realized. The scope for private sector provision of education services extends far beyond spaces in classrooms. In most developed countries, education systems are supported by a vast private sector network of supplementary services such as textbook publishing, assessment, and marketing of supplementary teaching and learning materials. Such provision is quite limited in many countries of the region, where governments tend to assume responsibility, often with greater cost and inferior quality, for all education services. No country in the region has yet attempted what several developed countries (for example, the United Kingdom and the United States) are doing

¹ ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to RMIT International University of Viet Nam*. Manila. The university is sponsored by the Royal Melbourne Institute of Technology (RMIT) of Australia, which will guarantee high quality learning.

with greater frequency—contracting management of publicly owned schools to private sector agencies. Expanded private sector provision of education is unlikely to happen without governments proactively creating conducive policy environments and financial incentives. However, enhancing private sector provision does not relieve governments of a significant, even essential, role in accreditation (quality control) and monitoring (consumer protection). Governments can do much more to facilitate and to monitor the provision of private education.

Box: Education Service Contracting in the Philippines

The Philippines has an active private education sector, particularly at the secondary and higher education levels. When public sector enrollments began to increase rapidly with the introduction of free universal secondary education in the late 1980s, public sector institutions were often unable to cope with the additional students, while private sector institutions began to suffer a decline in enrollment. The Government developed a novel solution: buying student places from the private sector. Under the education service contracting scheme, students who could not be enrolled in a public school and who were officially designated as “overflow” students were enrolled in nearby private institutions that chose to participate in the scheme. Under the scheme, the Government paid directly to the private institution an amount equivalent to the actual cost to the Government of the student’s education in a public school. Although this amount was sometimes less than the actual cost of the private school’s tuition, many private schools were pleased to accept the overflow students because they occupied places that would otherwise have been vacant. The private schools benefited by filling their unused spaces and the Government benefited by “renting” spaces at a cost less than constructing new schools to accommodate the overflow. Such arrangements should be encouraged and supported as a means of strengthening public and private partnerships.

9. Information and Communications Technology. The information and communications technology (ICT) revolution has forever changed the way the countries of the Asia and Pacific region must plan and manage their economies. Increasing productivity, ensuring competitiveness, and maximizing utilization of and benefit from the vastly increased access to knowledge require investment in ICT, and in education and training related to ICT. The rising demand for training in ICT demonstrates recognition of its importance on the part of students and workers. Much, if not most, of the demand for training is being met by private sector providers in many countries, testament perhaps to the relative speed and efficiency with which the private sector can accommodate new demand. Appropriate ICT has

particular potential for enriching and improving the quality and relevance of education provided to the poor. Application of ICT can provide resources for teachers in poor schools, and flexible learning schedules for out-of-school youth. But in most countries of the region, basic education, nonformal education, upper secondary education, higher education, and skills training continue to make minimal use of ICT, either to improve quality or to increase access. The challenge for ADB is to support education sector strategies and investments that (i) strengthen the application of appropriate ICT in education and training, (ii) ensure that education and training support the requirements of developing ICT in each developing member country, and (iii) are both cost-effective and sustainable.