# The State of the World's Children 1999



# Education



## THE STATE OF THE WORLD'S CHILDREN 1999

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# Contents

Foreword by Kofi A. Annan, Secretary-General of the United Nations

#### Chapter I

#### **Education For All: Making the right a reality**

*The State of the World's Children 1999* reports on the efforts of the international community to ensure that all its children enjoy their human right to a high-quality education — efforts that are resulting in an 'education revolution'. The goal of this worldwide movement: Education For All.

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Towards that end, the work of governments, non-governmental organizations, educators, communities, parents and children is informed by a definition of education that includes, but goes far beyond, schooling. Within this definition, education is an essential human right, a force for social change — and the single most vital element in combating poverty, empowering women, safeguarding children from exploitative and hazardous labour and sexual exploitation, promoting human rights and democracy, protecting the environment and controlling population growth. Education is a path towards international peace and security.

This chapter includes examples of initiatives that meet the child's right to education at the international, regional, national and local levels. It is divided into three sections.

*The right to education:* This section explores the historical context in which children's right to education has been repeatedly affirmed, for example, in the 1948 Universal Declaration of Human Rights, the 1989 Convention on the Rights of the Child, the 1990 World Summit for Children and the 1990 World Conference on Education for All, held in Jomtien (Thailand).

*The education revolution:* As the world's commitment to the principle of Education For All is put into practice at the local level, certain elements have emerged as necessary for its success: Schooling should provide the foundation for learning for life; it needs to be accessible, of high quality and flexible; it must be gender sensitive and emphasize girls' education; the State needs to be a key partner; and it should begin with care for the young child

*Investing in human rights:* Despite the progress of the last decade, the education revolution seems in danger of being cut short by an apparent dearth of resources and growing indebtedness in the developing world. This section argues that, despite these obstacles, education is one of the best investments a country can make in order to prosper. It calls for the political will necessary to make the vision of Education For All a global reality.

## Chapter II Statistical tables

Education is a multilinked variable in a country's statistical profile — connected not only to the obvious measure of literacy but also to a range of other indices including mortality, fertility and life expectancy rates, population growth, nutritional status and economic progress. The eight tables in this report profile 193 countries listed alphabetically. The countries are measured by basic indicators, nutritional status, health status, educational levels, demographics, economic indicators, the status of women and the rate of progress on major indicators since 1960. Countries are shown on page 93 in descending order of their estimated 1997 under-five mortality rates, which is also the first basic indicator in all tables.

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## Foreword

ducation is a human right with immense power to transform. On its foundation rest the cornerstones of freedom, democracy and sustainable human development.

Yet, as *The State of the World's Children 1999* report points out, 130 million children in the developing world are denied this right — almost two thirds of them girls. Nearly 1 billion people, or a sixth of the world's population, are illiterate — the majority of them women. This is a violation of rights and a loss of potential and productivity that the world can no longer tolerate.

Half a century ago, the Universal Declaration of Human Rights spelled out a global vision for peace and prosperity that included the right to education. The Convention on the Rights of the Child — the most widely ratified human rights treaty in history — enshrines the right of all children to a primary education that will give them the skills they need to continue learning throughout life.

This report demonstrates that the right to education is guiding classroom practice, shaping curricula and finding practical expression in schools around the world. It is establishing schools as oases of respect and encouragement for children. It is giving us classrooms where the principles of democracy are upheld and embraced. It is contributing to enhanced retention rates and reduced drop-out rates.

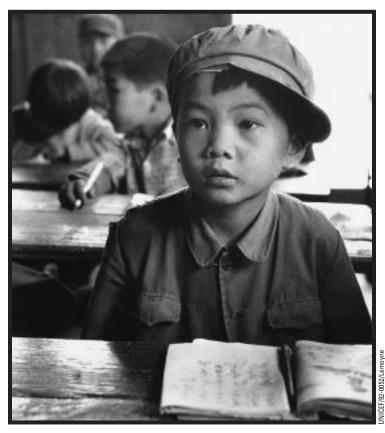
Motivated students leave school more prepared to take up the reins of the future; they are better empowered to improve their own lives and, later, the lives of their children.

When the right to education is assured, the whole world gains. There is no instant solution to the violations of that right, but it begins with a simple proposition: that on the eve of the 21st century, there is no higher priority, no mission more important, than that of Education For All.

Kofi A. Annan Secretary-General of the United Nations

# Chapter I

# Education For All: Making the right a reality



A primary school student in China.



# The right to education

early a billion people will enter the 21st century unable to read a book or sign their names — much less operate a computer or understand a simple application form. And they will live, as now, in more desperate poverty and poorer health than most of those who can. They are the world's functional illiterates — and their numbers are growing.<sup>1</sup>

The consequences of illiteracy are profound, even potentially lifethreatening. They flow from the denial of a fundamental human right: the right to education, proclaimed in agreements ranging from the 50-yearold Universal Declaration of Human Rights to the 1989 Convention on the Rights of the Child, the world's most universally embraced human rights instrument.

Yet despite these ringing affirmations over the past half-century, an estimated 855 million people nearly one sixth of humanity — will be functionally illiterate on the eve of the millennium.<sup>2</sup> At the same time, over 130 million children of school age in the developing world are growing up without access to basic education,<sup>3</sup> while millions of others languish in sub-standard learning situations where little learning takes place (Figs. 1-3). Girls crowd these ranks disproportionately, representing nearly two of every three children in the developing world who do not receive a primary education (approximately 73 million of the 130 million out-ofschool children.)<sup>4</sup>

Ensuring the right of education is a matter of morality, justice and economic sense. There is an unmistakable correlation between education and mortality rates, especially child mortality. The implications for girls' education are particularly critical.

A 10 percentage point increase in girls' primary enrolment can be expected to decrease infant mortality by 4.1 deaths per 1,000, and a similar rise in girls' secondary enrolment by another 5.6 deaths per 1,000.<sup>5</sup>

This would mean concretely, in Pakistan, for example, that an extra year of schooling for an additional 1,000 girls would ultimately prevent roughly 60 infant deaths.<sup>6</sup>

The implications of the lack of schooling, however, go further.

Each extra year of school for girls can also translate into a reduction in fertility rates, as well as a decrease in maternal deaths in childbirth. In Brazil, illiterate women have an average of 6.5 children, whereas those with secondary education have 2.5 children.

## Article 28

1. States Parties recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, they shall, in particular:

(a) Make primary education compulsory and available free to all;

(b) Encourage the development of different forms of secondary education, including general and vocational education, make them available and accessible to every child, and take appropriate measures such as the introduction of free education and offering financial assistance in case of need;

(c) Make higher education accessible to all on the basis of capacity by every appropriate means;

 (d) Make educational and vocational information and guidance available and accessible to all children;

(e) Take measures to encourage regular attendance at schools and the reduction of drop-out rates.

2. States Parties shall take all appropriate measures to ensure that school discipline is administered in a manner consistent with the child's human dignity and in conformity with the present Convention.

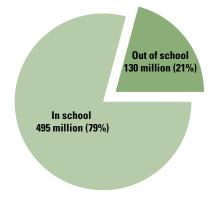
**3.** States Parties shall promote and encourage international co-operation in matters relating to education, in particular with a view to contributing to the elimination of ignorance and illiteracy throughout the world and facilitating access to scientific and technical knowledge and modern teaching methods. In this regard, particular account shall be taken of the needs of developing countries.

*— from the Convention on the Rights of the Child* 

Photo: Learning to write, as these girls are doing in Bogotá, is an opportunity denied more than 130 million children without access to basic education. Nearly two thirds of them are girls.

#### Fig. 1 Children out of school

There are about 130 million primary school age children in developing countries who do not attend school, out of a total of about 625 million children of this age group in these countries.



Source: Facts & Figures 1998, UNICEF, New York, 1998; and World Population Prospects, The 1996 Revision, United Nations, New York, 1997.

In the southern Indian state of Kerala, where literacy is universal, the infant mortality rate is the lowest in the entire developing world — and the fertility rate is the lowest in India.<sup>7</sup>

The denial of the right to education hurts people's capacity to work productively, to sustain and protect themselves and their families. Those who understand the importance of health, sanitation and nutrition help to lower their families' incidence of preventable illness and death, while increasing their potential for economic productivity and financial and social stability.

On a society-wide scale, the denial of education harms the cause of democracy and social progress and, by extension, international peace and security. By impairing the full development of children, illiteracy makes it more difficult for them to make their way in society as adults in a spirit of understanding, peace and gender equality among all peoples and groups.

And there is another, harder-tomeasure, consequence: For the functionally illiterate, the joys and revelations of the vast world of art and of other cultures — indeed, the love of learning itself — are largely beyond reach.

Illiteracy begins as a sad fact of daily life for millions of children who are, more often than not, girls. The reasons are numerous. For girls, their gender alone may keep them home, locked in subsistence chores - or so isolated in the classroom that they become discouraged and drop out. For tens of millions of children, girls and boys alike, education is beyond reach because they are full-time workers, many toiling in hazardous and exploitative forms of child labour. For others, there may simply be no school for them to attend, or if there is, it fails to ensure their right to education. There may be too few qualified teachers, or a child's family may not be able to afford the fees. The school may be too far from home. Or it may lack books and supplies.

Even those children fortunate enough to be enrolled may find themselves in a cheerless, overcrowded and threatening place, an environment that endangers rather than empowers them and crushes their initiative and curiosity.

Over 150 million children in developing countries start school but do not reach grade five.<sup>8</sup> They are not emerging with the literacy, numeracy and life skills that are the foundation for learning throughout life.

#### The question of quality

It is not enough simply to ensure that children attend school. The quality of education is also of paramount concern. *How* knowledge, skills and values are transmitted is as important as *what* is learned.

Children must also be able to participate fully in the educational process. They need to be treated with dignity and allowed to develop from their school experience a level of selfesteem, self-discipline and sheer enjoyment of learning that will stand them in good stead throughout their lives.

This applies particularly to girls, who often find patterns of social discrimination against them repeated in classrooms, where they are not called on in class, and where they are shunted into less challenging areas of study and undervalued by teachers, by male classmates and by the general school culture.

The Convention on the Rights of the Child is clear: Every child has the right to quality education that is relevant to her or his individual development and life. But demands even for access cannot be assured in much of the developing world. In many areas, there is little in the way of resources — or incentive — for schools to make themselves more relevant and appealing to students.

In many countries, particularly the lowest-income countries, the result is a pervasive grimness in the physical environment and the intellectual atmosphere of learning environments. Sometimes there is not even a chalkboard. Classrooms in rural areas tend to be roughly constructed. With daylight the only illumination, the rooms are dim. Conditions are often only marginally better in poor urban schools.

Overcrowding is common, especially in the early grades and in urban areas. In a number of countries, only two of every five pupils in grade one have a place to sit. A teacher in Bangladesh may have as many as 67 pupils; in Equatorial Guinea there may be as many as 90.<sup>9</sup> And many still do not have access.

Massed together, children struggle for space, for a modicum of attention from an overtaxed teacher, for a glimpse at a tattered text, often in a language they cannot grasp. Diseases and pests spread easily. With little to engage the students, teachers resort to rigid discipline and corporal punishment. What is taught often has little relevance to children's daily lives.

Teaching materials frequently reinforce stereotypes, compounding the physical problems that affect girls, such as distance from home and the lack of toilet facilities.

The poor quality of education in schools is itself a depressant on the demand for education, even where access exists. Child labour experts have found that some children would rather work than be subject to a school regime that is irrelevant to their needs.

Assane, a 10-year-old shoeshine boy interviewed in the Senegalese city of Ziguinchor, made the case clearly:

I don't need to go to school. What can I learn there? I know children

who went to school. Their family paid for the fees and the uniforms and now they are educated. But you see them sitting around. Now they are useless to their families. They don't know anything about farming or trading or making money... I know I need to learn to read and write [but]... if anyone tries to put me in school, I will run away.<sup>10</sup>

Nevertheless, basic education remains the most important single factor in protecting children from such hazards as exploitative child labour and sexual exploitation. The case for this can be found both in the Convention on the Rights of the Child and in the findings of the 1997 International Conference on Child Labour, held in Oslo (Norway). In the developing world, there are estimated to be 250 million children trapped in child labour, and many of them receive no schooling whatever.

Schools in many countries have simply not been good enough to attract or retain children on the scale needed for two principal reasons: they are chronically underfinanced, and they are too expensive for the majority of the population. (These and other problems are addressed in 'Investing in human rights', on page 79.)

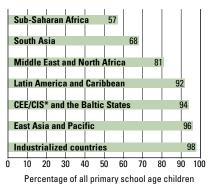
But the delivery of education itself has also been poorly organized, from overall management of school systems to the way lessons are taught in the classroom. The decreasing enrolment rates at both primary and secondary levels in Central and Eastern Europe and the Commonwealth of Independent States, where education was once paramount, are dramatic testimony to this.

## Education and child rights

The proclamation of the right to education in the Universal Declaration of

## Fig. 2 Net primary enrolment, by region (around 1995)

Net primary enrolment — the number of children enrolled in primary school as a percentage of the total number of children in the primary school age group — is a key indicator of progress towards the goal of Education For All. Sub-Saharan Africa and South Asia are the regions facing the greatest challenges in enrolling all their children in primary school by the year 2000.

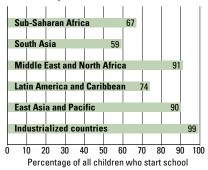


\*Central and Eastern Europe and the Commonwealth of Independent States.

Source: UNESCO and UNICEF, 1998.

## Fig. 3 Reaching grade five, by region (around 1995)

In addition to those millions of children who do not attend school, many others start school but do not reach grade five. Completion of grade four is considered one indication of minimal education attainment. Note the difference in pattern when this chart is compared to the one on net primary enrolment (Fig. 2).



Note: Data for Central and Eastern Europe, the Commonwealth of Independent States and the Baltic States were not available.

**Source:** The State of the World's Children 1999, UNICEF, New York, 1998 (Table 4).

#### SUB-SAHARAN AFRICA

**Enrolment:** From only 25 per cent in 1960, the regional primary enrolment rate climbed to nearly 60 per cent by 1980. After declining in the 1980s, enrolment is again close to 60 per cent. Over 40 million primary school age children are not in school. In nine countries, rural primary enrolment lags significantly behind urban, with the gap ranging from 26 percentage points in the Central African Republic to 49 percentage points in Burkina Faso.

**Gender:** In 1960, almost twice as many boys as girls in the region attended primary school. The gap has narrowed considerably, with girls' primary attendance rate now 57 per cent and boys' 61 per cent. Benin has the greatest disparity in primary enrolment, with the girls' rate about 30 percentage points less than boys'. Only a third of women in the region were literate in 1980; now, nearly half are literate.

**Effectiveness:** In the region, one third of children enrolled in primary school drop out before reaching grade five. Chad, Comoros, the Congo and Gabon, with more than one third of primary school students repeating grades, are among countries with high repetition rates.

**Constraints:** Armed conflicts and economic pressures from debt and structural adjustment policies have taken a severe toll on education. The region includes over 30 heavily indebted countries, and governments spend as much on debt repayment as on health and basic education combined — \$12 billion in 1996, and per capita education spending is less than half that of 1980. Large class sizes, poor teacher education, crumbling buildings and lack of learning materials in a number of countries all reduce the quality of education.

**Progress and innovations:** Among countries achieving primary enrolment rates of 90 per cent or more are: Botswana, Cape Verde, Malawi, Mauritius, South Africa and Zimbabwe. Malawi made primary education free in 1994, and the attendance rate is now over 80 per cent. When Uganda made primary education free for four children per family in 1997, enrolment doubled from 2.6 million to 5.2 million. The African Girl's Education Initiative works with governments and communities in over 20 countries to boost girls' enrolment.

## **Regional Spotlight**

#### MIDDLE EAST AND NORTH AFRICA

**Enrolment:** In 1970, about half of primary school age children were enrolled. Now, about four out of five children are in school. Oman, with no education system prior to 1970, has about 70 per cent of primary school age children in school. In Morocco, only about a third of children of this age group in rural areas are in school, less than half the rate in urban areas, and rural enrolment in Upper Egypt is about 20 percentage points less than in Lower Egypt.

**Gender:** In 1960, only a third of girls in the region attended primary school, compared with two thirds of boys. Now, about three quarters of primary school age girls are enrolled. The gap between girls' and boys' rates is more than 10 percentage points. Yemen has the greatest gender gap, with the girls' primary attendance rate over 30 percentage points less than boys'. Bahrain, Cyprus, Iran, Jordan, Libya and Tunisia have high primary enrolment rates and parity, or close to it, between boys and girls.

*Effectiveness:* About 9 out of 10 children who start primary school reach grade five, though high drop-out and repetition rates are a concern in some countries.

**Constraints:** Conflicts in Algeria, Sudan and the West Bank and Gaza have disrupted education, and sanctions against Iraq have led to school closings, loss of teachers and increased dropouts. Improved teacher training and curricula are needed to upgrade the quality of education in the region. Though the portion of expenditures by the region's central governments allocated to education have been high, education spending has recently fallen. Nearly half the countries in the region have not ratified the Convention on the Elimination of All Forms of Discrimination against Women, a concern because the denial of women's rights affects girls' education.

**Progress and innovations:** Iran is promoting education for women and girls in rural areas, with girls' primary attendance now over 90 per cent. Programmes in Egypt, Morocco, Sudan, Tunisia and Yemen are bringing education to girls in poor areas through community schools located closer to their homes.

Human Rights was the beginning of a broad effort by the United Nations to promote social, economic and cultural rights in tandem with civil and political rights (Fig. 4).

The indivisibility of these rights is guaranteed by the Convention on the Rights of the Child. As a result, what were once seen as the *needs* of children have been elevated to something far harder to ignore: their *rights*.

The Convention became binding international law on 2 September 1990, nine months after its adoption by the United Nations General Assembly; it has now been ratified by 191 countries. No other human rights instrument has ever won such widespread support in so short a time.

Ratified by all but two nations (Somalia and the United States), the Convention's acceptance means that 96 per cent of the world's children live in countries that are legally bound to guarantee the full spectrum of child rights: civil, political, social, cultural and economic.

Article 28 recognizes the right of children to education, requiring States parties, among other things, to provide free, compulsory, basic schooling, and to protect the child's dignity in all disciplinary matters, and to promote international cooperation in educational matters. Article 29 calls on governments to ensure that education leads to the fullest possible development of each child's ability and to respect for the child's parents and cultural identity and for human rights.

Quality education can hinge on something as simple as providing a child with a pencil where there are none. And at the most fundamental level, the fact of access itself is a priceless opportunity for a child deprived of education.

The vision of education enshrined in the Convention and other human rights instruments recognizes the right of education as the underpinning for the practice of democratic citizenship. The Convention is thus a guide to the kind of education that is essential both to children's development and to social progress.

The Convention's perspective on quality education encompasses not only children's cognitive needs but also their physical, social, emotional, moral and spiritual development. Education so conceived unfolds from the child's perspective and addresses each child's unique capacities and needs.

The vision of educational quality enshrined in the Convention on the Rights of the Child extends to issues of gender equality, equity, health and nutrition, parental and community involvement, and management of the education system itself.

Above all, it demands that schools be zones of safety for children, places where they can expect to find not only safe water and decent sanitation facilities, but also a respectful environment.

Articles 28 and 29 of the Convention are buttressed by four other articles that assert overarching principles of law. All have far-reaching ramifications, particularly in terms of what is needed to mould an education system — or an individual school. These are article 2, on non-discrimination; article 3, on the best interests of the child; article 6, on the child's right to life, survival and development; and article 12, on the views of the child.<sup>11</sup>

Article 12, for example, which assures children the right to express their own views freely in matters that affect them, requires major policy changes in the many schools that currently deny children the opportunity to question decisions or influence school policy.

But the rewards are vast: Schools that encourage critical thinking and democratic participation contribute to fostering an understanding of the essence of human rights. And this, in turn, can make education an enabling force not just for individuals, but for society as a whole, bringing to life the entire range of human rights.

The non-discrimination principle as set out in the Convention on the Rights of the Child has similarly profound ramifications. It is aimed at assuring that all children have access to relevant and meaningful education, regardless of their background, where they live or what language they speak.

The non-discrimination principle is key to combating gender discrimination. Schools must ensure that they are responsive to girls' needs in every possible way, from physical location to classroom curriculum and practice. They must also treat gender inequality not as a matter of tradition but rather as an issue of human rights discrimination that can and must be addressed.

In addition, schools must consciously promote acceptance and understanding of children who are different and give students the intellectual and social tools needed to oppose xenophobia, sexism, racism and other negative attitudes.<sup>12</sup>

#### Learning from the past

Education topped the national agendas of many newly independent countries of the developing world in the 1960s and 1970s as a core strategy to erase disparities, unify nations and fuel the engine of development.

"Education," said Julius Nyerere, a former schoolteacher who became the first President of the United Republic of Tanzania, "is not a way of escaping the country's poverty. It is a way of fighting it."<sup>13</sup>

UNESCO, the United Nations organization with specific responsibility for education, organized a series of ground-breaking regional conferences in Karachi in 1960, Addis Ababa in

## Article 29

**1.** States Parties agree that the education of the child shall be directed to:

(a) The development of the child's personality, talents and mental and physical abilities to their fullest potential;

(b) The development of respect for human rights and fundamental freedoms, and for the principles enshrined in the Charter of the United Nations;

(c) The development of respect for the child's parents, his or her own cultural identity, language and values, for the national values of the country in which the child is living, the country from which he or she may originate, and for civilizations different from his or her own;

(d) The preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin;

(e) The development of respect for the natural environment.

2. No part of the present article or article 28 shall be construed so as to interfere with the liberty of individuals and bodies to establish and direct educational institutions, subject always to the observance of the principles set forth in paragraph 1 of the present article and to the requirements that the education given in such institutions shall conform to such minimum standards as may be laid down by the State.

--- from the Convention on the Rights of the Child

## Fig. 4 International milestones for education

**1948** (Dec.) The Universal Declaration of Human Rights is adopted by the General Assembly of the United Nations. Education is declared a basic right of all people.

**1959** (Nov.) The Declaration on the Rights of the Child is adopted by the UN General Assembly. Education is declared the right of every child.

**1960-1966** UNESCO holds four World Regional Conferences on Education that

help establish time-bound regional goals to provide free and compulsory primary education to all children. The meetings are held in Karachi (1960), Addis Ababa (1961), Santiago (1962) and Tripoli (1966).

**1969** (Jan.) The International Convention on the Elimination of All Forms of Racial Discrimination enters into force, proclaiming the right of all to education, regardless of race or ethnicity.

**1976** (Jan.) The International Covenant on Economic, Social and Cultural Rights enters into force, guaranteeing the right to education for all.

**1979** (Jan.) The International Year of the Child is designated to reinvigorate the principles of the Declaration on the Rights of the Child and raise awareness of children's special needs.

**1980** Primary enrolment doubles in Latin America and Asia and triples in Africa, but the goal of universal primary education by 1980 is unmet. Of all 6- to 11-year-olds, approximately one third in developing countries and about one twelfth in industrialized countries are not in school. The target year of 1980 had been set by the UNESCO World Regional Conferences on Education, held between 1960 and 1966.

**1981** (Sept.) The Convention on the Elimination of All Forms of Discrimination against Women enters into force, calling for the elimination of discrimination against women and for equal rights in education. **1982** Debt crisis begins. Commercial banks stop lending to developing countries after several countries announce that they will suspend debt service payments. IMF and the World Bank begin to refinance existing loans, requiring structural adjustments. Public-sector services, including education, are severely affected.

**1985** (July) The Third World Conference on Women (Nairobi). Education is declared the basis for improving the status of women. Participating governments agree to encourage the elimination of discriminatory gender stereotypes from educational material, to redesign textbooks to present a positive image of women and to include women's studies in the curriculum.

**1990** (Mar.) The World Conference on Education for All (Jomtien). The conference, co-sponsored by UNDP, UNESCO, UNICEF, the World Bank and, later, UNFPA, presented a global consensus on an expanded vision of basic education.

(Sept.) The **Convention on the Rights of the Child** enters into force, codifying the right to education for all children into international law.

(Sept.) The **World Summit for Children** (New York). 159 countries agree on a series of goals for education, including universal access to basic education and completion of primary education by at least 80 per cent of primary school age children by the year 2000.

(Dec.) The International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, adopted by the UN General Assembly (but not yet in force), declares education as a right of the children of all migrant workers and guest labourers.

**1993** (Dec.) The **E-9 Education Summit** (New Delhi). Representatives of the Governments of the nine most populous nations in the developing world (Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan) pledge to achieve the goal of universal primary education by the year 2000. Together, these countries account for half of the world's population and 70 per cent of illiterate adults.

(Dec.) The United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities, adopted by the UN General Assembly, declares that States should recognize the principle of equal educational opportunities at all levels for children, youths and adults with disabilities.

**1994** (June) The World Conference on Special Needs Education: Access and Equality (Salamanca). Participants declare that all countries should incorporate special needs education into their domestic education strategy.

(Sept.) The International Conference on Population and Development (Cairo). Participants call for the provision of universal access to high-quality primary, technical and non-formal education by 2015, with a particular emphasis on girls' education.

**1995** (Mar.) The World Summit for Social Development (Copenhagen). Participating States commit themselves to promote and attain universal and equitable access to quality education to help eradicate poverty, promote employment and foster social integration, with a particular emphasis on girls' education.

(Sept.) The Fourth World Conference on Women (Beijing). The conference calls for the elimination of discrimination in education at all levels, for the creation of gender-sensitive education systems and for equal educational and training opportunities for women. The critical impact of girls' education is emphasized.

**1996** (June) Mid-decade Meeting of the International Consultative Forum on Education for All (Amman). Meeting assesses progress towards the year 2000 goals set at the 1990 World Conference on Education for All.

**1997** (Oct.) The International Conference on Child Labour (Oslo). Participating governments declare all work that interferes with the child's education unacceptable and agree to create time-bound programmes for high-quality universal and compulsory basic education, with a particular emphasis on girls' education. 1961, Santiago in 1962 and Tripoli in 1966. Out of these conferences came the first clear statistical portrait of global education levels. It was a dismaying picture.

In 1960, fewer than half the developing world's children aged 6 to 11 were enrolled in primary school, compared with 91 per cent in the industrialized world.<sup>14</sup> In sub-Saharan Africa, where the picture was bleakest, only 1 child in 20 went to secondary school.<sup>15</sup>

The UNESCO conferences set clear, bold targets. All eligible children were to be enrolled in primary school by 1980, and by 1970 in Latin America, where existing conditions were better. The result was dramatic. By 1980, primary enrolment had more than doubled in Asia and Latin America; in Africa it had tripled (Fig. 5).

However, populations surged over the same period. In sub-Saharan Africa, for example, it was thought that 33 million extra school places would be needed by 1980. In the end, 45 million places were provided, but this heroic effort still left the continent 11 million short of the number needed for all children of primary school age.<sup>16</sup>

The rapid onset of the debt crises of the developing world, which earned the 1980s the label of 'the lost decade', brought progress to an abrupt halt. Crippled by debt repayments and plunging prices that carried their export commodities earnings to their lowest levels in 50 years by the middle of 1987,<sup>17</sup> countries began slashing expenditures, including their spending on education.

Between 1980 and 1987 in Latin America and the Caribbean, real spending on education per inhabitant decreased by around 40 per cent. In sub-Saharan Africa, it fell by a catastrophic 65 per cent.<sup>18</sup>

As a result, access to education did not increase sufficiently — and educational quality plunged as well. And teachers in much of Africa and Latin America found themselves earning far less in real terms at the end of the 1980s than they had a decade earlier.<sup>19</sup>

Amid these setbacks, a major new United Nations initiative, the World Conference on Education for All, was convened in Jomtien (Thailand) in March 1990, with the crucial goal of reviving the world's commitment to educating all of its citizens.

## The Jomtien conference

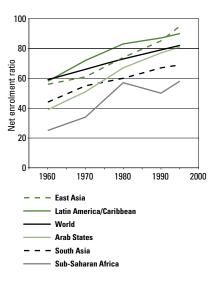
The World Conference on Education for All, sponsored by UNDP, UNESCO, UNICEF and the World Bank,\* set out to accomplish for education what the International Conference on Primary Health Care (Alma Ata, 1978) had achieved for health. It called for universal quality education, with a particular focus on the world's poorest citizens.

The Jomtien conference marked a significant shift in the world's collective approach to education, broadening the notion of quality 'basic education' along with an understanding of its delivery. Indeed, it is no exaggeration to say that Jomtien marked the emergence of an international consensus that education is the single most vital element in combating poverty, empowering women, promoting human rights and democracy, protecting the environment and controlling population growth. That consensus is why, in 1996, donor countries committed themselves to the task of helping developing countries ensure universal primary education by the year 2015.20

Previously, education had been assessed in terms of gross enrolment rates at primary, secondary and tertiary

## Fig. 5 Net primary enrolment, by region (1960-2000)

The number of children enrolled in primary school continues to increase both globally and for all regions of the developing world. Nevertheless, the goal of Education For All by the year 2000 will remain elusive in most regions. Data for Central and Eastern Europe, the Commonwealth of Independent States, and the Baltic States were not available.



Source: UNESCO and UNICEF, 1998.

<sup>\*</sup>UNFPA joined as the fifth UN sponsoring agency, after the Conference.

#### SOUTH ASIA

**Enrolment:** Primary enrolment has climbed from under 60 per cent in 1970 to nearly 70 per cent. Over 50 million primary school age children are not in school. There are significant variations in enrolment within some countries. In India, over 80 per cent of children in urban areas are in school, but in rural areas the rate is 20 percentage points lower; in the state of Kerala, 9 out of 10 primary school age children go to school, while in Bihar only half do.

**Gender:** Nearly two thirds of women in the region are illiterate, compared with about one third of men. The gap between girls' and boys' primary enrolment rates is over 10 percentage points. Discrimination is most severe in war-torn Afghanistan, where Taliban authorities have barred girls from school. In Bangladesh, in contrast, the primary school attendance rate is 75 per cent, with boys' and girls' rates on a par.

*Effectiveness:* About 40 per cent of children entering primary school drop out before reaching grade five, the highest regional rate.

**Constraints:** Nearly half the population in the region lives in severe poverty, earning less than \$1 a day. Child labour is a persistent problem, a cause and consequence of low enrolment and high drop-out rates. Pupil-teacher ratios are high in some countries (greater than 60 to 1 in India), particularly in the early grades. Teacher education and training need upgrading, and rural schools are often remote and poor in quality.

**Progress and innovations:** In Mumbai (formerly Bombay), the Pratham Mumbai Education Initiative, a partnership among educators, community groups, corporate sponsors and government officials, has set up 1,600 pre-schools and helped revamp over 1,200 primary schools. The Northern Areas Education Project in Pakistan, which seeks to improve education quality and accessibility in poor and disadvantaged areas, is training 720 teachers and establishing 10 pilot community schools. In Bangladesh, the Intensive District Approach to Education for All (IDEAL) educates teachers about children's individual learning patterns and promotes more child-friendly classrooms.

## **Regional Spotlight**

#### EAST ASIA AND THE PACIFIC

**Enrolment:** Net primary enrolment for the region is high, and several countries will either achieve or come close to achieving universal access to primary education by the end of the decade. Disparities in enrolment remain between countries, within countries (both Cambodia and Myanmar, for example, have disparities of 40 per cent or more between provinces) and, in a few cases, between boys and girls.

**Gender:** The gender gap in initial primary enrolment is virtually closed. But completion is a problem, with gaps of 10 per cent or more in several countries (Cambodia, Indonesia and the Lao PDR with a lower rate for girls, and Mongolia with a lower rate for boys). The economic crisis in many countries is expected to affect girls disproportionately, as preference is given to sons, and daughters are removed from school to help with household work. The gender gap widens for girls in secondary school, and nearly a quarter of the region's women are illiterate, compared with fewer than 10 per cent of men.

*Effectiveness:* Several countries are on track to reach the goal of 80 per cent of primary school entrants reaching grade five, among them China, Fiji and several other Pacific Island countries, Malaysia, the Republic of Korea, and Thailand. However, Cambodia, Myanmar, Papua New Guinea and Viet Nam have continuing problems of low completion.

**Constraints:** Attaining targets is especially difficult for the hard-to-reach — minorities, migrants, indigenous peoples and the disabled. Economic and climatic crises threaten education gains in several countries (Indonesia, Mongolia and Thailand), with poor families unable to pay for their children's education. Cambodia, the Lao PDR and Viet Nam, with legacies of years of conflict, face persistent poverty, as does Myanmar.

**Progress and innovations:** School cluster projects in several countries group nearby schools to share resources and expertise, improving overall educational quality. Multigrade teaching programmes are also useful in reaching children in remote areas, and initiatives in developing child-friendly schools are meant to lead to higher rates of enrolment, completion and achievement.

levels. At Jomtien, it became clear that as essential as access is, counting the number of children sitting on school benches is only part of the picture.

The expanded vision of education that emerged from Jomtien included emphasis on basic education, early childhood care and development, and learning through adolescence and adulthood.

Other key elements included making girls' education a major priority; the recognition that learning begins at birth; the importance of children's need for care and stimulation in their early years; and the acknowledgement that new partnerships among governments and groups at all levels are necessary to achieve Education For All.

Modelled on some of the principles that had driven the child survival revolution that UNICEF had sparked in the 1980s, the Jomtien conference established six key goals:

- expansion of early childhood care and development, especially for the poor;
- universal access to and completion of primary education by the year 2000;
- improvement in learning achievement based on an agreed-upon percentage of an age group (e.g., 80 per cent of 14-year-olds) attaining a defined level;
- reduction of the adult illiteracy rate to half its 1990 level by the year 2000, with special emphasis on female literacy;
- expansion of basic education and training for youth and adults;
- improved dissemination of the knowledge, skills and values required for better living and sustainable development.<sup>21</sup>

The conference managed to recapture some ground that had been ceded during the 1980s, and after it ended more than 100 countries set their own new education goals and developed strategies to achieve them.

Jomtien also helped move education back to the centre of the international development agenda. Each major United Nations summit and conference since Jomtien has recognized that education, particularly of girls and women, spans and links these areas of concern and is pivotal to progress in each.\*

#### Slow progress on key priorities

Progress towards Education For All has, however, been much slower than those at the Jomtien conference had hoped, as a mid-decade review in Amman (Jordan) in June 1996 revealed. The generalized decline and disrepair of the 1980s had been largely reversed, but there was a sense that a central priority of Jomtien — girls' education — and the conference's integrated vision of basic education had been overshadowed by the drive to get all the world's children into primary school by the year 2000.

During the five years following the conference, all evidence points to a girls' enrolment rate that is virtually static. Overall primary enrolment was the brightest sign of progress by middecade, with some 50 million more children in developing countries enrolled in primary school than in 1990. Discouragingly, however, this figure only managed to keep pace with the numbers of children entering the 6- to 11-year-old age group over the period.<sup>22</sup>

Regionally, the rates of progress varied. Both the East Asia and Pacific and Latin America and Caribbean regions neared the goal of universal primary enrolment, and remarkable gains were recorded in the Middle East and North Africa in recent years. But, in South Asia, 50 million children were not in school,<sup>23</sup> and sub-Saharan Africa still cannot provide sufficient classroom space for its rapidly growing population.

In Central and Eastern Europe and many of the newly independent countries of the former Soviet Union, once relatively solid and universal access to education is shrinking in the new era of market economies (Panel 1).

All regions — the industrialized world included — share a concern about the quality of education. The Latin America and Caribbean region, for example, has higher enrolment rates than any other in the developing world at the pre-primary, secondary and tertiary levels — and is not far behind East Asia at the primary level. Girls participate at rates equal to or higher than boys.

But the poor quality of the education provided in most of the region's countries — as well as the social and economic circumstances of many students — has led to high rates of repetition and high drop-out rates. The result is that about half of the students in Latin America do not attain basic literacy — even after six years of schooling.<sup>24</sup>

#### Planning for rightsbased education

Over the last decade, a consensus has grown concerning why the objectives of Education For All have been so hard to achieve — along with the kinds of changes that will be necessary to improve educational quality.

## LATIN AMERICA AND THE CARIBBEAN

**Enrolment:** Primary enrolment has grown rapidly, expanding at an annual rate of 4.4 per cent between 1960 and 1980, with gains continuing despite financial austerity in the 1980s. Access to primary education is virtually universal, with regional enrolment over 90 per cent. Guatemala and Haiti have the lowest primary attendance rates, 58 per cent and 69 per cent respectively.

**Gender:** Although discrimination against girls and women is a problem in the region, girls' primary enrolment has been on a par with boys' for decades, and girls' secondary enrolment, 51 per cent, tops boys', 47 per cent. In Colombia, the Dominican Republic, Guyana, Uruguay and Venezuela, the proportion of girls enrolled in secondary school is higher than that of boys by 10 per cent or more. The women's literacy rate is 85 per cent, and over three quarters of primary school teachers are female, both rates far higher than in any other developing region.

**Effectiveness:** High primary school drop-out and grade repetition rates are a serious problem. One quarter of children entering primary school drop out before reaching grade five. Bolivia, Colombia, the Dominican Republic, El Salvador, Haiti and Nicaragua have the highest drop-out rates — 40 per cent or more. In nearly half of the 21 countries with data, 10 per cent or more of children in primary school are repeating grades. Brazil and Guatemala have the highest repetition rates, both over 15 per cent. However, the region's adult literacy rate is 87 per cent, the highest in the developing world.

**Constraints:** High drop-out and repetition rates point to problems in educational quality. The region has the greatest economic disparities between rich and poor, and indigenous and impoverished populations face difficulties in getting access to quality education. Teaching approaches tend to be rigid and traditional, which discourages students from staying in school.

**Progress and innovations:** The primary school enrolment rate has increased from under 60 per cent in 1960 to 90 per cent, and the region has the highest teacher/ population ratio in the developing world. Escuela Nueva in Colombia has become a model for flexible, community-based education: Guatemala set up 1,000 community schools in 1997, and Brazil, Paraguay and Peru are launching similar initiatives.

<sup>\*</sup>The summits and conferences are the World Summit for Children (1990), the United Nations Conference on Environment and Development (1992), the World Conference on Human Rights (1993), the International Conference on Population and Development (1994), the World Summit for Social Development (1995), and the Fourth World Conference on Women (1995).

## Education in free fall: A region in the midst of transition



lasses full of bright-eyed children, from industrial Eastern Europe right across Asia to Yakutsk: Of the many propaganda images of the former Soviet Union, this is one of the few that has proved to have real substance in the wake of communism's collapse. Soviet-bloc countries attained remarkable levels of access to free education. Although the quality of the education often left much to be desired — teaching was often rigid and authoritarian, aimed at inculcating facts rather than the capacity for creative thought - basic schooling between the ages of 6 and 14 was virtually universal, and girls and boys had equal access.

From this foundation was laid a solid basis for many countries. The Third International Mathematics and Science Study, a 1995 international survey of 13-year-olds' learning achievement, for example, ranked the Czech Republic, Hungary, the Russian Federation, Slovakia and Slovenia ahead of most major Western countries.

While many systems, especially in Central Europe, continue to offer good schooling post-transition, reports from other countries of the region paint a picture of decline. Adoption of a new social model could have been an opportunity for these countries to build on the best of the old education system while discarding the worst. Instead, many children today are receiving an education that is inferior to that their parents received.

For some countries, the shock of economic and political change accompanying the transition from communism has been profound. Many nations have had to build or rebuild themselves: The region now comprises 27 countries where only 8 existed at the end of the 1980s. In almost every country of the region, gross domestic product (GDP) is below and often well below — 1989 levels; shrinking government revenues and growing inequality between rich and poor in some countries affect state provision of education and families' ability to cover school costs.

For other countries, the transition has been marked by civil war, notably in Armenia, Azerbaijan, Georgia, Tajikistan and former Yugoslavia. In these countries the educational heritage has been shattered — in Bosnia and Herzegovina during the war, for example, if children were educated at all it was in shifts, by teachers without materials, often in the dark and without heating.

A recent report by the UNICEF International Child Development Centre, in Florence (Italy), gives a graphic picture of educational decline amid the dislocation of the switch to a market economy:

- The costs to families of educating children have gone up, often sharply, at the same time family incomes have fallen. Fees charged for kindergartens have risen, fees have been introduced in some countries for upper secondary schools and they are becoming more common for tertiary education. Frequently there are now charges for textbooks, and clothing and shoes are no longer subsidized.
- The quality of schooling has dropped. Huge reductions have taken place in real public expenditure on education — by almost three quarters, for example, in Bulgaria. Teacher morale has often deteriorated along with pay. Buildings and equipment have suffered disproportionately from spending cuts; many are in a state of disrepair. Heating of schools in winter has become a serious problem in Kyrgyzstan, the Republic of Moldova and the former Yugoslav

Republic of Macedonia, for example.

Overall enrolment and attendance have dropped as rising costs and falling quality have depressed demand. For example, in the Caucasus and Central Asia, there have been major falls in enrolment at every level of schooling. The number of places in schools has also decreased: Over 30,000 pre-schools were closed in the 12 countries of the Commonwealth of Independent States between 1991 and 1995.

The portrait is not just one of general decay but of re-emerging inequality, with poor families less able to pay for their children's education, and children in rural areas and from ethnic minorities disproportionately affected. But if the educational gulf between rich and poor within countries has widened alarmingly, so too has the gulf between the countries of Central and Eastern Europe and those of the Caucasus and Central Asia. In Central Asia particularly, educational provision is spiralling down towards standards not seen in a generation, and in many other countries there is serious cause for concern.

The social impact of the transition from central planning to a market economy is all too often forgotten, as if the economy is the only thing that matters. The story of education in the 1990s from Slovakia to Siberia, Uzbekistan to Irkutsk, makes it clear that the world forgets the social dimension at its peril.

Photo: Two girls share a book in Yugoslavia. Educational planning, whether for an entire society or a single school, must start with child rights and be based on the best interests of the child. It must strive to ensure an environment that is free from violence, that fosters democracy and acceptance and that teaches skills which equip students for lives as responsible citizens.

What kind of school would result? Part of the picture emerges from a thoughtful checklist of attributes for child-friendly, rights-based education, compiled by the distinguished human rights authority and former Chairperson of the Committee on the Rights of the Child, Thomas Hammarberg.

A school, for example, that imparts real-life skills and promotes the development of the child in all respects from the right to nutrition to the right to play — begins to meet the criteria.

In Namibia, for example, where the newly independent Government was determined to root out the disciplinary violence that the former apartheid regime had imposed, the school system adopted a completely non-violent approach called 'Discipline from Within'.<sup>25</sup>

In different projects now being combined in a model for schools in Thailand, community members are being asked to define what rights they think their children have and how such rights might be reflected in their schools. The community's opinions are compared with the Convention on the Rights of the Child to obtain a local definition of a rights-based, child-friendly school, and a school self-assessment is used to help define what further school improvement is required. In another project, teachers are being trained as 'defenders of children' — a role in which they, with other members of the community, will work to identify and protect children at risk.

## CENTRAL AND EASTERN EUROPE, THE COMMONWEALTH OF INDEPENDENT STATES, AND THE BALTIC STATES

**Enrolment:** Universal access to free basic education was attained by the early 1980s. Most countries have maintained high primary enrolment rates; however, at least one child in every seven of primary school age is out of school in Croatia, Georgia, Latvia, the former Yugoslav Republic of Macedonia, Turkmenistan and Uzbekistan. In countries of the former Soviet Union, 32,000 pre-schools closed between 1991 and 1995, with big declines in enrolment in Armenia, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova and Ukraine.

**Gender:** There is parity between boys' and girls' primary enrolment and completion rates, and girls' secondary enrolment rate is higher than boys' in a number of countries.

*Effectiveness:* Though available primary school completion rates are virtually all above 90 per cent, nearly one third of the countries in the region have no completion data.

**Constraints:** There is concern about the quality of education in a number of countries in the region. Conflicts in Azerbaijan, Georgia, Tajikistan and former Yugoslavia have taken a toll on education, and the region is beset with social problems arising from political and economic transition. Real public spending on education has fallen in many countries — by one third in the Russian Federation and by three guarters or more in Azerbaijan, Bulgaria, Georgia and Kyrgyzstan. Teachers' salaries are down in a number of countries, and education costs for families have increased, a constraint for poor and minority families. Many school buildings are in need of repair, and heating is a problem in winter in several countries.

**Progress and innovations:** Educational reform is on several countries' agenda. Armenia, for example, is improving the quality and relevance of curricula and promoting decentralization and parental involvement. Education initiatives to ease ethnic tensions and promote tolerance are also under way in the region. UNICEF is encouraging early childhood care and development through the Better Parenting Initiative in Romania and the former Yugoslav Republic of Macedonia.

In Colombia, 35 schools are experimenting with a child-rights model to improve education. Among the measures taken are ensuring adequate space, safe water and sanitary facilities; establishing libraries; and maintaining an atmosphere of democracy that guarantees dialogue, participation and the peaceful resolution of differences. Schools ask children, parents and teachers to respond to a series of questionnaires and use the responses to ensure that the school meets and maintains its child-rights requirements. Children are posed such questions as, "Do my teachers know who I am and do they call me by my name? Do my teachers pay attention to what I think?"<sup>26</sup>

In Belém, in Brazil's impoverished northern region, the City of Emmaus School has taken a different approach aimed at developing the students' capacity to act as independent citizens. The school was created in the early 1980s when the Republic of Small Vendors, an organization that helps children living or working on the streets, decided to build a school on the poorer margins of the city that was both responsive to students' needs and that reflected the rich local culture. After consulting with the community - mainly rural migrants of Amazonian Indian origin - school planners designed a physical plant whose buildings are based on a circular Amazonian Indian design, with ample open space inside and outside.<sup>27</sup>

The school's teachers, who are formally employed by the Government, are retrained from the beginning in a whole new approach to teaching.

"We had to get them to review their social role and understand that, unless they changed their approach, they would be contributing to the very processes that deny the poorer layers of society their basic rights," said Graça Trapasso, former school coordinator. "The thrust here is to awaken children to their rights and responsibilities."

The quality of the relationship between children and teacher is paramount: Teachers are considered to be facilitators and guides. Learning begins with the child's own frame of reference and develops with the child's active participation.

Such undertakings mark the stirring of an education revolution guided by the Convention on the Rights of the Child. It has five key elements, most of which interweave with and reinforce each other:

Learning for life. This is the basis of a series of new approaches to teaching and learning that are designed to make the classroom experience more fulfilling and relevant.28 Using these approaches, teachers are becoming facilitators and guides rather than dictators of facts, and education systems are devising more accurate methods of measuring actual learning. What will be required are more fundamental changes in education policies and processes to instil and stimulate a lifelong love of learning. This will enable people to supplement or even replace the skills they learned in childhood to respond to new needs over the course of their lives.

Access, quality and flexibility. Schools are reaching out to the children left on the margins of the education system (girls, ethnic minorities, child labourers, the disabled). They are being built nearer the communities they serve and are more flexible in scheduling and in learning modes.

Gender sensitivity and girls' education. The education of girls has become a top priority. The cultural and political obstacles to gender equality are being addressed and education systems at every level are being made more sensitive and attentive to gender issues. The State as key partner. Education For All cannot be achieved without the full commitment of national governments, which are obligated by the Convention to ensure that the child's right to education is met. Their role, however, is changing as they delegate some authority to district and local levels. While retaining their normative role, governments are also playing greater mobilizing and coordinating roles with educators, parents, entrepreneurs and nongovernmental organizations (NGOs) as partners.

**Care for the young child.** Learning begins at birth and is enhanced by a holistic approach that helps ensure stimulation and socialization, good health care and nutrition, especially in the crucial early years of a child's life. Such a holistic approach is increasingly being achieved through low-cost community alternatives and parental education, as well as through formal pre-school programmes. These initiatives, taken together, represent the new concept of education, shaped by the Convention on the Rights of the Child, the World Summit for Children and the World Declaration on Education for All.

People must be educated. Education is not solely a means to an end, a tool of development or a route to a good job. It is the foundation of a free and fulfilled life. It is the right of all children and the obligation of all governments.

To advance into the 21st century with a quarter of the world's children denied this right is shameful. But those dedicated to Education For All — educators, development workers, parents and others — have cause to be both optimistic and proud. Spurred by deeply involved families and committed people in thousands of communities around the world, exciting innovations are taking shape. These efforts are part of an education revolution that is promising profound change — and is already well under way.

#### INDUSTRIALIZED COUNTRIES

**Enrolment:** Primary enrolment in the industrialized countries stands at close to 100 per cent. Secondary enrolment in Western Europe increased from 90 per cent in 1985, the lowest rate among industrialized areas, to universal enrolment in 1995.

**Gender:** There is parity in boys' and girls' enrolment rates at the primary and secondary levels. At the tertiary level, girls' enrolment rates are more than 90 per cent in North America, while the rate for boys is 75 per cent. While adult literacy is almost universal, women account for over 60 per cent of those adults who are not literate.

Effectiveness: In the 1960s, just over half of young people in the industrialized countries completed upper secondary school. By the 1980s, the proportion had risen to two thirds and has continued to increase. These gains do not assure effective education, however: In mathematics and science tests of 13-yearsolds, students from some East Asian and Eastern European countries scored higher than those from a number of industrialized countries. Also, an average of more than 15 per cent of adults in 12 industrialized countries are functionally illiterate; in Ireland, the United Kingdom and the United States, the rates are over 20 per cent.

**Constraints:** Not surprisingly, poverty appears to lead to lower academic achievement and higher drop-out rates. In seven industrialized countries, 10 per cent or more of children live in poverty, and in the United States the rate is over 20 per cent. Children of minority groups and those in one-parent families also face heightened risks.

**Progress and innovations:** Over three quarters of young children in Western Europe are in pre-primary education programmes, the highest rate among industrialized areas. In several countries, large-scale pre-school programmes target children at risk, including Head Start in the United States (begun in the 1960s) and Priority Education Zones in France and Better Beginnings, Better Futures in Ontario (Canada) (both started in the 1980s). School systems are also increasingly adapting curricula to reflect children's diverse cultural backgrounds.



# The education revolution

ver the last decade, consensus has grown about the kinds of changes needed if learning is to occur. More important still, these are not ideas dormant in academic papers or debated at international conferences, but they are being put into practice all over the world, in pilot projects and at the national scale. Nor are the resulting success stories isolated events that would be impossible to replicate in other contexts or cultures. Rather they are practical proof of the 'education revolution', whose principles are now broadly understood and shared and whose central elements are emerging in varying configurations around the world.

If access to quality learning is one guiding light of this revolution, the other is child rights. In article 28, the Convention on the Rights of the Child established the right of all children, without discrimination, to education. The Convention also provides a framework by which the quality of that education must be assessed. If children are required to sit in an overcrowded classroom mindlessly parroting what the teacher says, their learning and developmental needs are clearly not being fulfilled. The Convention guides us, therefore, in article 29, towards a more child-centred model of teaching and learning, one in which students participate actively, thinking and solving problems for themselves, and in this way developing the self-esteem that is essential for learning and decision-making throughout life.<sup>1</sup>

A vision of quality in education guided by the Convention can never be limited to the lesson plans of the teacher or the proper provision of classroom equipment. It extends far beyond, into questions of gender equality, health and nutrition; into issues of parental and community involvement; into the management of the education system itself. And the benefits and impact of quality education also make invaluable contributions to all areas of human development, improving the status of women and helping to ease poverty.

The education revolution is reshaping the edifice of education. Under its aegis, schools must become zones of creativity, safety and stimulation for children, with safe water and decent sanitation, with motivated teachers and relevant curricula, where children are respected and learn to respect others. Schools and other learning environments also need to offer young children in the early primary The Convention on the Rights of the Child guides us towards a more childcentred model of teaching and learning, one in which students participate actively, thinking and solving problems for themselves.

Photo: As much as 60 per cent of new HIV infections in sub-Saharan Africa may occur among young people 10-24 years old. Schoolboys in Malawi watch an AIDS prevention drama.

Learning for life in the 21st century requires equipping children with a basic education in literacy and numeracy, as well as the more advanced, complex skills for living that can serve as the foundation for life. grades a nurturing experience that eases their transition into systems all too often not designed to do this. The elements of this revolution are already changing schools around the world.

## Element 1. Learning for life

Going to school and coming out unprepared for life is a terrible waste. Yet for many of the world's children, this is exactly what happens.

Educators around the world have recently begun to focus on the gap between what is taught and what is learned, and the large numbers of children caught in that abyss. A World Bank survey in Bangladesh found that four out of five of those who had completed five years of primary schooling failed to attain a minimum learning achievement level, while those who had completed three years of schooling scored approximately zero on the same low measure of learning achievement.<sup>2</sup> The rights of these children are not being met.

Surveys such as these generally assess basic levels of literacy and numeracy — levels of reading, writing, speaking, listening and mathematics — which, of course, are critical tools for further learning. The surveys do not even attempt to measure the success of teaching children skills necessary for survival, for a life with dignity and for coping with the rapid and constant change that typifies modern life.

Learning for life in the 21st century requires equipping children with a basic education in literacy and numeracy, as well as the more advanced, complex skills for living that can serve as the foundation for life — enabling children to adapt and change as do life circumstances. A lack or inadequacy of basic education can seriously jeopardize the possibility of lifelong learning and can widen the gap between those who can and cannot profit from such opportunities.

In this approach to learning, teachers and students need to relate in new ways so that the classroom experience — the very process of learning — becomes a preparation for life. As the principles of the Convention on the Rights of the Child make clear, teaching must be a process of guiding and facilitating, in which children are encouraged to think for themselves and to learn how to learn. The classroom must be an environment of democratic participation.

The learning environment must also be transformed to one that is active and child-centred. It must be linked to the development level and abilities of the child learners. Children must be able to express their views, thoughts and ideas; they need opportunities for joy and play; they need to be comfortable with themselves and with others: and they should be treated with respect. In this kind of environment, children develop a sense of self-esteem that, when combined with basic knowledge, skills and values, stands them in good stead, enabling them to make informed decisions throughout life.

The physical environment is important too, helping children feel safe, secure and nurtured. Buildings and furniture should be child-friendly. Too many children perch on furniture built for adult bodies in classrooms with windows and doorways designed by adults for adults.<sup>3</sup>

The comprehensive approach of learning for life enables individuals to integrate more effectively into the world of work and society. It calls for a curriculum and a teaching approach that take into account such factors as gender, language and culture, economic disparities and physical and mental disabilities and enable children to deal with them in a positive way. Learning systems are needed that help children and societies respond both to their local needs and the challenges of globalization. The key features of such systems include emphasis on human rights and the transmission of knowledge and skills that help each person realize individual potential and social good, and ultimately help alleviate and even eliminate poverty.

Within this broader definition of learning to which every child has a right, the Jomtien conference gave new prominence to the idea of 'life skills'. The definition of life skills is evolving to encompass psychosocial skills of cooperation, negotiation and communication, decision-making, and critical and creative thinking in preparation for the challenges of modern life. It is an education in values and behaviour.

Life skills are those that children need in order to cope with issues and problems related to the entire spectrum of their survival and well-being, including knowledge about health, nutrition and hygiene. A grounding in life skills prepares children to deal practically and resourcefully with people and situations they encounter on the streets and in the fields, helping them manage finances, interact in social and family dynamics, appreciate their own rights and respect those of others.

While important in early childhood education and primary schools, where emphasis is placed on general survival skills rather than academic ability, life skills become even more vital in adolescence when the risks of exploitative child labour, HIV/AIDS and teenage pregnancy increase, requiring children to make ever more complex and difficult behavioural choices. The alarming proliferation of civil conflict in the developing world has posed an enormous life-skills challenge. To meet it, training in the techniques of conflict resolution is being introduced to students in countries with a recent history of violence, such as Colombia, Sierra Leone and Sri Lanka.

## Measuring learning achievement

If the success of education is to be gauged by what and how children learn, better ways must be found to measure the quality and relevance of education. The emphasis must be on assessing how well education systems are meeting their responsibility to provide for the educational rights of their youngest citizens in terms of what they learn. Such information can be used to adjust policy, introduce realistic standards, help direct teachers' efforts, promote accountability and increase public awareness and support for education.<sup>4</sup>

Unfortunately, most of the mechanisms in place test children as part of a selection process rather than addressing whether they have had sufficient opportunity to acquire the literacy, numeracy, life skills and values needed throughout life. There are interesting efforts emerging, however. To date, the joint UNESCO-UNICEF Monitoring Learning Achievement (MLA) project represents one of the most comprehensive attempts to devise an international framework for measuring learning that transcends the traditional focus on exam results or school enrolment<sup>5</sup> (Panel 2).

The MLA project is not the only initiative. The Minimum Levels of Learning (MLL) project in India is taking a fresh look at what kinds of skills can and should be measured both in and out of school.<sup>6</sup> And in Bangladesh, the Assessment of Basic Competencies (ABC) project is using the same techniques as immunization



Innovative learning systems that respond to local needs and the challenges of globalization have the potential to alleviate, even eliminate, poverty. A girl in India.

#### Panel 2

## What children understand: The Monitoring Learning Achievement project



he first-ever attempt on a global basis to help countries uncover and understand the trends, weaknesses and strengths of their education systems is bearing fruit, with some findings strikingly consistent across countries. For instance, pupils in urban schools perform better than those in rural schools; girls' performance is better than that of boys in the lower grades, but later, due to diverse cultural and socio-economic factors, begins to decline; and pupils from private schools generally outperform those from public schools.

These profiles are emerging from the project on Monitoring Learning Achievement (MLA), a collaboration between UNESCO and UNICEF launched in September 1992. The project's central team at UNESCO headquarters in Paris has overseen its development from a pioneer phase in five countries (China, Jordan, Mali, Mauritius and Morocco) to its current embrace of 27 countries at three different stages of implementation.

Its goal is to help countries monitor their performance in meeting 'minimum basic learning competencies' — in other words, acceptable levels of learning in literacy, numeracy and life skills — through a child-centred approach. From the data collected, countries then are able to:

- identify the factors promoting or hindering learning achievement in primary schools;
- understand the role of key participants;
- · analyse problem areas;
- propose policy changes and practical measures to improve the quality of education.

Specific recommendations that have emerged, for example, were that classroom practices must be improved in Sri Lankan primary schools; the most urgent need in Nigerian primary schools is to ensure effective teaching and learning of the English language; and in Mozambique, the priority is to develop children's critical thinking and problem-solving skills.

The addition of life skills to the more normal '3Rs' (reading, writing and arithmetic) is important since most testing excludes this element entirely. In China, for example, children were shown to be gaining an adequate understanding of reading, writing and mathematics. But their learning achievement in life skills was significantly less, which led to the recommendation that "the teaching-learning process in China needs to emphasize more problemsolving skills and the ability to apply knowledge in dealing with real-life problems."

While the project has the same broad goals, each government develops its own country-specific monitoring system. This country-specific design is important, since conditions differ so markedly. If monitoring is to be meaningful, it has to take into account not just local cultural differences but also the type of school, its location, its way of organizing classes and so on. Questionnaires are filled in by the pupils themselves, their parents, their class teacher and their head teacher so as to build up as complete a picture as possible of the child's learning environment, both in school and at home.

The project investigates three major areas of life skills: health/hygiene/nutrition; everyday life; and the social and natural environment. Again, some of the skills assessed within these areas are common to all while others are country-specific. All the pioneer nations, for example, wanted children to be able to recognize the symptoms of the major childhood diseases. Jordan wanted its children to know about the harmful effects of coffee and tea.

The MLA project makes it possible for participating countries to exchange information, and consequently, those joining the scheme later have benefited from the experience of the five pioneers, avoiding pitfalls and putting their monitoring structures in place more quickly. This is not just as a result of international seminars of the participating nations, though these have also been useful, but due to specific 'mentoring': China, from the original group, has acted as adviser to Sri Lanka from the next batch of countries, for example, just as Jordan has helped Oman.

In all these cases, better monitoring of learning achievement is helping governments to skirt some of the deepest potholes in the road to Education For All. surveys to assess the ability of children aged 11 and 12 to read and understand a passage of text, write a letter communicating a simple message, solve mental arithmetic problems and demonstrate life skills. The project has successfully shown that meaningful data can be gathered at local levels and at very low cost. The results showed a distressingly low level of learning — only 29 per cent of all children and 46 per cent of those with five years of schooling satisfied basic education criteria.<sup>7</sup>

There is a growing worldwide movement to discard numerical rankings and instead describe learning achievement, as in the profiles teachers do of children's work in the United States and the reformed schoolleaving examinations in Slovenia. In the outcomes-based curricula used in Australia, India, Italy and South Africa, learning objectives are unambiguously stated and understood by both teachers and students at the outset. Teachers then observe and describe how well children demonstrate - verbally, in writing or in performance --their grasp of the learning goals.

These developments share a conviction that what is needed is a focus on what children actually learn, and that assessments should be used to develop the kind of teaching that facilitates the learning process (Panel 3).

This concept of learning achievement has economic as well as educational implications. If class repetitions and drop-outs — indicators of inefficiency and poor quality — can be reduced, limited resources will stretch much further. A survey of Latin American education in the 1980s showed that, on average, a child took 1.7 years to be promoted to the next grade and that each year 32 million students repeated grades in primary and secondary schools, representing an annual waste of \$5.2 billion.<sup>8</sup> A survey of Latin American education in the 1980s showed that, on average, a child took 1.7 years to be promoted to the next grade and that each year 32 million students repeated grades in primary and secondary schools, representing an annual waste of \$5.2 billion.

Photo: A class in China, where an assessment of learning achievement showed that the country has done well in giving pupils a good grounding in literacy and numeracy but requires a greater emphasis on life skills in the curriculum.

## Beyond the ruler: Competency-based learning in Tunisia



stork has nested in the minaret of the white-painted mosque across the road. Below, two children are tying up the donkeys they have ridden from their homes to this school in the peaceful village of Mahjouba in north-western Tunisia. In the school courtyard, dozens of birds warble from almond and apricot trees shading a vegetable garden and a rabbit hutch. On the right are five classrooms decorated with large murals painted by the children. On the left is a large multipurpose room hosting a school library and extracurricular activities - the room is a vital resource in a school where students have to use the classrooms in shifts.

The school in Mahjouba is a typical example of Tunisia's integrated school development project, which was begun in 1992 in the governorate of El Kef on the Algerian border. In this area, more than 40 per cent of the population is illiterate and more than 10 per cent lives in absolute poverty.

The project aimed to enhance the performance of 30 of El Kef's rural schools through improved teaching methods, while also developing the infrastructure (building compound walls and multipurpose rooms, for example), providing safe water and planting vegetable gardens or fruit trees to provide learning opportunities for the students. Teaching methods pioneered by Mahjouba and other schools in El Kef have since been introduced in 475 primary schools across the country.

The new framework, devised by a national steering committee of experts from UNICEF and the Ministry of Education, is called 'competencybased teaching'. This term refers to a system based on the skills or 'competencies' children should be able to acquire, which become the key focus of teaching, remedial and evaluation systems. Teachers run regular assessments in order to observe what competencies children have acquired and which areas need additional attention.

In many parts of the world teaching is based on assumptions, and all too often lack of comprehension and learning only show up in end-of-year examinations, with many students having to repeat a year because their problems weren't diagnosed early enough to be addressed. The results from El Kef are still preliminary but are nonetheless encouraging: The pass rate at the end of grade six has increased from 46 per cent in 1991 to 62 per cent in 1997.

Unexpected responses that might have earned a pupil a rap on the knuckles in the past are now seen by teachers as a normal part of the learning process, which can be used to assess learning achievement.

Samir Elaïd, who has taught at the Mahjouba school since 1987, agrees. The academic results also indicate the value of the system: Three years ago, 10 of the 30 pupils in his third grade class had to repeat a year, whereas in 1998 only 4 have had to do so.

Abdallah Melki, principal of the Mahjouba school, is another convert. A 50-year-old with a ready smile, he was initially uncomfortable with the new methods but now feels they are highly effective, especially for problem students. His one regret is that the competency-based approach has so far been limited to three subjects: Arabic, French and mathematics. Competency-based science teaching will be introduced in the 1998/99 school year.

The Mahjouba school has also helped to pioneer three other innova-

tions. In the first, students sign a contract with the teacher on the work to be accomplished in a certain period: for example, two pages of spelling and one of mathematics in the coming week. Teachers in El Kef have found that this agreement helps children build a greater sense of responsibility for their own learning.

The second divides the class into groups of three or four. Students work individually on the same assignment, then discuss their results and come up with a joint answer. In a slight variation of this system, groups are made up of students of different levels who work together and help one another.

The third innovation is the practice of stronger pupils 'tutoring' weaker ones and offering them advice and explanations. At the Mahjouba school, for example, Wahida tutors her friend Hanene who is glad of the help. Hanene herself chose Wahida as her tutor because they are friends who walk to school together each morning.

On Wahida's part, she has found that her studies are much more interesting and she understands them better since her learning has been gauged by regular assessments. According to a World Bank publication, low-income countries spend, on average, four years' worth more resources to produce a primary school graduate than they would if there were no repeaters or drop-outs.<sup>9</sup>

Teachers, policy makers and students in many countries, nevertheless, still accept it as natural and inevitable for children to repeat grades because they have 'failed', which contributes to a vicious circle of low expectations, damaged self-esteem and further failure. Repetition may even be seen as evidence of high standards in schools, when the reverse is probably true.<sup>10</sup>

In recent years, countries have experimented with automatic promotion — the norm in most of the English-speaking world. Myanmar, confronting a serious crisis in education, has replaced year-end exams with an ongoing assessment of students' learning achievement. Teaching and management skills are also being upgraded. As part of the All Children in School project, schools are given initial incentives, in the form of chalkboards, toilet facilities and teaching kits, that are tied to success in meeting annual targets: a 10 per cent increase in enrolment, retention and completion rates over the previous year's rates as measured by community members. As a result, in three consecutive academic years from 1994 to 1997, an average of 65 to 70 per cent of all project schools managed to meet their annual targets and received roofing sheets to upgrade or extend school facilities.11

## Health and learning

Health and adequate nutrition are pillars of learning throughout life. But children in most of the developing world contend with frequent episodes of respiratory illness and diarrhoea during their school years that can Low-income countries spend, on average, four years' worth more resources to produce a primary school graduate than they would if there were no repeaters or drop-outs.

Photo: Regular assessments of students' academic progress in Tunisia have reduced repetition rates by identifying learning problems early on. A Tunisian boy reads from a chalkboard.

#### Panel 4

## Second-hand computer, first-class vision: Thailand's CHILD project



Somjai is in grade three of her primary school in north-east Thailand. In her first year she made good progress, but by the end of grade two she was faltering and her test scores were low.

Now, with this downward trend continuing, her teacher refers to Somjai's computerized learning profile. From it she learns that Somjai was often absent during her second year, that she rarely attends the health clinic despite her poor nutritional status and that she has three younger siblings and a divorced mother.

The teacher decides to visit the mother in case Somjai is missing school to care for her siblings while her mother works. She will suggest that the younger children attend the community day-care centre, or she might persuade the school authorities to talk to local officials about starting an income-generating project in the community.

Somjai is a good example of the Children's Integrated Learning and Development (CHILD) project in action, which started when the head teacher of a small, rural, primary school in the poorest region of Thailand wanted his 150 students to have access to a computer.

The head teacher wrote to the Institute of Nutrition at Mahidol University asking if they knew of anyone willing to donate a computer. He explained that it would be used not only in the classroom, and to improve the school's administration, but also to track changes and influences in the community from which the students were drawn.

The response to this modest request for a second-hand computer has already grown far beyond a network of computers in rural schools into a dynamic and distinctive example of child rights in action that could yet inspire similar ventures worldwide.

Launched in two schools in one province in January 1997, in the course of a year the CHILD project spread to 25 schools, 38 communities and some 3,000 children in the province. The project, run by Mahidol University with UNICEF support, creates an early warning system that integrates educational with community indicators to help all children achieve their maximum learning potential — particularly those with special educational needs.

Schools compile a child's learning profile (ideally computerized, in spreadsheet form), comprising social and family factors that might affect learning. Teachers and communities then use these over time to make informed decisions and propose actions in an integrated, holistic way.

The early expansion of the scheme is a sign of its success. Its rapid spread has also meant changes in focus to address the diversity of social conditions of the new schools and communities.

For example, in several communities protein energy malnutrition, iodine deficiency disorders and iron deficiency anaemia are threatening children's health and thus their ability to attend school. In other communities where parents migrate to seek work, increasing numbers of children are being left in the care of grandparents who have limited knowledge of modern basic health care.

Concentrating on learning alone, therefore, has proved insufficient in the effort to facilitate children's learning. For this reason, the CHILD project now redefines its objective as strengthening and preserving children's rights, in line with the Convention on the Rights of the Child. This holistic and practical view of child rights enables communities to see the connections between poor learning in school and health, nutrition and other factors.

As a result, communities have become more active participants in their own and their children's development. They are undertaking a wide range of activities to increase children's access to primary and secondary education, upgrade the quality of school lunch programmes and improve water supply and sanitation facilities. Communities are setting up day-care centres and establishing vocational training centres for youth who are returning to their villages due to the recent economic crisis.

Photo: The CHILD project creates an early warning system, looking at health, nutrition and other factors that can affect learning. Children in class in northern Thailand. subvert learning. Even in the state of California (United States), where standards of water and hygiene far exceed those in developing countries, gastrointestinal diseases account for around a quarter of all days lost from school.<sup>12</sup> Other serious health complaints that plague school age children in the developing world include malaria, helminths (parasitic worms), iodine deficiency and malnutrition. Health hazards like these do not simply keep children out of school, leading them to underachieve or repeat grades, but can permanently impair their ability to learn.

"There is a strong link between children's health and school performance," says Professor Dr. Hussein Kamel Bahaa El-Din, Egypt's Minister of Education, himself a paediatrician. "This link between health and education is a major challenge to educational planners and policy makers. Rapid interventions and serious preventive measures must take place. In Egypt, we strongly believe that education is the vehicle of preventive medicine, which is the medicine of tomorrow and the medicine of the majority, a true democratic trend."<sup>13</sup>

Egypt has launched a comprehensive package of reforms aimed at generating healthy and health-promoting schools. The package includes:

- regular medical checks for all schoolchildren;
- ► a school nutrition programme, with special help for rural areas;
- free health insurance for schoolchildren;
- the integration of health and nutrition messages into the curriculum;
- child-to-child programmes to promote health in the community.<sup>14</sup>

Egypt's efforts to make schools and students healthier are resulting in higher and earlier enrolment, lower rates of absenteeism and drop-out, and better learning achievement.



A teachers' workshop in Egypt, where education is considered preventive medicine.



School health programmes are among the most cost-effective ways to improve public health. In Thailand, girls plot connections between groups at risk of contracting AIDS.

Research also shows that improvements in the health of schoolchildren reduce the transmission of disease in the community,<sup>15</sup> with children proving to be exceptionally effective as health promoters themselves, passing on what they learn to siblings, friends, family members and other adults.<sup>16</sup>

Findings like these led the World Health Organization (WHO) to launch the Global School Health Initiative in 1995. The World Bank has also shown interest in investing in school health programmes, which it views as one of the most cost-effective ways of improving public health, noting that the number of schools and teachers far exceeds the number of health centres and health workers.17 It is important to point out, however, that teachers should not be expected to fill the role of health workers. Teachers, with demanding jobs of their own, cannot be expected to succeed where health centres have failed, especially without extra resources.

What are the main characteristics of a healthy and health-promoting school?

- A place of safety. Teachers need to act as protectors of children, safeguarding their rights within school, not least the right to be free from sexual exploitation and violence. Schools must be supportive and nurturing places for children with special needs, including those with disabilities or with HIV/AIDS.
- ► A healthy environment. All schools need safe water and sanitation. Without these, children are unable to practise what they learn about hygiene.
- A place where diseases can be detected and often treated. Some illnesses and unhealthy conditions — such as parasitic infections, micronutrient deficiencies and trachoma — can be simply and affordably treated by health workers or teachers. Teachers can

also be trained to recognize children with visual and hearing defects, which are often mistaken for learning disabilities.

► A school that teaches life skills. Children need more than information to make healthy choices. They may need to develop technical skills in first aid or learn to use oral rehydration salts to treat diarrhoea. They also need to learn how to make decisions and to negotiate and resolve conflict — critical skills in leading healthy lives outside the school gates.<sup>18</sup>

Education's ripple effect is being demonstrated in many countries. The Clean and Green Schools programme in Mauritania calls for teams of students, parents and teachers to evaluate the state of their local school and draw up plans to improve it that include health education classes based on the *Facts for Life* booklet!\* If it proves successful, the programme could be expanded nationwide at low cost and could help lower the country's high infant mortality rates.

In Thailand, schools covered by the CHILD project monitor the connections between children's learning and health (Panel 4).

In two Nigerian villages, a 20 per cent gain in life expectancy occurred when the only intervention was easy access to adequate health facilities, a 33 per cent gain when the mother had received schooling but lacked access to health facilities, and an 87 per cent gain when health and education resources were combined.<sup>19</sup> Far from forcing a trade-off or clash of priorities among competing worthy goals, joint health and education initiatives work together to accelerate the education revolution.

<sup>\*</sup> Facts for Life is an inter-agency publication that presents practical ways of protecting children's lives and health.

## Element 2. Access, quality and flexibility

Children have a right to go to school and to receive an education of good quality. The conventional education systems in many countries, however, are too rigid to reach the children who, because of gender, ethnicity or poverty, have least access to school. But Education For All cannot be achieved unless these children are reached. The challenge for schools is to be flexible enough to adapt to the needs of the most disadvantaged children while offering education of sufficient quality to keep all students once they have arrived. It is no coincidence that the poorest, most indebted nations are farthest from the goal of Education For All. On average, nearly half the children in the 47 least developed countries do not have access to primary education.20

Various cost-effective ways to increase enrolment and improve the quality of education are being investigated, and countries need to select approaches that address their distinct needs. A recent UNICEF study of five low-income African and Asian countries<sup>21</sup> shows, for example, that doubleshifting (in which a teacher and a classroom serve two separate groups of children on the same day) to improve access is already common in Viet Nam and would be useful in Burkina Faso and urban areas of Bhutan. In Myanmar, however, it would be inappropriate since there is no shortage of classrooms, nor are teachers' salaries high. Freezing higher education subsidies would be a reform worth pursuing in Burkina Faso and Uganda, which spend a disproportionate amount on these relative to primary schooling, but would be of less value in Myanmar and Viet Nam. Other solutions are being sought in the countries of Central and Eastern Europe and the former Soviet Union, a region of about 115 million children where disparity in access is a growing problem.

One method of increasing access that could be widely applied is to reduce the cost of building schools by using locally available construction materials. A World Bank study of six African countries showed that building brick-and-mortar schools to international standards was more than double the cost of working with local materials.<sup>22</sup> Even this estimate may have understated the possible savings.

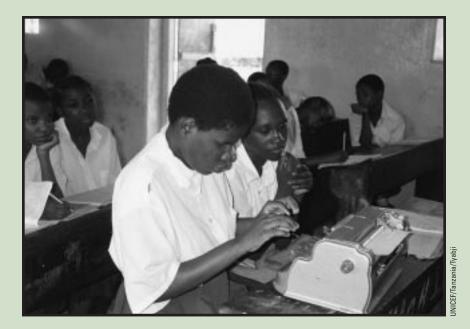
When Malawi launched its policy of universal free primary education in 1994, it also began discussions with agencies such as UNICEF and the World Bank on designs for its major school building programme. The eventual design has proven both serviceable and sustainable at around one quarter of the cost of a more standard model.<sup>23</sup> Similarly, with support from UNICEF, communities in Mali are using a variety of durable local materials such as kiln-hardened bricks to build schools that meet Ministry of Education standards but cost twothirds less than regular schools.

As ways are explored to meet the needs of unreached children, the growing role played by education providers other than governments needs to be kept in mind. Among these new providers are NGOs, religious organizations, private schools and communities. These all need to be acknowledged and accommodated within a new diversified system of education in which the State plays its essential role by setting standards.

## Reaching the unreached

Access remains a problem for the disadvantaged in any society. The Convention on the Rights of the Child is the basis for inclusive education systems where no child is excluded or marginalized in special programmes. The conventional education systems in many countries are too rigid to reach the children who, because of gender, ethnicity or poverty, have least access to school.... It is no coincidence that... on average, nearly half the children in the 47 least developed countries do not have access to primary education.

## A Tanzanian school welcomes the disabled



The happiest day of Martina Mukali's life was the day her parents told her she could go to school. Then eight years old, Martina travelled with her mother, a nurse, from her home in Morogoro region to the capital, Dar es Salaam, 200 km away, to attend the Uhuru Mchanganyiko Primary School. In the United Republic of Tanzania, nearly a third of all primary school age children are not in school. For Martina, who was born blind, the opportunity was really a dream come true.

Established in 1921, the Uhuru Mchanganyiko Primary School is one of the oldest in the country and the first to accept children with disabilities alongside other children, in the classroom and in all other activities. Of the 1,200 current students, 62 are blind, 11 are deaf-blind and 55 have mental disabilities. Like the other blind students, Martina resides at the school; she visits her sister in Dar es Salaam on weekends and holidays. It is difficult for children with physical and mental disabilities to overcome the grave problems limiting their access to education. Fewer than 1 per cent of children with special needs make it into education systems in the developing world, according to UNESCO. Children in rural areas are the most seriously isolated.

In Tanzania, education is not free students must pay fees and buy uniforms, exercise books and other materials — but the major costs of disabled children's schooling are covered by the Government. Boarding costs, school fees, medical expenses and learning materials for those who come from outside Dar es Salaam are also provided.

Martina, now 17, has achieved more than many of her sighted peers. Her classmates help her navigate the campus, and she reads and writes in Braille and loves to sing. She says, "I can do everything that you can do except cook, and that is only because nobody has bothered to teach me!" Her love of life and learning are infectious and inspire her classmates and all who meet her.

At the Uhuru Mchanganviko Primary School, blind students are integrated from the third year, or Class 3, onwards. Before they begin regular classes, they are oriented to the school campus - dormitories, classrooms and playground — and given instruction in mathematical symbols, elementary Braille and basic life skills consisting of personal care and hygiene. Eight specialist teachers and eight blind teachers — themselves graduates of the school - work together with teachers of geography, history and social studies, preparing all their materials in Braille and dictating them to the students. Braille course materials are produced at a printing press on-site. Students in need of extra help can attend special classes after regular school hours.

Of the deaf-blind students, four live on the school campus. The other seven live at home, and specially trained teachers work with their parents and other family members on ways to improve communication and interaction with these children.

One of every five students and the majority of the disabled students — enrolled in the Uhuru Mchanganyiko Primary School goes on to secondary school. Many students find work or begin trades on finishing primary school, so handson vocational training in carpentry, masonry and brick-making is offered to boys and girls at the end of the primary school programme.

One child with mental disabilities who thrives in the carpentry classes is Kenny Lungenge, 15 and living with his mother, an onion vendor, in Dar es Salaam. When he first arrived at the school five years ago, he knew nothing about basic hygiene or about how to communicate with other children. Today he interacts with his peers and is able to craft beds, bookshelves and cupboards. His friend Hussain Ali, who also is 15 and has mental disabilities, has mastered basic arithmetic and civics and reads at Class 2 level. Hussain also studies masonry.

The Uhuru Mchanganyiko Primary School achieves these rich results with threadbare resources. The dormitory facilities are spare, and there are no live-in specialized staff to look after the blind and deaf-blind children. Teaching materials, classroom furniture, and supplies and equipment used in vocational training are in short supply. Still, the school is succeeding in eliciting community support. There are plans to involve parents and the community in fund-raising activities, to sensitize the public about the disabled and to market products the students make, with proceeds to directly benefit them.

As the school's appointed timekeeper — a Class 6 student strikes the rim of an old car wheel, sounding the end of another day and calling the children to afternoon assembly, the disabled mingle with the other children, distinctions among them blurred by the hope and energy of schoolchildren ending their school day and at the threshold of life.

Photo: Blind since birth, Martina Mukali, 17, uses a Braille typewriter to take notes in a class at the Uhuru Mchanganyiko Primary School in Dar es Salaam. The school was the first in Tanzania to integrate disabled students.

Who are the excluded? Girls are the large majority of children out of school, and they must be a priority for recruitment. Also, proportionately fewer rural children attend than citydwellers, and proportionately fewer children from ethnic minorities or indigenous groups go to school than children from the dominant ethnic group. The disabled are barely considered (Panel 5). Children caught in the turmoil of armed conflict or other emergencies face the loss of years of schooling. Some 8 million children in sub-Saharan Africa alone will have lost their mothers or both their parents to AIDS, and many of these orphans will never enrol or will have to drop out of school (Fig. 6).

And lack of minority access is a problem in many countries, for example, in Niger, where only about a third of children enrol. It is a vital issue in China, which comes close to achieving universal primary enrolment but has to work much harder to enrol Muslim girls from Ningxia Hui Autonomous Region than Han Chinese boys in Beijing, for instance.<sup>24</sup>

Distance from the school reduces attendance. Studies in Nepal have shown that for every kilometre a child walks to school, the likelihood of school attendance drops by 2.5 per cent.<sup>25</sup> In Egypt, if a school is one kilometre instead of two kilometres away, enrolment goes up 4 per cent for boys and 18 per cent for girls.<sup>26</sup>

To reach unreached children, educational policy makers can learn much by sharing successes. In fact, one of the most hopeful aspects of the education revolution is the way in which creative initiatives are piloted in one part of the world and applied in another.

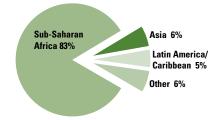
Multigrade teaching, in which children of two or more ages or grades are taught by one teacher, is one example. The practice has long

# Fig. 6 AIDS orphans: A looming education crisis in sub-Saharan Africa

HIV/AIDS is having a devastating impact on children in sub-Saharan Africa. Over 90 per cent of all AIDS orphans — children who have lost their mother or both parents to AIDS — live in sub-Saharan Africa.

Many of these orphans risk never completing basic schooling. Lack of resources limits responses, but among the measures in place are free primary education policies in Malawi and Uganda that provide vital support for orphans. Malawi has also developed a national orphan policy and is focusing on community care approaches, and South Africa is testing community-based care initiatives. Far more needs to be done to meet the crisis, and ensuring the right of orphans to an education must be an essential part of these efforts.

Geographical distribution of deaths attributable to HIV/AIDS



#### **AIDS orphans in eight African countries**

Country	Cumulative total (1997)
Burkina Faso	200,000
Congo, Dem. Rep.	410,000
Ethiopia	840,000
Kenya	440,000
Malawi	360,000
Tanzania	730,000
Uganda	1,700,000
Zimbabwe	450,000

Source: Report on the Global HIV/AIDS Epidemic, June 1998, UNAIDS and WHO, Geneva, 1998.

been a necessity in small village schools that can only afford one teacher, and it was the norm in most rural schools of the industrialized world in the early decades of this century. It tended to be regarded, however, as an inferior model of education until the Escuela Nueva schools in Colombia demonstrated how welldesigned lesson plans and teaching materials, bolstered by the support of the communities, could ensure a positive multigrade experience.

Rural schools in Colombia in the early 1980s were few and of poor quality. Some 55 per cent of 7- to 9year-olds and a quarter of all 10- to 14-year-olds in the countryside had never attended school, and one third of all first-graders dropped out.<sup>27</sup> The Escuela Nueva approach changed these statistics, and its evident success in a small number of schools has led the Government to extend the system countrywide. Multigrade teaching makes it possible for a complete primary school to be located close to children's homes in sparsely populated rural areas. Escuela Nueva teachers benefit from detailed guides and lesson plans as well as regular training to help them adapt lessons to the local situation. In keeping with the principles of the Convention on the Rights of the Child, teachers become facilitators rather than authority figures.

Another advantage of Escuela Nueva is that children move to the next grade at their own pace — when they achieve a set of objectives rather than by passing an exam at the end of the year. Grades, therefore, are not repeated. Apart from avoiding the stigma of being 'held back', students who have been sick or had to work in the harvest can resume their studies whenever they return. When compared with regular schools, Escuela Nueva's children not only score higher in achievement tests but also show improved self-esteem, creativity and civic-mindedness. Drop-out rates are also much lower.<sup>28</sup>

A number of countries have been inspired by the Colombian model and have adapted it to their own circumstances. Guatemala, for example, employs the Escuela Nueva methodology in its bilingual primary schools for indigenous children. In the Philippines, educational planners launched their own special multigrade demonstration schools after a visit to Colombia. Multigrade schools had, in fact, existed in the nation since the 1960s but had a poor reputation - located in distant, disadvantaged areas, they tended to be staffed by inexperienced, unsupervised teachers and to have inadequate facilities.

The country's new multigrade approach, however, has won approval from teachers, local communities and students. Thirteen-year-old Adonis Corisay, for example, planned to give up his studies after grade four, his local school's highest level. When the new multigrade school at Poyopoy started offering grades five and six, he was inspired to continue despite a two-hour walk to school. "Now I would like to finish high school. Then I will continue on to college so I can become a mechanical engineer. I would like some day to assemble my own car, which I will use in the mountains." The project expanded from 12 schools in 6 disadvantaged provinces in the 1996/97 school year to 24 schools in 12 provinces in 1997/98.<sup>29</sup>

Another way of reaching the hardto-reach in the remote mountainous regions of the Cordillera in the Philippines is the Cordillera Mobile Teaching project, which brings 'school' to the children, carried by a teacher with a backpack. First tested in 1989 in Ifugao Province, one of the poorest and most rugged regions of the country, the mobile teaching approach has not only increased enrolment but also produced test results matching or surpassing those of conventional schools. In 1993, it was extended to mountainous areas throughout the region. 'Ambulant' teachers now trek into the mountains to divide a week of teaching between two learning centres, kilometres apart, reaching children who would otherwise not have access to schooling and saving other students a hazardous hike across mountains and rivers.<sup>30</sup> The Cambodian cluster schools are another example of shared resources in remote areas (Panel 6).

In many countries, children in remote regions have gained access to learning by some form of 'distance education', often involving radio. The United Kingdom's BBC pioneered the transmission of educational radio broadcasts as early as 1924.<sup>31</sup> Since then, radio, television, and audio and video cassettes have become vital educational media, particularly in developing countries where more expensive technologies remain out of reach. Through Interactive Radio Instruction (IRI), a technique developed in Nicaragua in the early 1970s by a team from Stanford University, students answer questions, sing songs or complete practical tasks during carefully timed pauses in the broadcast, with the teacher acting as facilitator or even participant in group work.

Radio lessons like these must be tailored to the needs of their audiences and use the full potential of the medium, including drama, sound effects and music. From the first, the aim has been to improve quality of education rather than just provide learning at a distance. And while more high-tech options now command attention, IRI continues to be quietly effective on a mass scale. A study in the Dominican Republic

compared children who had 5 hours of radio instruction a week (plus half an hour of follow-up activities) with students with 10 or more hours of instruction in regular schools. The IRI students showed similar results in reading and writing and significantly better results in mathematics.<sup>32</sup>

Radio has also proven a highly effective tool for reaching pre-school children. In Nepal, two series of 20 programmes have been developed for three- to five-year-olds and their caregivers. Each programme has been broadcast over national radio twice a week and is an effective way of conveying important information to remote mountain communities about the health, nutrition and stimulation of young children. But with a cast that includes characters such as a talking bird and a pet elephant, the programmes can also be used by community day-care centres or informal family groups.33

## Flexible and unified systems

The hallmark of all these approaches is flexibility, in which the approaches adapt to local conditions to meet the educational needs of all children. This attribute was once confined only to so-called 'non-formal education' projects that multiplied in the 1970s, particularly in South Asia, as concerned organizations tried to fill the myriad cracks in the education system by reaching out to working children, the disabled or girls.

One of the most famous of these was launched by the Bangladesh Rural Advancement Committee (BRAC) in 1985. Long recognized for its work in rural development, credit and health, BRAC aimed initially to provide basic literacy and numeracy to 8- to 10-year-olds (with special emphasis on girls) in 22 villages, but met with such immediate success that it expanded at fantastic speed. By the end



For girls and many among ethnic minorities, the poor and the disabled, school remains inaccessible. Ensuring the right to Education For All is essential. In Bolivia, a teacher helps a child to write in a pre-school programme for children of working mothers.

# The floating classroom: School clusters in Cambodia



Ampong Prahok school is imposing, brightly painted and modern looking. It is also a houseboat moored among the wood and bamboo houses of a floating village at the northern end of Cambodia's Tonle Sap lake. When the villagers float their homes to more sheltered waters at the start of the rainy season, they tow the school with them.

The wooden base of the school is stabilized under the water by a steel hull balanced on two sides by sturdy bamboo poles, roped together to form thin logs. A corrugated roof keeps out the monsoon rains. There is a small teachers' office and two classrooms that can accommodate up to 80 students. The village children punt gondolier-style or paddle their cances to the school, fastening them to the railings of its exterior boardwalk.

Kampong Prahok school is not unique — in fact, it is part of a cluster of such floating schools.

In mid-1993, UNICEF, in cooperation with the Cambodian Government, established the cluster schools in seven target areas of rural, urban and minority populations. The major objective of the clusters is to redress imbalances in school quality by sharing resources, administration and often even teachers, to improve the weaker schools without diminishing the stronger ones. Government policy nationalized their development in 1995. In total, 631 clusters have been established across the country, 44 of which UNICEF supports as of mid-1998.

Over time, experience has shown that parents move their children to cluster schools because they realize that these schools offer good teachers, new or refurbished buildings and better equipment. Surveys indicate that enrolment rates in these schools are substantially higher than the national and provincial averages and drop-out rates are much lower, especially in urban areas.

The cluster system makes it possible to stretch scarce teaching resources and equipment by making them available via a common resource centre. Such centres can serve as a location for classes.

Given these advantages, it is no wonder that cluster schools are popular. Nevertheless, the floating fishing community had to work hard to bring a cluster school to Tonle Sap. Parents from the area journeyed for two days to the Provincial Education Office to insist that someone visit their community to help them plan the schools. The officials arrived a few months later to find a functioning parent-teacher association despite the fact that there still was no school and that all the association's members were illiterate.

"It was a difficult area," says Sieng Sovathana, Deputy Director of the Provincial Office of Education. "We used to have an enrolment rate of around 15 per cent because we only had one school." Now, with UNICEF's help, four floating schools move with the villages, and the old school building has been renovated as a resource centre. Enrolment is up to 60 per cent. "As a result of the cluster school system," says Ms. Sovathana, "we've seen an increase in enrolment, improved quality of education and a reduction in drop-out rates and in the number of children who have to repeat a year. Also the administrative work has improved remarkably."

This is not to say that Kampong Prahok is without problems. The teachers in the floating schools have no boats, for example, so whenever they want to go somewhere, they have to borrow one from the students. And Chhorn Rey Lom, a 13year-old student who is about to complete grade two, faces the prospect of having to give up school when she has barely begun, as the Kampong Prahok cluster presently offers only the first two grades. "I will have to stop studying," she says, "and work and fish to help my parents. I wish we had more grades and more schools in this community."

But on the whole, the advantages of the cluster system outweigh any problems, according to Ms. Sovathana. "It means the bigger schools with more resources can help the poorer schools. First we group the schools, then we group the head teachers so they all know what's going on. Then we group the teachers so they can help each other with teaching techniques and exchange ideas and experiences. Finally we group the communities."

In a country like Cambodia, with its grim recent past of suffering and civil war, clustering schools can serve an extra purpose. "Since 1979 people do not talk freely to each other, or share things with each other," says Pawan Kucita, UNICEF Education Officer in Phnom Penh. "The cluster's concept of sharing resources, materials and ideas, between schools and between villages, can only help. We look at the school as an agent of change in the community. It is one mechanism we can use to build harmony in society, a willingness to share and develop together."

of 1992 there were 12,000 BRAC schools,<sup>34</sup> and in 1998 some 34,000.<sup>35</sup>

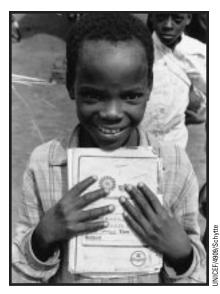
A BRAC school usually comprises 30 children, around 20 of whom are girls, who live within a radius of two kilometres and are taught in a simple rented room. Two thirds of the teachers are female, drawn from the local community and paid only modest wages. But they are among the most educated people in the community, having completed 9 years of education and 15 days of initial training, plus 1 or 2 refresher days each month. BRAC staff visit them weekly. Parents make no financial contribution but are expected to attend meetings.

The school is a typical village structure with a thatch or tin roof and earthen floors. Each has a chalkboard and charts, and teachers are provided with materials such as workbooks and teaching notes, picture cards and counting sticks. Each student receives a slate, pencils, notebooks and texts. The school aims to help children achieve basic literacy, numeracy and social awareness.

Students also spend 40 minutes a day on physical exercise, singing, drawing, crafts and reading stories, activities that the children love and that thus help boost attendance. Teachers ask pupils to help each other with assignments, and comprehension.<sup>36</sup>

The schedule is flexible; school is held for 3 hours a day, 6 days a week, 268 days per year. But the time of day is selected by parents, and the school calendar can be adapted to fit local needs such as the harvest. BRAC school graduates are eligible to move on to the fourth grade of the formal primary school system, although not enough of them do so — many families find they cannot afford the extra costs associated with the public sector.<sup>37</sup> BRAC is a significant success, an exception to the general belief that educational projects aiming simply to fill in the cracks end up offering inferior education to the poor, disadvantaged, disabled or girls.

Photo: By sharing scarce resources and pooling teachers, school clusters are able to reach more students and redress imbalances in educational quality. The Kampong Prahok floating school in Cambodia.



A boy clasps his exercise book in Uganda, where the Government, in its push to achieve Education For All, now guarantees free primary schooling to four children from each family.

BRAC is a significant success, an exception to the general belief that educational projects aiming simply to fill in the cracks end up offering inferior education to the poor, disadvantaged, disabled or girls who need it. And even BRAC has trouble providing a reliable bridge for its students into mainstream schools.

Now what is being increasingly advocated in many countries is a unified system overseen by the State and founded on state-supported schools but much more responsive to local conditions and community needs and at times bringing in partner organizations that open learning opportunities for children who are not being reached by conventional schools. The old divide between 'non-formal' and 'formal' education is thus becoming irrelevant. In such a system, the State's role is to set standards and ensure that the different approaches encompassed by the system conform to these standards.

There are now examples worldwide of public education systems that:

- adapt the annual calendar and daily schedule of schools to local circumstances, such as the agricultural seasons in rural areas, and use shorter school hours more effectively;
- locate schools closer to children's homes, which particularly increases girls' attendance;
- involve parents and the local community in the management of schools;
- make increased use of paraprofessionals and volunteers from the local community;
- adapt the curriculum to local needs;
- eliminate gender bias in curricula and related materials;
- exercise more flexibility in evaluating and promoting students to minimize the need for them to repeat whole years.

In the more inclusive concept of education, diverse approaches complement each other in the push to achieve Education For All. The Ugandan Government has taken the bold step of guaranteeing free primary schooling to four children from each family. It has also piloted the Complementary Opportunities for Primary Education (COPE) scheme in four districts over the last two years, to give older children who have missed earlier educational opportunities a second chance at school.

The project embodies many of the good practices from programmes in other parts of the world that have reached out to marginalized children. The classes are small (30-40 pupils), and the curriculum is skills oriented and enriched with life skills, covering only four subjects: mathematics, science, English and social studies. The timing is flexible (three hours a day), and teachers assess children continually rather than in terminal exams. The participation of parents and the community is encouraged.<sup>38</sup>

The national officer responsible for COPE, George Ouma Mumbe, believes the project's schools are already changing the lives of child labourers and other children previously unreached by the system. "By giving them specially trained teachers, syllabus and teaching methods, they are able to pick up quickly because of their superior age," he says. "It is amazing how fast these kids learn."<sup>39</sup>

Perhaps the most significant element of programmes such as COPE is that they accommodate and encourage accelerated learning opportunities, so that children who are over age in a class can advance quickly through the system to catch up with their peers. Enormous numbers of over-age learners repeating grades clog education systems throughout the world as a consequence of system failure. A strategy that aims to accelerate students' movement through the education system has enormous potential in terms of both meeting their rights and increasing the system's efficiency. The full implications of accelerated learning programmes for curricula and for pupil flow have not yet been fully worked out, but they make a very powerful argument for flexibility.

### **Empowering teachers**

Teachers are at the heart of the education revolution, but many feel under siege. Once viewed as wise, respected community leaders bringing the torch of learning to the next generation, their diminished and demoralized status is a worldwide phenomenon. In 1991, the second International Labour Organization's (ILO) meeting on the Conditions of Work of Teachers concluded that the situation of teachers had reached "an intolerably low point." Working conditions were drastically eroded, producing an exodus of qualified and experienced teachers.40 When UNESCO sought the views of national authorities for a conference on the role of teachers in 1996, only a handful of wealthy industrial countries (notably Austria, Canada, Finland, Germany and Switzerland) differed from the majority view that the standing and pay of teachers were cause for anxiety.<sup>41</sup>

The profession was hit hard by the financial austerity of the 1980s in the developing world. When governments cut public spending as part of structural adjustment programmes required by the World Bank and the International Monetary Fund (IMF), education budgets (comprised largely of teacher salaries) suffered. Over the 1980s and 1990s, teachers in Africa and in Latin America experienced a general lowering of real income, with rapid and substantial reductions in some cases.<sup>42</sup>

The erosion in salaries in Africa, for instance, has meant that primary school teachers often receive less than half the amount of the household absolute poverty line.<sup>43</sup> Many teachers have been forced to supplement their meagre incomes by offering private lessons or running their own businesses, to the detriment of their regular attendance and performance in schools — a phenomenon that has spread now to countries in Eastern Europe, and in Central and East Asia. Even when resources are abundant. governments are more likely to spend on expanding schooling than on wages.

Teaching conditions need to be improved worldwide to halt the vicious circle of demoralization and decline. But the social standing of teachers will not recover until the quality of the educational experience they provide improves. One route to this goal is their readiness to alter classroom practice in line with the Convention on the Rights of the Child. Another lies in society's responsibility to offer both the conditions that will encourage more highly qualified candidates to enter the profession and the kind of education for teachers that prepares them for the child-centred classrooms of the future.

In Togo, for example, more than a third of primary teachers only have a primary education themselves, and 84 per cent of secondary teachers have not completed a teacher education course. In Uruguay, one of Latin America's more prosperous nations, only a third of secondary teachers have completed university; 70 per cent have had no teacher education.44 In the United States, more than 12 per cent of newly hired teachers enter the classroom without formal courses in education, and another 14 per cent have not taken enough such courses to meet state standards. Some teachers are recruited on the basis of tests that The erosion in salaries in Africa has meant that primary school teachers often receive less than half the amount of the household absolute poverty line. If the medium of instruction in school is a language not spoken at home, particularly when parents are illiterate, then learning problems accumulate and chances of dropping-out increase. do not evaluate teaching processes and methodologies but instead examine basic skills and general knowledge — criteria that offer no insight into their abilities as educators.<sup>45</sup>

In the past, wealthier governments have viewed teacher education as a lengthy process of theoretical study in college. Developing countries faced with the impossibility of financing this industrialized world model have often resorted to crash courses resulting in only minimal exposure to educational methods for teachers already poorly prepared.<sup>46</sup> Between these two extremes is a new model of teacher education that forms an essential component of the education revolution. Part of this is a revision of the concept of school supervisors and inspectors who are trained to serve as pedagogical advisers - experienced professionals who can guide teachers and help resolve problems in a continuing process rather than evaluate teachers in a judgemental way.

No workable education system can stop at the primary level. The focus of the Jomtien decade was understandably on guaranteeing universal primary education, but as more children complete the first years of schooling, the greater the need for secondary school, especially since it is from the latter pool of students that future teachers should be drawn. Teacher training costs as much as 35 times the annual cost per student of a general secondary education.47 This experience of secondary education must mirror the participatory, gender-sensitive, child-centred model set out by the Convention on the Rights of the Child, as teachers are overwhelmingly likely to replicate the educational model they themselves experienced in school.48

Those who do not complete secondary school will still, however, need preparation for their role as teachers, and innovative models of teacher education are springing up throughout the world. One major strategy — little replicated elsewhere but proving that effective teacher education can be delivered at relatively low cost — is ZINTEC (Zimbabwe Integrated Teacher Education Course). Emerging from Zimbabwe's need to deliver on its promise of universal primary education, ZINTEC offered recruits four months of intensive, residential education at the beginning of a four-year programme, three years inservice education using a distancemode package coupled with supervision by college lecturers and other regular school supervisors, and a final four months' residential course.49

In India, teacher education initiatives have aimed to counteract old patterns of teacher-pupil interaction and inspire people with a sense of classroom possibilities through the Shikshak Samakhya (Teacher Empowerment) programme in Madhya Pradesh state. Here, teachers experience an explosion of ideas, knowledge, skills and interactive activities, a wide range of colourful and attractive teaching-learning materials, different methods of teaching, collegiality and peer-group support.<sup>50</sup> This alternative participatory education method involves teachers working with one another, with the aim of empowering them to make their own decisions. Shikshak Samakhya has succeeded in overturning the low morale endemic among teachers in Madhya Pradesh. It has also moved the teacher education process closer to the active, participatory environment embodied in the 'Joyful Learning' initiative that is transforming the classroom experience in 11 Indian states (Panel 7).

In 44 schools of the former Yugoslav Republic of Macedonia, the Active Teaching/Interactive Learning project has changed traditional classroom practices by facilitating teacherstudent-parent partnerships. Children's ages and aptitudes form the basis for the planned work, writing tasks are varied, and readings encompass a wide range of purposes.<sup>51</sup>

And in Bangladesh, where most primary school teachers require students to learn by repetition, some classrooms are benefiting from the Intensive District Approach to Education for All (IDEAL). This project, a partnership between UNICEF and the Government, educates teachers about the different ways in which children learn — each according to individual strengths. For example, some children learn better by doing, others prefer to listen, and still others to visualize. To make the classroom environment more friendly, enjoyable and sensitive to students, especially girls, IDEAL teachers use participatory methods. The value of this approach has been obvious to many teachers: "I have been dreaming of this sort of classroom organization for the last 35 years," said Abdul Majid Mollah, head teacher of a primary school in Jhenaidah. "My dream has come true." 52

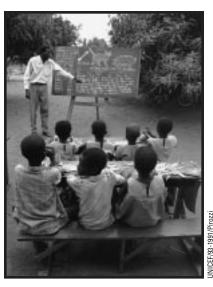
The Bangladesh educators are not alone in discovering the magical interaction with children who want to learn. "We were very worried when we started the course, but now we know we can teach the new way and we enjoy it," said a teacher learning new techniques in the Lao People's Democratic Republic. "It's more fun to teach now," he adds. "Things run more smoothly when the children enjoy it." 53 In bringing learning alive for children in their care, teachers are recovering their own sense of selfesteem and mission. "I came because I am tired of what happens in my school," said a teacher explaining why he had attended the Talleres de Educación Democrática (Democratic

Education Workshops) in Chile. "Tired of always doing the same things, of working alone, of the fear to change. I try to do many things. I have always been in favour of change. I would like to believe that all of us walk together towards the same goal." <sup>54</sup>

### Language barriers

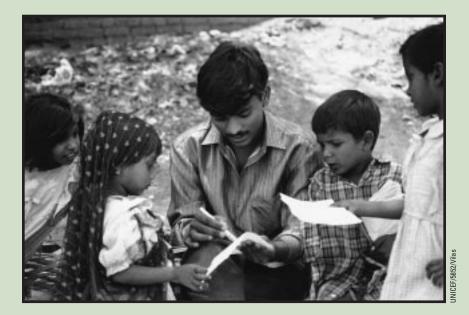
Another major obstacle to children's access to schools is that, in many countries, lessons are still conducted in the former colonial language — for example, in many of the English-, French- and Portuguese-speaking African countries that have the lowest levels of primary enrolment in the world. If the medium of instruction in school is a language not spoken at home, particularly when parents are illiterate, then learning problems accumulate and chances of droppingout increase. On the other hand, there is ample research showing that students are quicker to learn to read and acquire other academic skills when first taught in their mother tongue (Panel 8). They also learn a second language more quickly than those initially taught to read in an unfamiliar language.

In the 1990s, several Latin American countries modified their education laws to affirm the rights of indigenous peoples, leading to participation by the indigenous in educational decisionmaking as well as in planning, implementing and evaluating educational policy and programmes. In Bolivia, for example, indigenous organizations developed an intercultural bilingual education programme, and in Andean and Amazon Basin countries, indigenous groups participated in the development of human resource training programmes. A case study on the Bolivian programme documented girls' and women's enthusiasm about bilingual education as a means to intercultural communication. The Latin



Research shows that learning in the mother tongue in the early grades builds a vital educational foundation and bolsters children's confidence and self-esteem. Students in an outdoor French class in Benin.

# Joyful learning: Empowering India's teachers



he first hint that this school is different is the building's colour — a warm, inviting pink. Inside, the difference from other Indian schools is even more palpable. It is not just the animal and floral decorations painted on the whitewashed upper walls, nor the displays of children's artwork, nor the metre-high 'blackboard' — the black-painted lower wall — that runs all the way around the room. The most striking difference is in the atmosphere.

Both the children and the teacher are clearly enjoying their work. They want to be here. A more dramatic contrast with the dismal rote-learning that has been the standard practice in Indian classrooms for generations could not be imagined.

This is a *bal mitra shala* — a childfriendly school — and it is part of the strategy of Shikshak Samakhya, the teacher empowerment programme that has rejuvenated primary schools in the Indian state of Madhya Pradesh. The word 'strategy' is carefully chosen: This is a different model of teacher education, a change in classroom process and practice and a very effective motivation programme, but it is much more than the sum of these parts. For almost the first time, the education system — the planners and administrators — have placed their faith in the teachers at the grass-roots level. And they have been rewarded by the most heartening success stories.

The district where this venture began was not an easy place for a pilot scheme. Dhar has long been classified as 'backward': Scheduled tribes comprise more than 75 per cent of the population, people regularly migrate to cities to find work and school attendance is poor.

In 1992, when the programme was launched on 5 September — Teachers' Day — in 186 primary schools and 23 cluster resource centres, local teachers initially saw it as yet another wearisome government programme. But Shikshak Samakhya's great strength is the way it motivates teachers. From the first, they were involved in designing and developing the scheme so that they soon claimed it as their own. The new approach spread rapidly to neighbouring districts, and the commitment of the original teachers to supporting their colleagues in areas new to the scheme has been vital.

By 1995, Shikshak Samakhya was achieving national notice - programmes inspired by it are now operating in 10 other Indian states, under the generic name of teacher empowerment or 'joyful learning'. Joyful learning refers to the movement whereby teachers pledge to teach with enthusiasm and to incorporate song, dance and the use of simple, locally made teaching aids, bringing children more actively into the learning process. Programmes are supported by several United Nations agencies, including UNICEF, the United Nations Development Programme (UNDP) and the United Nations Population Fund (UNFPA).

The programme has helped teachers regain the pride and respect that Indian tradition affords their profession, says Sardar Singh Rathore, a head teacher from Dhar. Such respect had eroded in the past two decades. "Not only are they enjoying their teaching in the classrooms, but they have been able to make it so interesting that children are eager to come to school," said Mr. Rathore. A further benefit has been increased enrolment in the schools served, especially of girls and working children.

Teachers in the programme attend a two-day initial orientation session where they learn about the new philosophy from other teachers and are given practical training in preparing the new classroom aids. The teacher education itself is conducted along 'joyful learning' lines, with the extensive use of songs, riddles and group activities.

Built on the premise that a motivated teacher and a satisfied student are the best way of transforming an education system, the teacher empowerment/joyful learning strategy is based on the belief that primary teachers can be motivated and successful if they receive sufficient trust, support and guidance. Parents will send their children to school if the learning experience is made relevant, effective and enjoyable.

"Seeing the children both learning and longing to go to school, the parents and community have come forward to support the teacher and the school," continues Mr. Rathore.

The virtuous-circle effect could not be clearer: India's investment in the strategy has succeeded in empowering teachers and making learning and teaching fun. It has had a positive impact on children's learning achievements. The strategy has also crossed national boundaries and has influenced planning in neighbouring Bangladesh, Nepal and Pakistan. The founding principles of teacher empowerment and joyful learning thus hold lessons not just for the rest of India but for the world as a whole.

American experiences in general have also demonstrated that involving the ethnic groups themselves can strengthen solidarity among people and raise awareness about gender and other kinds of discrimination.<sup>55</sup>

There are also innovative bilingual education programmes providing replicable models all over the world. In Viet Nam, the Kinh majority comprises 87 per cent of the population. The remaining 13 per cent is composed of 53 separate ethnic minorities who live in remote hill regions and coastal areas with the lowest schoolenrolment rates in the country. Since 1991, the Government has been trying to extend primary schooling to the hill regions via a multigrade teaching project. The language of instruction is Vietnamese, but fast-track training is offered to potential teachers from ethnic minorities. UNICEF and the World Bank have also sponsored the development of bilingual books in ethnic minority languages, such as Bahnar, Cham, H'Mong and Khmer, and are setting up special literacy production centres that will employ local teachers, writers and illustrators who speak and write the local languages.

The model for this effort is the Intelyape project, which developed Arrernte literacy materials with Aboriginal Australians in the town of Alice Springs — another example of how the education revolution applies innovations from one part of the world to another.<sup>56</sup>

### **Emergency measures**

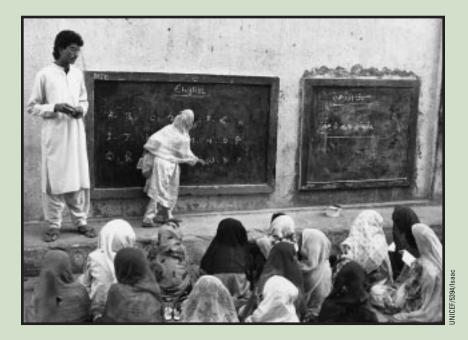
The impact of armed conflict on children is so deep and all-encompassing that it is almost impossible to measure fully. We can estimate the deaths in a decade (2 million) and serious injuries (6 million), the numbers orphaned or separated from their families (1 million), and those left homeless (12 million).<sup>57</sup> But we cannot know the exact num-

In armed conflict, education can serve to both heal and rehabilitate. Keeping schools open, or reopening them as soon as possible, provides children with structure and some sense of normalcy in the midst of chaos.

Photo: New teaching techniques that actively engage children in the learning process are rejuvenating education in India, making school more enjoyable for teachers and students. Here, a teacher and pupils in India.

#### Panel 8

# Which language for education?



chool can be an alien and daunting place for the many millions of young children who begin classwork in a language different from their own. Compelled to adopt a second language when they are as young as four, five or six, these children must give up an entire universe of meaning for an unfamiliar one. They may also come to believe that the language they have known from birth is inferior to the language of school. In learning complex subjects such as mathematics and reading, they must undergo one of the greatest challenges they will ever face, yet the linguistic skills on which much of their cognitive faculties rest have suddenly been deemed irrelevant to the task at hand.

As these building blocks of knowledge crumble, so can the children's self-esteem and sense of identity. It is no wonder that so many of them struggle to stay in school and succeed. A recent study in Zambia, for example, showed that students who began school using English instead of their mother tongue did not acquire enough reading proficiency to learn well by grades three to six.

Experts increasingly recognize how important it is for children to use their mother tongue when they begin school. Use of this tongue validates their experiences. It helps them learn about the nature of language itself and how to use language to make sense of the world, including all aspects of the school curriculum.

The mother tongue is an essential foundation for learning. But acquiring proficiency in a national language or in even a third, international language such as French or English also has advantages. It broadens communication and, later on, affords greater opportunities for higher education and jobs. Aboriginal educators extol such two-way learning, which helps students participate in the community and in the wider world as well.

After the first few grades — at least by the end of primary school students who begin studies in their mother tongue should therefore ideally add a national language. This could be, for example, a Western, former colonial language, a Western, former colonial language, such as French in Senegal, or a dominant indigenous language, such as Hindi in India. Ascertaining which national language to introduce in schools, however, can be a matter of political debate.

In many countries, the twolanguage education ideal is rarely attained, despite the fact that most people in the world deal with more than one language in their daily lives. Cultural and political considerations often come into play. Many parents and decision makers, for example, advocate teaching in the national language from the start as a way to assimilate children into the dominant culture. For this reason, some parents will not send their children to a school that uses only the mother tongue.

Shortages of materials and training programmes have also hindered the two-language goal. To begin with, teachers may not speak the local or indigenous languages of their students, and they are often hardpressed to find curriculum materials in these languages. Moreover, even teachers proficient in a local tongue will require training in how to teach the national language as a second language in the later grades.

For governments, the costs of developing learning materials and teacher-education courses can be enormous, especially where many languages exist. West Africa, for example, has 500 to 1,000 languages. Yet those costs need to be weighed against the price society pays for high drop-out and repetition rates in schools where such language programmes do not exist.

Whether they learn a second language in first or fourth grade, children often struggle with a new language, which can be radically different from their own in terms of vocabulary, sentence structure and meanings. For example, Khmer, an indigenous language of Viet Nam, uses a script derived from a South Indian alphabet, whereas Vietnamese, the national language, uses the Roman alphabet. Most children learn a writing system from scratch in the early grades, but those learning to write in a new language have to overcome the obstacle of attaching symbols to unfamiliar words.

Countries, such as Ecuador, have made considerable progress in bilingual education. Bolivia recently passed its Education Reform Act in support of the right to a mother tongue. Burundi, Kenya, Rwanda, Somalia, Tanzania and Zimbabwe have introduced mothertongue instruction in primary schools, and villages in Burkina Faso have introduced it in community-managed schools. Education policy in Papua New Guinea allows communities to decide the language of instruction for grades one and two. In Nepal, UNICEF supports government efforts to produce learning materials in four languages.

Early mother-tongue instruction is a key strategy to reach the more than 130 million children not in school — and help them succeed. bers of children who are spiritually scarred and emotionally damaged by the violence they have seen and, in some cases, been forced to take part in; by the massive disruptions in the social fabric of their lives; and by the increasingly frequent experience of being the targets of attacks.

In armed conflict, education can serve to both heal and rehabilitate. Keeping schools open, or reopening them as soon as possible, provides children with structure and some sense of normalcy in the midst of chaos. Teachers and other professionals can attend to the psychosocial and emotional effects of violence on children. They can teach about survival and safety and monitor for human rights abuses.

In an effort to restore and protect children's right to education in emergencies, UNESCO and UNICEF developed the 'Edukit' concept, in which educational and teacher training materials are sent to the affected areas as rapidly as possible. Children get pens and paper, chalk and erasers, notebooks and exercise books. Teachers receive curriculum guides, teaching materials and textbooks. And disrupted communities gain a start on rebuilding. First used in Rwanda and Somalia, Edukits have been sent to Afghanistan, Ghana, Iraq, Liberia, Mali, the Republic of Moldova, Sierra Leone, Somalia, Sudan, Tanzania and Zambia.

There are also programmes to help make schools places where peace is practised and learned. In Lebanon and Sri Lanka (Panel 9), educational approaches born in conflict have become part of the national curricula. Children are taught problem-solving, negotiation and communication skills and respect for themselves and others; they come to know that peace is their right. The goal is to reconcile divided communities and prevent future conflicts.



Education helps restore normalcy and heal the trauma after armed conflict. Attentive students in Angola, which has endured 30 years of conflict, use educational materials provided in a UNESCO-UNICEF 'Edukit'.

Photo: When children as young as four, five or six are compelled to adopt a second language, they give up a universe of meaning for an unfamiliar one. Girls attend an English class in Pakistan.

# A new beginning: Education in emergencies



t is 7:30 a.m. on a misty Monday, and the morning haze is mixed with the smoke of campfires drifting across rows of tightly packed, blue plastic 'homes'. Dressed in her best — a striped sweater drooping to her knees, donated by someone from another continent — Veridiane joins the trail of small figures swinging empty plastic bags. The line of children snakes its way to a clearing under a wide acacia tree called 'school'. There are benches of stones or logs lovingly aligned by parents. The teacher welcomes Veridiane and the others to their first day of school.

Such sights were typical in refugee camps in Tanzania after the massive influx of 500,000 refugees from Rwanda in 1994. From these first days of 'schools under trees', emergency education eventually reached 65 per cent of all the children in the camp, providing much needed stability in their lives.

Veridiane and the other refugees were forcibly repatriated to Rwanda

in December 1996. By then, a new wave of refugees from civil conflict in Burundi and the Democratic Republic of the Congo had arrived in Tanzania.

Many lessons learned from the Rwandan refugee experience were applied: Within a few weeks of their arrival, 'schools under trees' began with materials provided by UNICEF, the Office of the United Nations High Commissioner for Refugees (UNHCR) and others. For the 58,000 Burundian children, textbooks identical to those used in their schools at home were printed and distributed. The 20,500 Congolese children in the camps will also soon receive educational materials.

The curriculum, the same as that used in the children's country of origin, is recognized in many cases by school systems at home. So it was that six Congolese children, by agreement with both Governments involved, took the Democratic Republic of the Congo's national examinations in 1997, which were conducted in Tanzania. Negotiations continue with the Burundian Government over recognition of camp-acquired qualifications, so that children will not have to repeat a grade when they finally return home.

Some elements of refugee schooling nevertheless remain particular to the situation. For example, children are taught English and Kiswahili in Tanzania's camps so they can communicate with surrounding communities. Child rights are taught through the use of illustrated booklets produced by Kuleana, an NGO based in Mwanza (northern Tanzania). Conflict resolution is also a vital part of the school curriculum — as well as of adulteducation initiatives in the camps.

In phased approaches to education in emergencies around the globe, children suffering from psychosocial stress should have their needs addressed first. Before more formalized curricula and pedagogic responses can be organized, recreational programmes - sports, drama and art can give children opportunities to express and release their feelings. In acute crisis situations, training packages such as the Teaching Emergency Package (TEP), developed by UNESCO, UNICEF and UNHCR for Rwanda, are instrumental as an early response to educational needs.

However, none of these should be considered stopgap measures. On the contrary, emergency situations can provide a new beginning, laying the groundwork for education systems that are more sensitive to child rights and that include education in democracy, human rights and peace — topics that are still too infrequently addressed in mainstream classrooms.

The UNICEF-supported Education for Peace project has grown out of Lebanon's 16 years of civil war. Launched in 1989 in collaboration with the Lebanese Government and 240 NGOs, the project has trained 10,000 young people who have, in turn, organized educational activities reaching approximately 200,000 children. The goal is to promote peace and a culture of reconstruction and reconciliation; emphasis is placed on child rights and child development, conflict resolution and environmental education.

In Sri Lanka, in its 15th year of civil conflict, the Education for Conflict Resolution project is weaving the values of tolerance, compassion, understanding and peaceful living, appreciation of other cultures and non-violent conflict resolution into school curricula. Since the project began in 1992, it has reached more than 1 million primary school children and trained more than 75,000 administrators and 30,000 student leaders. In 1999, the project will be introduced into Sri Lanka's secondary schools.

In a world where nearly 50 million people have been uprooted from their homes, either forced to flee across borders as refugees or displaced within their own country's borders — 1 in every 120 of the world's population — the new understanding of how to educate people in emergency situations has never been more urgently needed.

Photo: In Tanzania, 'schools under trees', like this one, provide stability and educational continuity to refugee children from neighbouring countries. In Croatia, where children have endured bitter civil war, an innovative project offers children in primary schools 20 weeks of training that aims to address psychosocial stress, increase bias awareness, promote conflict resolution and teach ways of achieving peace. It is one of the various approaches being used to help mitigate the effects of conflict on children, as well as to address their very special educational needs.

A collaboration between UNICEF, CARE, Canada's McMaster University and the Croatian Ministry of Education, the project was begun with fourth-graders during 1996 in one of the four war-affected areas of the country with the purpose of helping children resolve everyday problems, build their self-esteem and improve their communication skills. As of the 1997/98 school year, the project was in place in all four war-affected areas, with Mali Korak (Little Step), a local NGO, handling the teacher education component.

Successful results include reduced psychosocial stress, improved classroom atmosphere and positive attitudes towards school, parents and life in general. The hope is to extend this kind of training to teachers and students in all eight grades of primary school and to adolescents in youth associations.

### Countering child labour

The majority of out-of-school children are likely to be working. ILO estimates that there are 250 million children working full or part time in the developing world.<sup>58</sup> Work prevents many children from gaining or benefiting from education, but it is equally the case that education systems fail to take into account the special circumstances of working children. Most working children want to go to school. To attract out-of-school working Education systems fail to take into account the special circumstances of working children. Most working children want to go to school.

# In India: Helping the poor choose school



n Andhra Pradesh, India's fifth largest state, 75 villages are child labour-free because their children are enrolled in school, due in large part to the efforts of the M. Venkatarangaiya Foundation (MVF) over the past seven years. From the inception of the programme in 1991, MVF efforts have been guided by two interrelated objectives: No child shall go to work; all children shall go to school.

The MVF programme began in five villages by enrolling 16 children, all girls, in school. By 1998, more than 80,000 children, 5 to14 years old, boys and girls alike, from 500 villages were enrolled by MVF in government-run schools throughout the rural areas of the Ranga Reddy district.

"The essence of the programme lies in making the community accept the idea that no child should work," explains Shanta Sinha, the Foundation's Secretary-Trustee and a professor of political science at the University of Hyderabad. "This in itself is an extremely difficult task since an enormous conflict of interest is involved. To the parent it means an immediate loss of a helping hand, while to the employer it implies the loss of an accessible labour force. To the teacher it results in a large increase in the number of children to teach, while the community as a whole takes on additional responsibility."

Even more difficult than resolving these conflicts of interest is transforming the social values and cultural norms that support the concept of children working. How MVF accomplished this shift is a model of community organizing and consensus building among parents and the children themselves, with teachers, many of whom have joined together in a 'Forum for Liberation of Child Labour', youth volunteers known as 'education activists', local officials and employers. First, MVF contacted every family directly with the help of the volunteers to determine the status of each child in the district. Children 5 to 8 years old were enrolled in regular schools and children aged 9 to 14 were sent to special night schools or residential camps for three months in the summer as a sort of 'bridge course', preparatory to being enrolled in regular schools. The experiences and progress of both groups of students were monitored by committees of parents.

Simultaneously, MVF held public meetings, poster campaigns and rallies. Parent-teacher associations were activated at the village level and administrative committees at the district level. "Just as community pressure is built up to encourage parents to send their children to school," says Professor Sinha, "employers are also encouraged to stop hiring children. There have been a number of instances where employers have, under pressure from the community, come forward to sponsor for education children whom they once employed. The community has responded by honouring these former emplovers."

With the increased number of children in school, the teaching staff faced new demands. Additional community teachers, funded partially by the community and many of whom were first-generation literates themselves, were hired to serve the students as a link between the worlds of work and school. Government teachers were supported by MVF through workshops that focused on teachers' attitudes towards the working child attending school for the first time, and others that addressed the specific problems of working children.

As the programme matured, MVF's role evolved. In 1997, the Foundation trained more than 2,000 youth volunteers, government teachers, 'bridge course' teachers, women leaders, and elected and NGO officials.

In contrast to most programmes, MVF provides no economic incentives or recompense to either the children or their families. Yet the approach has been so successful that the state government is now duplicating it in other villages. How does MVF explain its experience?

"The view of the Foundation," says Professor Sinha, "is that in many cases children have been put to work because they were not in school rather than the other way around." MVF's experiences clearly refute the prevailing theory that economic necessity makes poor parents choose work for their children rather than school. The poor families of Andhra Pradesh, given the opportunity and encouraged to do so, readily withdrew their children from work and enrolled them in school.

"We seem to have hit upon an agenda that is close to parents' hearts for what they wanted for their children," says Professor Sinha. "The programme strikes a chord." children into school, to retain all children there to an appropriate age and level of learning, and to reintegrate children who have dropped out, education must be structured to fit the specific needs of working children, their families and communities (Panel 10). In particular, agricultural and domestic labour, the most hidden forms of child labour, which impact disproportionately on girls, must be addressed.

To transform education from being part of the child labour problem into a key part of the solution will entail considerable innovation and the use of non-traditional techniques. It will involve upgrading teacher education and school materials, and introducing greater flexibility and creativity into education management, teaching and learning methods, curricula, school schedules and locations. It means mobilizing civil society, especially children. Children are participating in planning their own school activities more regularly, for example, in Escuela Nueva in Colombia, where children's councils are commonly held as part of education for citizenship.

UNICEF is cooperating with governments on a number of approaches to meet the educational needs of working children. Scholarship programmes in Brazil have provided education grants to the poorest families as an economic incentive to reduce the drop-out rate. For example, the Bolsa Crianca Cidadã, a federal government programme in regions of the country where child labour is prevalent, gives grants to families and to municipal education secretariats to expand sports, cultural activities and school tutoring when child workers are in school. Working children in the Federal District are targeted by the Bolsa-Escola programme, which provides the equivalent of a minimum wage (about \$100 a month) to their



A girl casts her ballot during a student council election in Colombia, where children regularly participate in planning school activities.

Photo: Social values and cultural norms that support the idea of child labour must be changed to keep children in school, something that requires the involvement of the entire community. A girl works in a tea shop in India.

#### Panel 11

# Egypt's community schools: A model for the education of girls



quickly noticed her academic prowess and her active participation in class, leading them to approach the community school project for guidance about their new methods of active learning, including self-directed activities, learning by doing, working in groups and children's participation in managing the classroom.

Nadia's middle-school teachers

It is the accomplishments of students like Nadia and 4,000 other children who have become active learners that have prompted Egypt's Ministry of Education and the Government to expand the community school project. A number of elements are going to scale, such as training teachers and principals in active learning pedagogies, developing self-instructional materials and piloting flexible promotional systems that advance children when they complete levels of learning rather than when they pass a specific exam.

The community schools began in 1992 through strong partnerships among the Ministry of Education, communities, NGOs and UNICEF. Combining multiple grades in one class, they represent a model of active learning especially attractive to girls, based on the principles of community ownership and parents' participation in their children's education. True to the principles contained in the Convention on the Rights of the Child, the schools foster creativity, critical thinking and problem-solving skills as the basis for lifelong learning.

With support from the Canadian International Development Agency (CIDA), the community schools are being integrated with a government initiative begun in 1993 called the 'one-classroom' schools, which also target girls in deprived rural hamlets. The schools are operating in more

Surprisingly, educational innovations are more easily found in the deprived rural communities of Egypt's south than in Cairo's wealthy neighbourhoods. Where the desert meets the lush agricultural fields next to the Nile and where mountains loom over the valley, timehonoured traditions are giving way to child-centred schools that are attracting the most estranged students: girls.

About 25 per cent of southern Egypt's rural population resides in isolated, sparsely populated hamlets at least 3 km from the nearest village school. Girls are most affected by these conditions. In most rural areas in the south, girls' net enrolment rates range from about 50 per cent to 70 per cent, compared with 72 per cent nationally. In the most extreme situations in some remote areas, only 12 girls are enrolled for every 100 boys.

In Asyut, Suhag and Qena among the most deprived governorates in the south — close to 200 community schools have been established. Their success, in reducing the obstacles to girls' education and in fostering the active participation of both girls and boys in the classroom, has led to the integration of their principles of quality teaching and learning into the formal education system.

Nadia, who thrived in the childcentred environment of the Al Gaymayla hamlet school, is now an adolescent, with sound self-esteem and solid educational skills. Currently attending a preparatory middle school in Om Al Qossur village, Asyut, she plans to pursue her education all the way through university, an aspiration emphatically supported by her family.

"When she was only in the third grade she could read and write with greater ease and proficiency than her older brother who had attended the nearest village school. We then began to rely on her for advice. She became the one to write our confidential letters to her uncle who is working abroad in the Gulf," said her father. than 2,000 communities across the country.

The integration of the two projects began in earnest in 1995. By ministerial decree, an Education Innovation Committee (EIC) was created to bring the two initiatives closer together and to incorporate the best practices of the projects into the formal basic education system at large, to encourage innovations in education as an ongoing process. Active learning and child-centred class management are being incorporated into the formal schools.

EIC sits in the heart of the Ministry of Education, with membership drawn from universities, the national literacy agency, the media and the staff of the Ministry of Social Affairs. Recently, the Ministry of Education proposed that NGOs, community members, businessmen and women as well as health and environment officials also be included.

With such evident demand from communities, parents and policy makers for quality education, a movement is on its way, with community schools viewed as a catalyst for social change and personal transformation. The quest for quality learning with communities taking responsibility and ownership of their schools is building a solid foundation for sustainable development and lifelong learning. Some refer to it as a silent revolution: a cherished collaboration for community learning and empowerment.

families, a subsidy lost when their child's attendance falls below 90 per cent during the school year. Linked with efforts to improve the quality of primary education, the programmes have reduced drop-out rates.

In Bangladesh, a memorandum of understanding (MOU) has been both a rapid and creative response in developing non-formal approaches for children formerly working in the garment industry. Signed by the **Bangladesh Garment Manufacturers** and Exporters Association (BGMEA), ILO and UNICEF in July 1995, the agreement stipulates that children under 14 be removed from the workplace, placed in schools and given a monthly stipend. Lessons learned from the MOU have been incorporated into a basic education programme for hard-to-reach urban children.59

### Element 3. Gender sensitivity and girls' education

'Growing tomatoes' is the topic of today's agricultural lesson in the al-Akarma community school in Upper Egypt. In the middle of the lesson, Nagwa raises her hand. The teacher gives her permission to speak, and Nagwa very politely but assertively corrects the teacher's information on how and where tomatoes grow. The teacher thanks Nagwa and encourages the class to applaud her.<sup>60</sup>

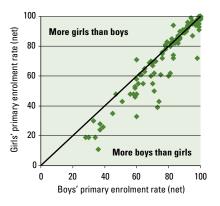
This is a gender-sensitive classroom in action. The subject matter is relevant to the students' lives; the teacher-student interaction is mutually respectful; a girl is encouraged to participate rather than just listen passively; and her contribution is then affirmed (Panel 11).

Investing in education systems to make them inclusive benefits all children. Unfortunately classrooms like Discrimination against girls is the largest impediment to achieving Education For All.

Photo: A girl in a classroom in Asyut, Egypt.

#### Fig. 7 Primary enrolment: Where the boys and girls are

As this scatter diagram of boys' and girls' net primary enrolment rates in all developing countries shows, more boys than girls are enrolled in countries where overall enrolment is low and gender parity is greater at higher overall enrolment levels. Higher boys' enrolment can be seen in the lower section of the chart, while higher girls' enrolment can be seen in the upper section.



Source: The State of the World's Children 1998, UNICEF, New York, 1997 (Table 4).

Nagwa's are still very much the exception. Discrimination against girls is the largest impediment to achieving Education For All.

Girls' right to a high-quality education that serves their needs is all too often denied, even to those who reach the classroom. Their learning and self-esteem can be undermined by lessons and textbooks filled with implicit and explicit messages that girls are less important than boys. Their teachers — women and men alike may praise boys more, reward them with attention and offer them more opportunities for leadership. At school, girls may be routinely assigned housekeeping tasks that would only be given to boys as a punishment.

A gender-sensitive class should contain roughly equal numbers of girls and boys, and their performance should be at parity, but many classes in the world do not fulfil that most basic criteria. For example, of the estimated 130 million out-of-school children aged 6 to 11 in the developing world, 73 million are girls.<sup>61</sup> The importance of reducing this gender gap by targeted strategies to promote girls' education has been stressed throughout the 1990s. It loomed large in the World Declaration on Education for All in 1990, adopted by 155 countries: "The most urgent priority is to ensure access to, and improve the quality of, education for girls and women, and to remove every obstacle that hampers their active participation. All gender stereotyping in education should be eliminated."<sup>62</sup> (See Figs. 7 and 9.)

These words were carefully chosen to focus not only on the quality of the education available to girls and the need to remove all barriers to attending school, including those related to cultural tradition or lack of political will, but also related to the physical aspects of the problem, such as lack of school places or appropriate facilities. Many girls drop out of school at the onset of menstruation, which makes them particularly vulnerable when there are no separate toilets.

The broad social benefits of educating girls are almost universally acknowledged. They include the following:

- The more educated a mother is, the more infant and child mortality is reduced (Fig. 8).
- Children of more-educated mothers tend to be better nourished and suffer less from illness.
- Children (and particularly daughters) of more-educated mothers are more likely to be educated themselves and become literate (Fig. 10).
- The more years of education women have, the later they tend to marry and the fewer children they tend to have.
- Educated women are less likely to die in childbirth.
- The more educated a woman is, the more likely she is to have opportunities and life choices and avoid being oppressed and exploited by her family or social situation.
- Educated women are more likely to be receptive to, participate in and influence development initiatives and send their own daughters to school.
- Educated women are more likely to play a role in political and economic decision-making at community, regional and national levels.

While the bigger global problem concerns girls' lack of access to a quality education, a problem in boys' education appears to be looming. It is clear that in some regions boys' enrolment is lower and their drop-out rates higher. This is a long-established phenomenon in countries with pastoral traditions such as Lesotho and Mongolia where boys have always been expected to tend the herds. But it is also a growing problem in the Caribbean, where girls are not only staying in school longer, but significantly outperforming boys at primary and secondary levels. These findings are possibly the first reflection in the developing world of a 'boys' education' problem that exists in industrialized countries (Panel 12).

To protect children's right to education, schools and education systems must be 'gender sensitive'. What does this mean? In practice, most reforms to improve quality and guarantee child rights will also make education more gender sensitive. Key measures proven to promote girls' schooling and enhance the quality of the school experience for all children include:

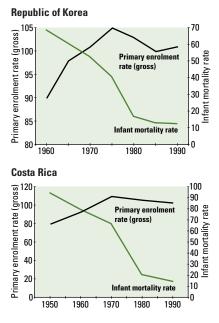
- ► Offering a child-centred learning experience in the classroom that elicits the best in each individual, starts from the life and environment of the community and includes learning in the local language.
- ► *Recruiting and training* teachers to be sensitive to gender and child rights. In some areas, more women teachers are needed to serve as role models for girls as well as to ensure that parents are comfortable with the classroom environment. A UNICEF study of countries that achieved universal primary education early in their development process shows that these countries did exactly that - they employed a much higher proportion of women teachers.63 The goal for all teachers, male and female, however, is to create classrooms in which girls and boys can contribute equally. Recruiting more women teachers will be of limited use if girls' needs continue to be disregarded. The educational process must change.
- Rooting out gender bias from the images and examples found in textbooks and materials. Since

these images tend to show males in positions of activity, power and authority, their elimination may seem like a reform detrimental to boys. In reality, boys benefit from curricula that encourage them to behave on the basis of who they are rather than on what society expects them to be. Thoughtful revision of textbooks, classroom materials and lesson plans is likely to increase their general quality and relevance to all children's lives.

- Giving the local community more control over and involvement with schools and ensuring that parents and families are involved in achieving gender sensitivity in education.
- Ensuring that principals, supervisors and other administrators are sensitive to gender issues, which will result in schools where girls and boys have a good learning environment that is safe and clean. This would include facilities that do not discourage girls' attendance. It would also include a better gender balance among principals, supervisors and other administrators.
- Collecting education statistics and ensuring they are disaggregated by gender, to get a true picture about girls' access to and participation in education. Data disaggregated by geographical location, socioeconomic group and, where relevant, ethnic and linguistic group will help identify other possible areas of discrimination as well.
- Providing programmes that foster early childhood care for child growth and development (see 'Element 5. Care for the young child'). All children's self-esteem and preparedness for school are enhanced by this kind of pre-school care and stimulation, but girls' staying power in primary school seems to be increased even more than that of boys.

# Fig. 8 Education's impact on child mortality

A 1997 UNICEF study examined the impact of health, nutrition, water and sanitation and education interventions on health in nine countries and the Indian state of Kerala, all of which had made significant reductions in infant mortality. Of the interventions, education was found to have the greatest impact on health indicators, including rates of infant and under-five mortality, life expectancy at birth and total fertility. By way of example, the graphs below show a drop in the infant mortality rate preceded by a rise in primary enrolment in the Republic of Korea and Costa Rica.



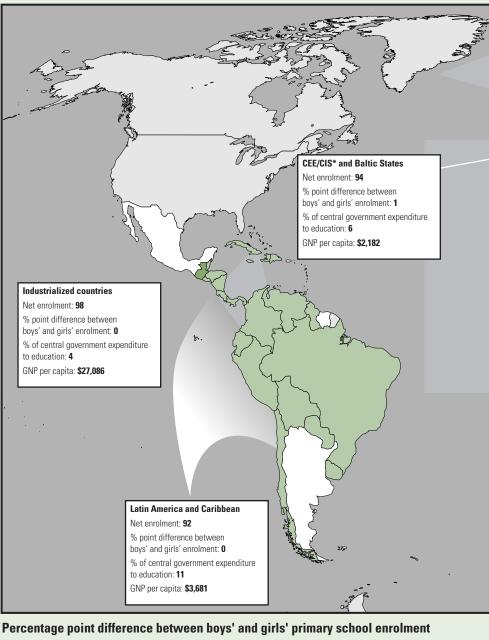


# Fig. 9 At a glance: The gender gap in primary education and related indicators

The gender gap in primary education, shown on this map, is the percentage point difference between boys' and girls' net primary school enrolment. In most developing countries, boys' enrolment exceeds that of girls. The difference is largest in South Asia, where boys' enrolment exceeds girls' by 12 percentage points, in the Middle East and North Africa by 11 percentage points and in sub-Saharan Africa by 9 percentage points. There is no difference between boys' and girls' enrolment in industrialized countries.

**Source:** UNESCO and UNICEF, 1998, for net enrolment; *The State of the World's Children 1998* and *The State of the World's Children 1999* for percentage point difference between boys' and girls' enrolment, per cent of central government expenditure to education and GNP per capita (1996); UNAIDS for HIV/AIDS figures; ILO for child labour figures.

**Note:** The map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan and the respective China and India boundary claims.



15 or more

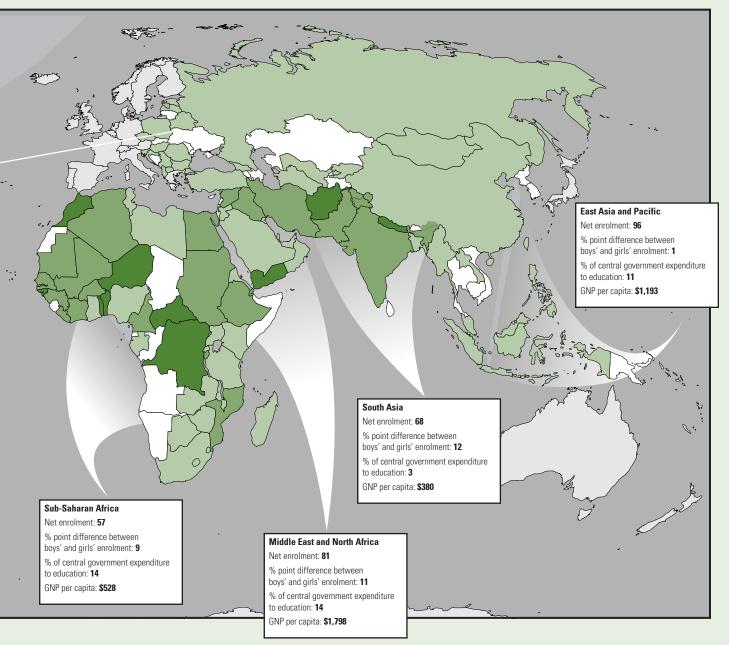
5-14

No data

Industrialized countries

#### Numbers to note

Over 8.2 million children aged 14 or younger have lost their mother or both parents to AIDS — 7.8 million in sub-Saharan Africa alone — and that number is increasing by 50,000 a year. In developing countries, about 250 million children between the ages of 5 and 14 work — around 153 million in Asia, 80 million in Africa and 17.5 million in Latin America. These millions of child workers and AIDS orphans are at risk of being denied their right to basic education, making it all the more difficult to lift themselves out of poverty and exploitation.



For a list of countries in each region, see the Regional summaries country list on page 122. \*Central and Eastern Europe and the Commonwealth of Independent States.

Heads of schools and administrators must promote high-quality, child-centred learning and ensure that schools are safe places, where girls feel respected and are safe, physically and intellectually, from teasing, rowdiness, violence and sexual harassment.

- ► Locating schools closer to children's homes. This can be achieved through school mapping to identify the least served locations, and by establishing small multigrade schools in remote rural areas. These measures make schooling more accessible to all children but particularly encourage girls' enrolment.
- Scheduling lessons flexibly to allow children to participate who might otherwise be deterred by family responsibilities in the fields or the household.
- ► Offering free education, or ensuring that children are not denied education because their parents cannot afford it. Faced with a choice between sending their sons or daughters to school, poor families often send their sons.

Gender sensitivity is not merely a facet of the education revolution but is woven into its very fabric. Measures aimed at girls' participation advance the cause of universal education on every front.

A gender-aware approach must, therefore, inform decision-making at every level of the system. At the national level, decisions about education must be based on gender-specific information to ensure equality as an absolute priority. Sufficient resources must also be found so that families no longer have to bear the direct and indirect costs of schooling.

Heads of schools and administrators must promote high-quality, childcentred learning and ensure that schools are safe places, where girls feel respected and are safe, physically and intellectually, from the teasing, rowdiness, violence and sexual harassment that overwhelms them in so many schools.

Teachers must use gender-sensitive materials and monitor their own bias, making sure that girls participate as frequently as boys and in the same ways. They also need to include in the curriculum material about women's contributions to society and the local community, especially where that contribution is hidden or undervalued.

The global UNICEF Girls' Education Programme is currently pursuing these goals in more than 50 countries, including the three regions with the widest gender gap: sub-Saharan Africa, South Asia and the Middle East and North Africa. The latter two face a long and challenging road to equity but have at least increased girls' enrolment in primary school over the last decade.

In the Middle East and North Africa, progress has been notable, but within the region, however, country circumstances vary widely. Bahrain and Jordan have completely eliminated the gender gap in primary schooling, and Saudi Arabia has nearly done so. Morocco, on the other hand, has a 19 percentage point difference between boys' and girls' enrolment.

In general, though, most countries in the region show substantial progress, which reflects the priority that governments and international agencies have placed on improving girls' educational opportunities since the Jomtien conference.

All 17 UNICEF country programmes in the region have a significant female education component; aid donors have been particularly favourable to this area; and countries have been persuaded of the need to educate girls — not least by the growing need for a better trained and qualified labour force. The Government of Iran, in recent years, has been particularly supportive of education for rural girls and women.

In sub-Saharan Africa, on the other hand, girls' net enrolment rate, at 51 per cent, is lower than it was in 1985. The region's gender gap is smaller

#### Fig. 10 Generational impact of educating girls

only because the boys' enrolment rate has fallen even more.

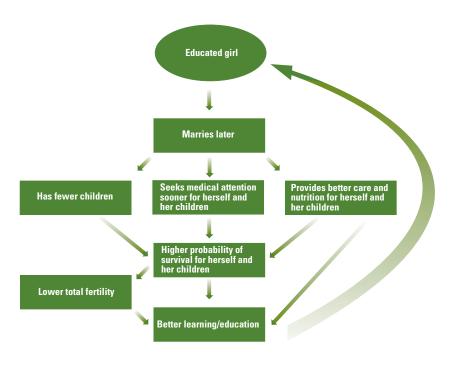
At the Pan-African Conference on the Education of Girls, held in Ouagadougou (Burkina Faso) in 1993, UNESCO recognized that Africa is lagging behind other regions and called on African governments, regional, bilateral and international agencies and NGOs to make girls' education a priority.

Fortunately, energy is being devoted to progress in the 1990s with every prospect that it will pay significant dividends over the next decade. The African Girls' Education Initiative, supported by UNICEF, now operates in over 20 countries and has substantial financial backing by the Canadian and Norwegian Governments to carry it through to the end of 1999.<sup>64</sup>

The Initiative is helping countries try different approaches to close the gap between boys' and girls' enrolment, but one common measure is to improve education systems overall in order to better the educational experience of girls.

In Mali, for instance, constraints to girls' education are seen in the broad context of weaknesses in the entire basic education system, so that rather than using a piecemeal project approach, the focus is on decentralized planning and making the curriculum more relevant. Preliminary results are encouraging. In participating schools, girls make up a much larger percentage of the student population than they do in schools in neighbouring villages.<sup>65</sup>

Zambia's Programme for the Advancement of Girls' Education (PAGE) has targeted gender issues within the system by using a host of initiatives ranging from piloting its own single-sex classes (no results are available to date), to increasing parental support for girls' education via The benefits of girls' education accrue from generation to generation. Educated women are likely to have smaller families and healthier children who themselves are likely to be better educated than children of uneducated women. Over time, lower child mortality leads to behavioural change, lowering fertility. Smaller household size improves the care of children, and lower fertility reduces the size of the school age population.



Source: Santosh Mehrotra and Richard Jolly, eds., Development with a Human Face, Clarendon Press, Oxford, 1997.

joint pupil-parent sessions. The attempt to reach out to parents which has helped encourage rural parents to evaluate how they allocate household tasks to their sons and daughters — is a recognition that gender sensitivity begins at home and in the community and cannot be left to the school alone.

At school and community meetings organized by PAGE, attitudes towards girls' education remain divided, but it is clear that the dialogue has helped reduce entrenched opposition. The seven provinces not included in the original programme asked to join, resulting in the Government's launch of PAGE in 1998.

# The macho problem: Where boys are underachieving



Parents look after girls more," says 16-year-old Sebastian Brizan. "Boys need protection, too." Sebastian, who lives in Trinidad and Tobago, feels that both parents and schools pay less attention to boys than to girls. He started skipping school at the primary level. He says that he found school boring and felt the teachers lacked commitment. Ultimately he failed the Common Entrance Examination — a test required for entrance into secondary school in the English-speaking Caribbean.\*

In the Caribbean, unlike the majority of the developing world, boys are doing significantly worse than girls at school: Fewer boys pass the Common Entrance Examination and they are more likely to drop out of school. Part of the problem seems to be that boys grow up with rigid ideas about gender roles. "I never wanted nobody to tease me and call me a 'sissy'," says 17year-old Algie, from Dominica, on why he used to skip classes. It has become routine for boys in the Caribbean to perceive academic effort as 'sissy', 'effeminate' or 'nerdy'.

"The boys don't utilize education in the same way," says a female teacher from St. Vincent and the Grenadines. "Much of it has to do with image. They don't want to be seen as a nerd, and a nerd is someone who works hard at school." A teacher from Barbados agrees: "They also prefer to be seen not working. It's not popular to be male and studious. It's not macho."

The problem is exacerbated by the low proportion of male teachers in the Caribbean — especially in Jamaica — where positive educational role models for boys are as hard to come by as they are for girls in many developing countries. This is also true of primary schools in the industrialized world, where boys are taught almost exclusively by women. The problem of boys' educational underachievement is currently ringing alarm bells there, too.

As recently as the early 1980s, the dominant concern in the industrialized world was, as in most developing countries now, with female rather than male underachievement. But now girls are routinely surpassing boys in average educational attainment. Some observers link this trend to changes in the economy and job market. These observers believe men's traditional role has been taken away, and the resultant feeling of hopelessness is percolating through even to boys who are quite young.

Yet in Nigeria, as in many countries in Latin America, it is precisely boys' greater access to the labour market that is proving a problem. In eastern Nigeria, the number of boys dropping out of school is spiralling: In the states of Abia, Anambra, Enugu and Imo, 51 per cent of boys were out of school in 1994 and 58 per cent in 1996.

Chima Ezonyejiaku is one of them. His father is a retired head teacher and his mother still teaches in a village school, yet Chima has abandoned his studies to apprentice himself to a wealthy trader in the town of Onitsha. Like most of his friends, he feels that school is a waste of time and wants to begin the process of making money.

Boys like Chima are unlikely to go back to school and need special educational opportunities tailored for them. UNICEF is assisting the Nigerian Government and Forward Africa, a local NGO, to provide non-formal educational opportunities in local market places, mechanic workshops and Koranic schools. New curricula and instructional materials address

<sup>\*</sup>The exam will be abolished in Trinidad and Tobago in the 1999/2000 school year.

the realities of young boys and girls outside the formal school system. Classes and school hours are flexible, and instructors emphasize reading, writing and survival skills for present-day life.

When Sebastian failed Trinidad and Tobago's Common Entrance Examination, he was lucky to enrol at the Cocorite Learning Centre. UNICEF in the Caribbean supports children at risk of staying out of school - particularly boys through assistance to centres such as Cocorite. There, he says, the students are taught right from wrong; teachers talk to him "about life" and give him guidance. He is able to gain practical as well as academic skills that help keep him interested. He no longer skips school because one of the teachers checks up on him and ensures that he doesn't.

The focus is on improving overall life skills — including negotiation, coping, decisionmaking, critical thinking, conflict resolution, interpersonal relationships and communication — and providing vocational training with an emphasis on building selfesteem and confidence.

In the Caribbean, as elsewhere, the need is to transform the education system so that it is 'gender sensitive' — ready to address in school and, where possible, out of school, the social and cultural problems of being a girl or a boy, which may impede children's educational development. And that change is just beginning. At the national level, meanwhile, Zambia's Ministry of Education has agreed on the following 10 criteria by which inspectors will judge whether a school is gender sensitive, which could prove useful to other countries as well:

1. At least 45 per cent enrolment of each sex.

2. A completion rate of 80 per cent.

3. A girls' progression rate of 85 per cent.

4. At least 40 per cent of teachers from each sex.

5. The head teacher and deputy should be of opposite sex.

6. A catchment area of no more than 5 kilometres.

7. Separate toilet facilities for each class of 40.

8. Gender-sensitive teaching.

9. Use of gender-sensitive materials.

10. Active parental and community support.

As these criteria make clear, 'gender-sensitive' means a concern for gender equality that also benefits boys. PAGE points to a survey in one area that showed the programme had succeeded in increasing the number of girls passing the grade seven final exam, while the number of boys passing the exam had increased even more.<sup>66</sup>

"Getting girls into school is merely the first step on a long rugged road that is filled with ruts and roadblocks, some cultural, others economic,"<sup>67</sup> said Priscilla Naisula Nangurai, a head teacher in Maasailand (Kenya), speaking of the pressures for girls to drop out of school. Ms. Nangurai was one of a group of 'dynamic African headmistresses' profiled by the Forum for African Women Educationalists (FAWE) to promote girls' education by providing positive role models.

A remarkable organization in itself (Panel 13), FAWE is collaborating with a team from the Institute of



Girls' learning and self-esteem can be undermined by lessons and textbooks filled with implicit and explicit messages that tell them girls are of less value than boys. A schoolgirl participates in class in Ghana.

Photo: In the Caribbean, initiatives aimed at keeping boys in school offer practical as well as academic skills. Boys learn carpentry at a vocational training centre in Haiti.

# Women educators push the limits for girls in Africa



mpassioned about making a difference in girls' education in Africa, 60 visionary and influential women current and former ministers of education, university vice-chancellors and education specialists - make up the Forum for African Women Educationalists (FAWE). The organization's agenda on behalf of Africa's young women and its expectations of Africa's policy makers are clear. "Girls and women are the intellectual resource in Africa that will contribute to the crucial change that the continent is looking for," says Dr. Eddah Gachukia, FAWE's Executive Director. "Girls must not only be educated, they must also be accorded the opportunity to use their education and their skills to make decisions about and be participants in the development of Africa."

And FAWE insists that problems even the unmistakable issue of funding — are solvable. "We at FAWE never want to hear resources cited as an excuse for the lack of Education For All," Dr. Gachukia told UNICEF during an interview in her downtown Nairobi office. "Africa has the resources, internal and external. What Africa needs is to manage these properly for the benefit of everybody."

With 26 associate members, comprising male ministers of education and senior policy makers, and 31 national chapters in all areas of sub-Saharan Africa, FAWE has worked since 1992 to promote Education For All, especially for girls, through advocacy, concrete actions and policy reforms. Now, after six years of operation, FAWE's mission extends beyond just access to education and improving its quality.

In certain ways, FAWE's members — accomplished in their individual spheres and working together as a network of professionals across nations, sectors and disciplines personify the organization's vision of educated women actively engaged in the public life of Africa. In 1994, for example, citing research findings, they successfully lobbied the ministers of education in several African countries to change policies that excluded pregnant girls from reentering school. "The message has been," says Dr. Gachukia, "that education is the right of every child, even the girl who becomes pregnant, and not a privilege for those who do not become pregnant."

Through FAWE's national chapters, the organization supports grassroots efforts with grants and awards to individuals and institutions that have found cost-effective, innovative, replicable ways of promoting girls' education and gender equity in education. By the end of 1997, FAWE had awarded more than 40 grants in 27 countries.

"We do not compete with other girls' education programmes, we recognize them as partners," explains Dr. Gachukia. "All we do is link them to policy makers so that their local ideas can gain national and regional recognition and support."

FAWE's most prestigious award is the Agathe Uwilingiyimana Prize for innovative achievements in female education in Africa. The Prize, first awarded in 1996, is dedicated to the memory of the late Rwandan Prime Minister, a dedicated educationalist and a FAWE member, who had been a teacher in a girls' secondary school and once served as Minister of Education. Projects in eight countries (Burkina Faso, Ethiopia, Ghana, Guinea, Kenya, Malawi, Sierra Leone and Zambia) have been recognized for their success, and the lessons learned through them have been documented and shared.

The organization's greatest strength, according to its Executive Director, is in policy outreach. In 1995, in Ethiopia, Guinea and Tanzania, FAWE began its programme of Strategic Resource Planning (SRP) in collaboration with the Institute of Development Studies, Sussex University (United Kingdom). The project has since expanded to Ghana, Malawi, Mali, Senegal, Uganda and Zambia. Through SRP, the organization assists ministries of education to identify specific problems affecting girls, collect and analyse data and develop a range of policy options to close the gender gap and assure primary schooling for all.

"We present the findings of SRP for each country and we invite everyone — community members, teachers, donors, policy makers — to sift through the findings and recommendations," says Dr. Gachukia, explaining that partners at the national level are then ready to work together to put their recommendations into action. "We believe that this strategy makes everybody involved feel part and parcel of the process and whatever policy that emerges."

In the final analysis, as effective as its programmes and activities have been, FAWE's most valuable contributions to Africa's development may well be in the demonstrated capabilities of the organization's members to change the consciousness — minister by minister, country by country about what to expect of girls.

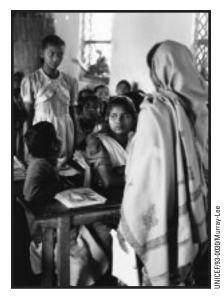
Photo: FAWE believes that girls' education is the key to Africa's development. Here, girls stand in the doorway of a classroom in Malawi. Development Studies at Sussex University (United Kingdom) on a major new girls' education programme, Gender and Primary Schooling in Africa (GAPS). The aim of GAPS is to adapt the influential research and financial modelling in the book *Educating All the Children\** to the practical needs and cultural circumstances of various African countries. It recommends a package of reforms that will "deliver schooling for all, at levels of quality and gender equality which are defensible, within 10 to 15 years."<sup>68</sup>

Each country's national government takes joint responsibility for the research project. The first three countries studied — Ethiopia, Guinea and Tanzania — have moved into the second phase in which the reforms will begin to be implemented, and research is now under way in a second group of countries.

Reform proposals are bold and wide ranging, charting a route by which Ethiopia might plausibly move from its current primary gross enrolment rates of 39 per cent for boys and 24 per cent for girls to 102 and 106 per cent, respectively, over a 15-year period. They include cost-saving reforms such as automatic promotion in grades one to five, and increasing double-shifting to 75 per cent at both primary and secondary levels.

The cost of such a dramatic increase in educational provision would inevitably be high, especially since it depends for its overall success upon "quality-enhancing and genderequalizing reforms," such as increased spending on learning materials, higher wages for teachers, and subsidies for stationery and clothing material to 50 per cent of rural girls. Nevertheless, Even when a country manages to offer universal primary schooling — as many countries do in East Asia, the industrialized world and non-indigenous parts of Latin America the need for gendersensitive education remains.

<sup>\*</sup>The book referred to is by Christopher B. Colclough with Keith Lewin (Clarendon Press, Oxford, 1993).



Household responsibilities keep millions of girls out of school. This invisible barrier needs to be broken to assure their right to education. A class in Bangladesh.

the model suggests that Ethiopia, which has farther to travel than many other countries to reach schooling for all,<sup>69</sup> could achieve the goal by a combination of increased spending, modest economic growth and targeted aid.

Guinea, meanwhile, is working to overcome some of the social and cultural factors inhibiting girls' education. It has reduced direct costs of schooling through tax relief and by abolishing compulsory uniforms. As the primary reason girls drop out of school in Guinea is to marry, the Government has also made it illegal to force a girl into marriage before the ninth grade. To address the second major cause of dropping-out among girls - domestic responsibilities and household chores - it has introduced devices such as mechanical mills and has dug wells to reduce girls' burdens. It has also passed regulations specifying the times and parameters for chores in school, ensuring that these fall equally upon boys and girls.70

Even when a country manages to as many countries do in East Asia, the industrialized world, and non-the need for gender-sensitive education remains. Indeed, at the junior secondary level, girls face serious obstacles in continuing their education. It is particularly critical for girls to cross the precarious bridge from primary to secondary school in South-East Asia, because, when they enter adolescence, many face the risk of being recruited into the sex industry and other hazardous and unhealthy work settings.

Pregnancy, another risk during this period, leads in many countries to girls' automatic expulsion from school, in contravention of the Convention on the Rights of the Child (article 2). The suspension or exclusion of pregnant girls from school was the subject of a 1997 ruling by the Committee on the Rights of the Child.<sup>71</sup>

Botswana is addressing the discrimination through a pilot project that gives pregnant girls three months' maternity leave, during which they would keep in touch with school via extension courses. When they return to school, their baby would be cared for in a centre located alongside the junior secondary school. In return, girls would work in the day-care centre, which would double as a living classroom, teaching parenting and life skills to both male and female students, and aiming to reduce the number of adolescent pregnancies. Community response has been positive. Popular demand, in fact, forced Botswana's Government to permit pregnant students to take exams and be readmitted to their original school.72

Work is a major factor in denying millions of girls their right to education:

Asabe Mohammed, a 14-year-old food hawker from the village of Soro in Nigeria, had been on the street selling food cooked by her mother throughout her primary school years. "I think I was not that big when I started hawking food," she commented, pointing to a seven-year-old girl. But Asabe had a second chance, attending the Soro Girl-Child Education Centre, established in May 1993 as part of an initiative by UNICEF and the Nigerian Government to give out-of-school girls the opportunity to acquire basic education and then feed into mainstream secondary schools. In September 1997, Asabe was among the 35 girls who graduated at a colourful ceremony. She received a post-literacy certificate as well as prizes for excellence in arithmetic, writing and tailoring and is now enrolling in a junior secondary school in Darazo, about 30 kilometres away. Those girls who will not be continuing their education have benefited from the training and are now setting up their own businesses in trades such as embroidery, tailoring, knitting and soap-production.<sup>73</sup>

There are girls like Asabe in virtually every town and village of the developing world. This is why the success of gender reforms in education may have to be judged, not just by their results in terms of enrolment rates or even learning achievement, but by the extent to which they change the lives of girls for the better.

#### Element 4. The State as key partner

The obligation to ensure all children's right to education and to achieve Education For All lies with national governments. But within this encompassing obligation, many actors play vital roles in delivering highquality basic education to all children, from central to local governments, from international agencies to local communities, NGOs and religious groups. Only the State, however, can pull together all the components into a coherent but flexible education system.

Historically, provision of education in developing countries has gone awry because governments have focused on higher education to the detriment of primary and secondary levels. As inheritors of colonial education systems, most developing countries, immediately after independence, preferred to use limited resources to create universities and schools aimed at meeting the needs of industrialization. Many countries continue this focus on higher (tertiary) education to the detriment of primary and secondary levels (Fig. 11). The most extreme example is the Comoros, which spends 8 per cent of GNP per capita on each

pre-primary or primary pupil and 1,168 per cent on each college student.<sup>74</sup>

There are many countries where the imbalance is almost as alarming. The inevitable result is that universal primary education has not been achieved. In the minority of countries that have accomplished that goal, the State provided the policy and leadership, and in most cases became the main provider of primary education, working in partnership with communities, private schools and the private sector. In many of these cases, the concentration of state resources on primary education meant a greater reliance on other providers for secondary education.

The most critical role of the State in education is as a guarantor of children's right to basic education. Experience in the last few years has led to a more textured understanding of the role of the State, and of the State itself. It is no longer useful to think of the State in monolithic terms as a single national authority, but better to understand that the State's authority exists at all levels from the national or federal to the local, and the roles that the State will play with regard to policy, funding and provision often vary significantly from one level to another.

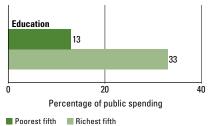
The Convention reiterates and reinforces the responsibilities of the State vis-à-vis children's education in a number of clauses. Article 28 ensures the right of children to education, and article 29 elaborates a vision of quality education that fulfils that right. The State, therefore, must ensure that children successfully complete primary education and must set standards to ensure minimum levels of quality and learning achievement (see 'Element 1. Learning for life').

Buttressing these are article 3, which calls upon States to ensure that

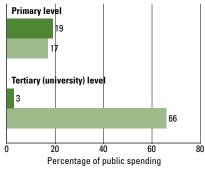
# Fig. 11 Who benefits from public spending on education?

On average 33 per cent of public spending on education benefits the richest fifth of the population, while only 13 per cent benefits the poorest fifth. Public expenditure on basic social services such as primary education benefits society more equitably, while spending at the tertiary (university) level benefits the richest fifth of the population.

#### **Beneficiaries of public education**



Beneficiaries of public education expenditure at the primary vs. tertiary level



Poorest fifth 🛛 🔳 Richest fifth

Source: The World Bank, as cited in UNDP, UNESCO, UNFPA, UNICEF, WHO and the World Bank, *Implementing the 20/20 Initiative: Achieving universal access to basic social services*, UNICEF, New York, 1998, pp. 8-9. Above all, the State, as a vital role player in the education revolution, must supply the political will to make things happen. the best interests of the child are taken into consideration in all decisions and actions concerning the child, and article 2, which mandates that States protect children from all forms of discrimination; article 2 encompasses the educational ostracism of girls, who represent nearly two thirds of out-of-school children in developing countries. Thus States must implement all key policy measures proven to increase the chances of girls' entering and staying in school (see 'Element 3. Gender sensitivity and girls' education').

States can use a variety of approaches to protect these rights, including legislation. Laws appear most useful in holding a State itself responsible for meeting its own obligations, one of the most important of which is ensuring that all children have access to school. Others are reducing exploitative child labour and mobilizing society in support of Education For All.

Above all, the State, as a vital role player in the education revolution, must supply the political will to make things happen. Irrespective of how flexible and diverse the education system becomes, the State must still be involved in planning for the entire system, designing and supervising the curriculum, educating teachers, setting standards, contributing to school construction and paying salaries. But its role is also changing rapidly. Instead of acting as an omnipotent central authority, States are finding that partnerships with multiple sectors of society offer a greater chance of achieving Education For All, and many are passing power to lower levels of the system to improve efficiency and responsiveness.

#### **Mobilization**

Education For All was intended to galvanize the international commu-

nity into action — from the level of governments and global institutions, to private companies and media outlets, to local schools and villages. The 1990s has witnessed the power of that concept.

Brazil offers an important example of mobilization and partnership that embrace the whole society beyond the education sector and the traditional education constituency. In 1993, Brazil's nationwide mobilization effort culminated in a 'National Week on Education for All,' resulting in a 10year plan that led to concrete government action on many fronts. In 1995, the new Brazilian Government expanded actions that included transferring federal funds to local schools and municipalities, improving the national testing of students' learning achievement and using television as the medium for a national distance-learning teacher-education programme.75

The Government's most important role has probably been to mobilize the whole nation behind the universal education campaign. The most visible member of this effort has been President Fernando Henrique Cardoso himself who, soon after he took office in January of 1995, demonstrated that education was his top priority by teaching the first class of the year at the Jose Barbosa School in Santa Maria da Vitória, in the state of Bahia. This was followed by a national mobilization campaign called 'Acorda Brasil. Esta na Hora da Escola!' (Wake Up, Brazil, It's Time for School!).

The public response exceeded all expectations. A round of debates took place throughout the country. A tollfree telephone service, Fala Brasil (Speak Brazil), was established for members of the public to express their views on education and issues concerning the Ministry of Education's programmes; it receives an average of 1,500 calls per day. A national database was set up to record successful educational projects or innovations and make them available for replication or adaptation in other regions. It became available on the Internet in September 1997.<sup>76</sup>

Brazil put into practice almost all of the key guidelines for successful mobilization:

- clearly articulating the goal and vision, with specific time objectives;
- monitoring progress frequently and effectively via a few clearly defined indicators;
- placing the goal of universal basic education at the very centre of national life;
- building a national consensus so that the results survive changes of government;
- using the power of the new information and communications technology effectively;
- identifying, emulating and creating success stories.<sup>77</sup>

Other countries have successfully mobilized for Education For All. Since 1995, the Philippines has designated the last Monday in January as National School Enrolment Day (NSED). On that day every year, schools throughout the country stay open from 7 a.m. to 6 p.m. to enrol children eligible to begin first grade the following June. The aim is not only to increase enrolment via media attention to NSED, but also to help education authorities plan for the number of teachers, classrooms and materials required the following academic year. On NSED, children receive medical and dental examinations, an arrangement that also helps prepare schools for students with special needs.78

This kind of national mobilization raises public expectations. It also

creates challenges for the authorities. In the first years of NSED, there were still shortages of teachers and class-rooms when the children arrived at schools the following June.<sup>79</sup> Never-theless, the Philippine Education Ministry was sufficiently flexible to back up the mobilization campaign with a far-reaching decision. It assigned the best teachers, especially those gifted in language, to the first grades to ease the transition from home to school and make children's first experience of education as positive as possible.

The power of an idea to mobilize enthusiasm and resources has also been evident in Malawi. There, in 1994, the new government marked its break with the autocratic era of the former President Hastings Kamuzu Banda by proclaiming universal free primary education. At a stroke, the move released children's families from the crippling dual burden of paying school fees and buying school uniforms, producing a massive leap in enrolment from 1.9 million to 3.2 million children, including broadly equal proportions of girls and boys.<sup>80</sup>

The bold approach clearly had major implications for the Government's budget, but it caught the imagination of international donors and lenders to such an extent that Malawi has been able to sustain and refine its commitment in the succeeding years. Rewarded for its daring, Malawi has received high levels of international aid and loans for building classrooms, educating teachers and improving educational supplies.

Mobilization campaigns can tap new funds for education, though the benefits to society of involving the private sector are not restricted to money. In Brazil, the Itaú Bank, the second largest private bank in the country, and the Odebrecht Foundation have worked closely with the



Education, key to human and social development, needs to assume a place at the centre of nation's lives. Two boys read together in the Philippines, where the Government has launched a nationwide campaign to increase school enrolment.

A community that participates actively in the running of an educational facility whether a nursery, primary school or secondary school has greater opportunities to make educational services relevant and a greater incentive to make them work. Government and UNICEF to support and promote education and child rights in the media and through fundraising campaigns.

The two donors have also provided concrete support for projects. The Itaú Bank donated all the equipment for the Fala Brasil education telephone centre, trains the operators and maintains it;81 additionally, it funds an Education and Participation prize to acknowledge the work of NGOs, community groups and trade unions and supports NGOs with training and networking opportunities. The Odebrecht Foundation was a strong supporter of Brazil's Statute of Children and Adolescent Rights, one of the world's most creative responses to the Convention on the Rights of the Child, and a partner in national mobilization efforts for Education For All.

#### **Partnerships**

The formation of partnerships has become a central concept in planning and managing education, especially in situations where significant numbers of children are deprived of education. The State retains responsibility for setting national objectives, mobilizing resources and maintaining educational standards, while NGOs, community groups, religious bodies and commercial enterprises can all contribute, making education a more vital part of the life of the whole community.

The role of local communities extends far beyond raising money for schools, although in some countries 'partnership with parents and local communities' means 'fund-raising'. The costs of sending children to school have, in fact, risen markedly for families. A 1992 household budget survey in Kenya showed that households directly contributed 34 per cent of the total cost of primary education.<sup>82</sup> Cambodian households contribute three quarters of the total cost of public primary education, and those in Viet Nam contribute half<sup>83</sup> a dramatic departure from the totally free education offered until recently. The inevitable effect of these costs is a decline in the enrolment and retention of children in school. Studies carried out in two African and three Asian countries by UNICEF confirm that private costs are a major factor in discouraging school attendance.<sup>84</sup>

Partnership with a community may well lead to more funds becoming available, but this should be a byproduct of the collaboration rather than its only goal. If parents are asked to contribute more money but have no voice in the organization and management of schools and see no improvement in educational quality, they and their children will soon disappear from view.

On the other hand, a community that participates actively in the running of an educational facility whether a nursery, primary school or secondary school — has greater opportunities to make educational services relevant and a greater incentive to make them work. Any project has a higher chance of success if it is based on the expressed needs of the community and if that community is a key actor in its implementation, monitoring and evaluation (Fig. 12).

"We decide what's good for our children and we are capable of doing something about it," says Enamul Huq Nilu, chair of a school management committee in Jhenaidah Sadar Thana (Bangladesh).<sup>85</sup> His school is part of the IDEAL project, which has aimed to reinstitute the community and parental involvement in primary schools that ended when the national Government assumed control in 1973. Through a local planning process facilitated by government and UNICEF officials, members of the school management committee, parents and

## Fig. 12 School mapping

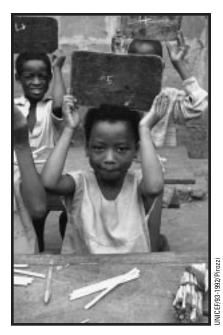


This map was created as part of the Lok Jumbish project in the Indian state of Rajasthan by a team of villagers, trained by a local organization working in cooperation with Lok Jumbish. It is based on a household survey conducted to ascertain whether boys and girls aged 6 to 14 were attending school regularly. The survey became the basis of a provisional plan for school improvement after its findings were presented to the community for discussion.

Such village school mapping surveys, being conducted in small communities around the world, help to gauge educational needs by identifying pre-school age and school age populations. Well-defined surveys can provide communities and local and regional education planners with accurate and timely information that can be used to improve educational efficiency, including school coverage and existing and future teacher and capacity needs. Analysis of the data can contribute to a better understanding of the reasons for low enrolment, or the low rate of attendance of girls, for example.

The surveys are especially useful when reliable data are lacking or when aggregated data at the national or regional level do not capture the particulars of the local situation. Reliance on community members in all stages of the process — collection, analysis, verification and use of disaggregated data — enhances their stake in their children's education as envisaged in the Convention on the Rights of the Child.

Source: 'Lok Jumbish, 1992-1995.' Lok Jumbish Parishad, Jaipur, India, n.d.



Parents and local communities must be the State's vital partners in school management to ensure that educational services are relevant to the community's needs. Children learn to count in a mathematics class in Benin.

teachers work together to write a yearly plan for the school that is then monitored by all involved.<sup>86</sup>

A similar philosophy underpins the CHILDSCOPE project in the Afram Plains district of Ghana. Its main strategy has been to empower the communities surrounding its 11 primary schools to identify impediments to their children's education and devise their own solutions. Parents actively participate in the education and development of their children, with resulting improvements in literacy, numeracy and general enrolment, particularly that of girls. In addition, the project's holistic approach has led to a greater community awareness of the health and nutritional needs of developing children.

As the CHILDSCOPE project illustrates, schools can serve as vital change agents. They can reach out to local communities in partnership with other agencies, for example, to identify children who may need protection. In this sense, teachers and school employees are the local agents of the Ministry of Education, assuming a measure of responsibility for tracing children who do not appear in school and whose rights are more likely to be endangered.

Partnership in the service of Education For All involves all segments of society in guaranteeing child rights. For it to work, however, the State must be prepared to relinquish some of its decision-making powers to lower levels of the system.

### Decentralization

Imagine you are a teacher in a primary school in a rural district. You hear that a family member has died and wish to attend the funeral. Instead of asking your head teacher or board of school governors for permission, you must make your request to a ministry official in the distant capital. There, your plea will be dealt with by bureaucrats who have never met you, have never seen your school and do not know what provision might be made to cover your absence. This was the rule until recently in Venezuela, which had one of the most centralized education systems in the world.<sup>\$7</sup>

On the surface, the organization of public schooling is remarkably similar throughout the world. Individual schools are managed by a head teacher or principal. At the district level, an administrative body offers supervision and technical support. A state or provincial education agency may be available only in larger countries, but nearly all countries have a national education ministry that plans and has administrative responsibility for the system as a whole.

Centralized control may be more efficient when it comes to textbooks — ensuring that children in all parts of the country have access to quality material and that the material does not promote ethnic hatred, for example. But there is increasing recognition that if schools are to improve and be more responsive to local communities, they have to be given more autonomy to assess and resolve their own problems.

Decentralization is an important option, but one that carries a cost. It is likely to require more careful planning, more expensive training, more extensive data collection and even more staff and resources. Decentralization should be selected not because it is the cheapest option but the best, and it strengthens the State's commitment to and ability to achieve Education For All.

As experience is increasingly revealing, decentralization becomes most dynamic when control of schools is redistributed, concentrating power not entirely in the hands of head teachers but involving the community in management through creation of a governing body with membership drawn from parents, teachers and the wider community. Decentralization, so conceived, should be a tool to encourage partnerships and mobilization — key features of the education revolution.

The recent experiences of the Brazilian state of Minas Gerais, one of the country's largest and most developed states, shows decentralization at its best. After examining the reasons for an appalling drop-out rate in 1990, only 38 in every 100 students who had entered primary school completed the first year — the state made decentralization the top educational priority. It also shifted decisionmaking from the state capital to school boards headed by an elected principal and composed of equal numbers of parent representatives and school staff. The boards were originally responsible for the financial and administrative issues with which parents felt comfortable, but they are now involved in pedagogy as well. Community involvement and local control have already significantly improved educational standards: In 1994, 11 per cent more students completed their first year than in 1990; grade repetition tumbled from 39 per cent in 1990 to 19 per cent in 1994.

Ana Luíza Machado Pinheiro, Secretary of Education for Minas Gerais, says, "Three or four years ago, when the schools were falling apart, if you put forward a pedagogical proposal people would say: 'What for, if we have no desks and no teaching materials? If the school is in a chaotic situation, how are we going to implant a new pedagogical proposal?' Today, with the schools all neat and tidy, everybody is talking about quality."<sup>88</sup>

Contrary to expectations, participation in schools has been greatest in poorer communities, and it is these schools that have registered the greatest student improvement. The Minas Gerais model has inspired many other Brazilian states to follow its example; it is particularly attractive because it requires no additional resources but simply better management of what is already available.<sup>89</sup>

Other successful models of decentralized school management are appearing throughout the world. In Poland and some other Central and Eastern European countries, decentralized school systems are a reaction to the former highly centralized socialist systems. In Asia, school clusters — in which schools are grouped together to share resources, save costs and maximize community mobilization - have proved particularly useful. The strengthening of school clusters has been a vital part of the Continuous Assessment and Progression System (CAPS) project in Myanmar, which aims to reduce dropout and repetition rates at the primary level. The effectiveness of school management flowing from the cluster system is as important as teacher education, child-centred learning or community mobilization in terms of keeping children in the classroom. Good management generates higherquality education just as predictably as good teaching.90

Decentralization can create educational opportunities for groups that may be traditionally excluded from a centralized education system. El Salvador's EDUCO (Programa de Educación con Participación de la Comunidad) project, for example, which vests control of schools and preschools in community associations, targets children mainly in rural areas. The needs of ethnic minorities for special provisions, such as teaching in their own language, are more likely to be recognized by a local teacher than a national education authority. Good management generates higherquality education just as predictably as good teaching.



On average, nearly half the children in the 47 least developed countries do not have access to primary education. Girls in a primary school class in Niger.

The recruitment of more girls into school can be improved through decentralization. In the Mopti and Kayes regions of Mali, where girls' enrolment rates are very low, districtlevel teams, including local NGOs, work intensively with communities to elect and train school management committees responsible for ensuring gender parity, among other things. Mauritania places a high priority on the decentralized collection of data about girls' education through local education management committees and regional observatories.

In fact, the almost universally acknowledged need for better educational data broken down by gender on enrolment and drop-out rates and on learning achievement — can be met much more easily through decentralization.

Yet, as the accelerating process of globalization causes national governments to privatize an increasing number of functions, decentralization may be undertaken in the interests of costcutting or privatization. Public education in this event is likely to be weakened, with access to education as well as the quality of that education falling in lower-income regions simply because they have fewer resources to devote to schooling. Inequality of this kind mushroomed, for example, after Chile introduced a voucher scheme in 1981 that siphoned off students from public into private schools and public school revenues dropped.91 In addition, decentralization places additional demands on local professional and administrative capacity, and if not accompanied by a strong and effective programme of strengthening that capacity, it can result in a decrease in quality and substantially higher costs.

Decentralization can provide enormous benefits if undertaken from a position of strength and commitment to educational equity and quality and community empowerment. The most successful examples occur when a national education ministry is also strong and not driven by the dictates of finance constraints — and where the education ministry can intervene, as necessary, to stop emerging inequalities.

# Element 5. Care for the young child

The principle that learning begins at birth was reaffirmed in the Jomtien conference's World Declaration on Education for All.<sup>92</sup> Awareness of the central educational importance of the early years has grown along with programmes that put this concept into practice.

Every year new research adds to our understanding of the way children develop. The rapid development of a young child's brain depends largely on environmental stimulation, especially the quality of care and interaction the child enjoys. Recent work in molecular biology has established that brain development in the first year of a child's life is more rapid and extensive than had previously been thought. By the time of birth, a child has 100 billion neurons in the brain linked by complex nerve junctions called synapses.93 These synapses are the connections allowing learning to take place, and in the first few months after birth their number increases twentyfold.94 Physical, mental and cognitive development all depend on these communication links in the brain.

The good nutritional health of both a mother (while pregnant and lactating) and baby is vital not just for child survival and physical growth, but for mental development and future educational prospects.<sup>95</sup> In addition, there is convincing evidence that the quality of the care — including nutrition, health care and stimulation — a child receives during the first two to three years can have a long-lasting effect on brain development. And beyond that, attention to child development at least through age eight is crucial in helping children reach their potential.

Given this significance of early nutrition and care, any meaningful approach to 'basic education' has to include early childhood programmes that promote child survival, growth and development. There is a growing consensus that childcare and early education are inseparable: Children cannot be well cared for without being educated and children cannot be well educated without being cared for.<sup>96</sup>

The world is finally recognizing that a child's rights to education, growth and development — physical, cognitive, social, emotional and moral — cannot be met without a comprehensive approach to serving their needs from birth. It is acknowledging that the mental, social and emotional development of pre-school children has a huge impact on their ability to thrive in the classroom and later in the adult world.

### Childcare: A social imperative

Families are the first line of love, care and stimulation for their children, and parents are the first, and most important, teachers (Panel 14). But increasingly the nurture and stimulation so essential to a child's physical, emotional and intellectual development are being provided today in a patchwork of formal and informal services provided by governments, businesses, NGOs and others.

Full-scale kindergartens or day care for all children are not the only way of meeting children's and families' needs for good quality childcare. Expansion of ECCD (early childhood care for child growth and development) services, though rapid, has been hampered by many governments' misconception that the Western model of formal, prohibitively expensive, pre-school centres is the only way to meet children's needs in the early years.

Research suggests that structured day care outside the home is the most effective — a Turkish study between 1982 and 1986 showed it to achieve better results in all measures of psychosocial development. Nevertheless, the same survey showed that children whose mothers cared for them at home but received training and some outside support gained significantly over children whose mothers received no training. The children tested higher in language use, mathematics and overall academic performance during the five years of primary school and demonstrated better levels of social integration, personal autonomy and even family relationships. As adolescents in 1992, more of them were still in school than peers whose mothers had not received training.97 The most practical, low-cost way for a developing country to pursue the manifold benefits of ECCD, therefore, is to try to raise parental awareness of child development issues.

The better the care and stimulation a child receives, the greater the benefit — for the national economy as well as the child. For example, children with good early childhood experiences (health, education, nutrition, stimulation, growth and development) are less likely to 'waste' public funds by dropping out of school or repeating grades; they will also suffer less from illness and be more productive in adulthood.

Often, formal programmes have been used to ensure that children are ready for school, especially in cases where parents have to work and cannot provide the primary care for their children. Few developing counThe world is finally recognizing that a child's rights to education, growth and development — physical, cognitive, social, emotional and moral — cannot be met without a comprehensive approach to serving their needs from birth.

### Parent education: Supporting children's first teachers



n most societies, the home and family are the most powerful socializers of children. Children's learning begins at birth and continues through early childhood, serving as a strong preparation for schooling. The role of parents and other caregivers becomes especially important, therefore, in fostering the social, intellectual, emotional and physical characteristics that will enhance children's later learning, both in school and in life.

Cultures have long perfected ways of transmitting knowledge to children, and the common wisdom of societies provides a basis for child care and development that is usually well adapted to the needs of the particular situation. But the world is changing, and sometimes parents, especially young ones, can benefit from new information and knowledge now available about children's healthy growth and development.

"Many times local or traditional practices are sound, but increasingly they do not take advantage of all that is known," says Dr. Robert Myers, the founder of the Consultative Group on Early Childhood Care and Development, an inter-agency group, and an international authority on ECCD.

Indeed, recent studies on childrearing practices by UNICEF and the Latin American Episcopal Conference have found that many parents are aware of 'new' information on children's development, but that the information is often not put into practice.

Parent education programmes can fill this knowledge gap, helping parents and other caregivers understand what is needed for better child development, adopt good child-care practices and effectively use existing services directed at children's health, nutrition and psychosocial development needs. Such programmes also bolster parents' self-confidence, making it easier, in turn, to promote their children's development.

Innovative programmes that support and educate parents and other caregivers are in place around the world, from Cuba to Indonesia, China to Turkey. They have proven popular because they reach large numbers of people through existing community networks at a relatively low cost.

The results are tangible and impressive. In Mexico, parents who have been trained in the nationwide Initial Education Programme, which targets caregivers of 1.2 million of the country's poorest children under the age of three, say that their attitudes about child-rearing have changed. Many add that they now recognize that traditional punishments for children are often inappropriate. This non-formal programme, run by the Government with UNICEF support, reports that gender roles in childcare are also changing. In remote rural villages, it is the fathers who attend the training sessions.

A parent training programme in Turkey has become a model of nonformal, multipurpose education designed to keep children in school and learning. Group discussions are held on such topics as children's health, nutrition and creative play activities, and mother-child interaction. In follow-up studies of the first pilot project, significant differences were found in cognitive development between children whose mothers had undergone the training and those who had not. As hoped, children in these families stayed in school longer. Since expanded, the programme is conducted in cooperation with the Turkish Ministry of Education and has served more than 20,000 mother-child pairs.

For 15 years, the Promesa (Promise) project in Colombia has served about 2,000 rural families. It began by encouraging groups of mothers to stimulate the physical and intellectual development of their pre-school children by playing games with them in the home. Gradually, the mothers in the groups started to discuss health, nutrition, environmental sanitation and vocational training. Over time, the project expanded, with residents spontaneously organizing themselves to solve other family or community issues.

In the Philippines, the Parent Effectiveness Service combines home visits by volunteers with regular parent discussion groups. An evaluation of the programme showed that it has contributed to the development of parents' knowledge and related skills in the areas of health, parenting, ECCD, child discipline and husband-wife relationships. In selected regions, parent discussion groups were supported by a 30-minute weekly radio broadcast, 'Filipino Family on the Air', which covered 26 topics, including child rights, gendersensitive child-rearing, children and the media, and child abuse.

Parent education activities are most effective when they complement and reinforce more formal, organized service programmes, and in fact can sustain children's gains in early development even if a programme or child-care centre disappears.

Yet "parent education programmes are no panacea," says Dr. Myers. To rely on them alone, without the range of more formal programmes such as child-care and health services, deprives parents of the full range of support they need — including resources, facilities, time and information for their children's growth and development. tries have the budgets to match the level of childcare in industrialized countries such as Belgium, Denmark, France and Italy, where 80 per cent of three-year-olds attend nursery or pre-school.<sup>98</sup>

Trinidad and Tobago, however, enrols around 60 per cent of four-yearolds in nursery schools operated, at the Government's request, by Servol (Service Volunteered for All). Each of the Servol pre-school centres has been requested by local communities, which have formed an eight-person school board to provide and maintain facilities and pay the portion of teacher salaries not covered by the small government subsidy.

Teachers in the Servol centres do not try to pressure young children into reading, writing and counting but aim to give toddlers a positive self-image and develop their resourcefulness, curiosity and sense of responsibility. Parent education is fundamental: 'Rap sessions' are held in which teachers explain the harm done to small children by both excessive discipline and neglect, and they communicate the importance of hygiene and nutrition.<sup>99</sup>

Servol's model of nursery school was a significant and successful departure from facilities in which toddlers were expected to sit quietly at desks and listen to the teacher. Many formerly communist countries have been struggling to make the same kind of transition. One of the strengths of the old political system in the former Soviet bloc was its extensive provision of nurseries for the children of working parents. While clean, safe and cheap, however, many followed a rigid curriculum in which all children did largely the same thing at the same time.

In response to declining pre-school enrolment and availability, teachers in 23 Eastern European and former The better the care and stimulation a child receives, the greater the benefit — for the national economy as well as the child.

Photo: In Colombia, a mother holds her baby daughter. She was chosen by her neighbours to run a home day-care centre for local children and trained to meet their health, nutrition and developmental needs.



Rigid approaches to pre-school education, in which children are expected to sit quietly and listen to the teacher, are gradually giving way to more child-centred models. In Romania, a child plays with a toy at a crèche that encourages creative learning activities.

Soviet Union countries are moving down a different road today. Funded by the Soros Foundation, they are learning a new curriculum designed by Children's Resources International (CRI) containing the best techniques of early childhood education. Emphasizing child-centred education and child-initiated play, the Step by Step curriculum has proven so popular that the project has expanded to Haiti, Mongolia and South Africa and has developed curricula for infants and toddlers and for children up through age 10.100 Another initiative, funded by Save the Children (United States) in Bosnia and Herzegovina and in Croatia, combines structured play to enhance children's development with strong parental and community involvement, keeping costs low.101

The Lao PDR is another former 'command economy' pursuing change. Since 1989, the Government has sought external partners, including Save the Children Fund (United Kingdom) to help it introduce more child-centred teaching methods in schools and nurseries. The changes in the 1990s have been profound, according to Mone Kheuaphaphorn, director of the Dong Dok kindergarten. In the old days, teachers did a lot of talking and the children could only be listeners; they had very little chance to participate.... Teaching aids and toys were not usually available and, if there were any, they didn't relate to the topic and weren't attractive to children.... The activities were controlled by teachers and the children had no access to free play or choice. Now the philosophy is 'learning through play' which includes many activities.... To sum up: The new way of teaching helps children become happy, healthy and creative. Since the implementation there have been regular whole-school meetings and monthly classroom meetings with parents so as to ensure

parents can support their children's learning and also contribute to the school when it is needed. Parents are happy to see their children's skills and behaviour change and that the school has become an attractive place for children.<sup>102</sup>

The new child-centred approach has also made it possible for the Lao PDR to launch a successful project integrating children with special needs and learning disabilities into the school system at the kindergarten stage. The sensitivity and responsiveness of a modern pre-school centre has worked to make education more accessible to those children, such as girls and minorities, who have tended to be excluded from the traditional school system.

Every indicator points to the fact that poor children benefit most both in psychosocial and educational terms — from ECCD programmes.<sup>103</sup> This finding makes such interventions particularly appropriate for impoverished communities. The Pratham Mumbai Education Initiative in the city of Mumbai (formerly Bombay) is offering child-centred nursery education to 30,000 children aged three to five from slum communities. Its chief aims are to foster a love of learning in poor communities and prepare children as much as possible for the challenges of schooling.<sup>104</sup> Pratham, an NGO, is confident that the Initiative will cover the city by the year 2001 and is also campaigning for an amendment to the Indian Constitution giving all children under eight the right to education.

#### Intersectoral links

The lesson of ECCD for Education For All is that all schools can and must change to serve children's developmental needs. Many of the same principles of ECCD programmes the need for intersectoral links between education and health or nutrition or the advantages of childcentred, flexible teaching methods could usefully be put into practice in all schools, especially in the early primary grades.

Until recently, health and nutrition workers tended to concentrate on helping children survive their first few vulnerable years, while education experts focused on school enrolment or improving teaching and learning. Their work rarely connected, but that situation has changed. The education sector's increasing work with professionals in health and sanitation, nutrition and family planning — forging and strengthening 'intersectoral links' — represents another vital aspect of the education revolution.

Since 1987, ECCD programmes in Nigeria have steadily expanded. Each centre offers free immunization and concentrates on children's nutrition: many programmes have, in fact, advocated deworming to control parasitic infection in children. From the start, the aim of the project was to provide low-cost community-based care, since pre-school facilities had previously reached only 2 per cent of children from wealthier families, even in urban areas. Even these programmes paid little attention to health, nutrition, and the psychosocial and cognitive aspects of child development.

The successful strategy has been to reach children wherever they are. Culturally acceptable ECCD facilities have been located in market places, churches, mosques, community halls and annexes to primary schools, and the UNICEF-supported project has home-based facilities in poor areas, serving around 175,000 children. An NGO network plans to extend ECCD services to all Nigerian children under six years of age.<sup>105</sup>

The need for a coordinated, interdisciplinary approach to children's education, health and nutrition is most vital in the early years of life. In order to achieve this goal, collaboration among a variety of partners, such as trade unions, the private sector, NGOs and religious groups, is needed. Children must be better prepared for school, and ECCD, whether provided at home by parents or in formal kindergartens, has proven to be the best means. Schools must also be better prepared to receive young children in a welcoming, suitable environment; they must then educate those children and ultimately enhance their capacity to take advantage of that education. Based on the evidence flowing in from around the globe, that lesson is sinking in.

### Globalization and learning

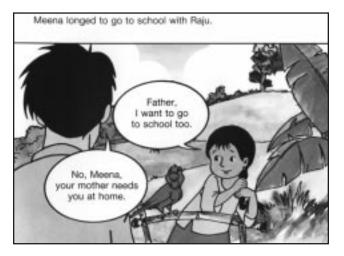
Virtually all the elements of the 'expanded vision' of education that emerged from Jomtien can be, and have been, put into practice, as we have described, in various ways in education systems around the world. What that vision could not have anticipated was the extraordinary pace of political, social, economic and technological changes the world would go through, and which would have great impact on education.

For instance, while the Jomtien vision stressed the importance of the State working in partnership with civil society to ensure access to quality education for all, it did not count on the rapid emergence at the end of the cold war of a plethora of new nation States, many of which had to deal with problems of tenuous authority, limited capacity and precarious resources. The need for partnership suddenly became even more urgent, as did the recognition that the State need not be the only provider of education. The focus on human rights recast the



Education for Development builds bridges across continents and cultures by promoting understanding, tolerance and friendship among young people worldwide. By encouraging them to cooperate, to think critically and analytically, to solve problems and to participate actively in learning, it helps lay a foundation for peace, global solidarity, social justice and environmental awareness. Started by UNICEF in 1992 to acquaint young people and educators in the industrialized world with global issues and UNICEF's role in promoting development, Education for Development programmes are now being used by educators throughout the world to promote global citizenship. Students in the United States attach strings to a map to indicate trade links between countries.

### Fig. 13 Meena: An animated advocate for girls' rights



Meena's mother and father thought about what the villagers had said. They decided to send Meena to school.



All the villagers agreed that it is good to send girls to school. The old woman said that her daughter had gone to school.



Meena, Raju and Mithu danced with joy



Spurred by a desire to go to school like her brother, a girl in a South Asian village learns to count and wins her right to go to school. Her name is Meena, and she stars in a series of 13 animated films created by UNICEF offices in South Asia and the international animation company Hanna Barbera.

The Meena series evolved based on extensive research by UNICEF in Bangladesh, India, Pakistan and Nepal to identify characters, settings and storylines that struck a common chord among the region's diverse population. The resulting stories are full of adventure and fun, but at their heart lie the real-life problems faced by girls in South Asia.

Meena's resourcefulness in dealing with issues such as unequal access to education, food and health care, AIDS, the practice of dowry, early marriage and

others have made her a positive role model for girls and a powerful advocate for the rights of all children.

The first episode has been dubbed into 30 languages and broadcast in all four South Asian countries, as well as on Turner's Cartoon Network, and will be shown soon in China, Myanmar and countries in the Middle East. In 1998, the full 13-episode series was aired for the first time by television broadcasters in Bangladesh, India, Nepal, Pakistan and Sri Lanka, and a radio programme, co-produced by the BBC World Service, was launched in India. Mobile film units and a comic book series have brought Meena and her message to over one million rural people throughout the region. The potential audience for Meena materials in South Asia alone is estimated at over 500 million people.

principal role of the State as guarantor of every child's right to a quality education.

So while in many cases the State continues to be the principal provider of basic education, in others it is just one in a broad range of different organizations providing basic education. It retains, however, the important role of providing leadership, developing policy and standards, and articulating the national vision. And in every case the State is accountable for ensuring the right of every child to a high-quality basic education.

While the Jomtien vision recognized the importance of the process of globalization, few in 1990 could have anticipated how quick the pace would be in the last eight years. Computer programmers in the Philippines now write programmes for software developers in the United Kingdom, while lawyers in India draft briefs for legal firms in the United States.

From the intermingling of cultures and the growing dominance of certain cultures and languages of the 'global village', two strong trends have emerged — heightened demand for schools to teach an international language that will give access to the global village, and an increasing concern for education to help preserve and protect cultural and ethnic identity and diversity. Education thus is becoming a key strategy to provide access to a world that is increasingly interdependent and also to help ensure the survival of cultural and ethnic identities.

Nor could virtually anyone in 1990 have foreseen the extraordinarily rapid growth of modern communication and information technologies. The Internet existed then but attracted very little attention. The meteoric advance of information processing and electronic communication technologies has created the possibility for changes in education that were not taken seriously in 1990.

Suddenly, and at an awe-inspiring pace, new possibilities are arising for transforming the education vision of Jomtien into reality, using not only mass media and radio as Jomtien proposed, but also the new information and communication technologies, which are already transforming teaching and learning in privileged communities. As potent as they are, unless access to them can be assured for the less privileged, they will simply serve to widen the existing learning gap between communities and countries rather than bridge it.

In the years since Jomtien, significant possibilities have emerged to advance human welfare. At the same time, disparities between the privileged and the poor have widened, and with them the threat of social instability and civil conflict, making the arguments for the education revolution as an investment to promote peace, prosperity and the advancement of human rights even stronger now than they were a decade ago. The next section, 'Investing in human rights', looks more closely at the arguments for that investment.



Recent technological advances have the power to transform education, but unless access to these new technologies can be assured for all, they will simply widen the learning gap between rich and poor. Children sit at a computer terminal in the United States.



# Investing in human rights

n the brink of the 21st century, the world is on the cusp of an education revolution, based on our expanded and revitalized concept of what education means and the ways in which learning can be enhanced.

The commitment to education, which foundered on the rocks of debt and structural adjustment during the 1980s, has been renewed in the 1990s by the awareness that human rights are key to human development.

As never before, humanity recognizes that human rights are indivisible and that the fulfilment of one right reinforces and promotes another. That there is a human right to education, like the rights to freedom of speech and thought and freedom from torture, may still strike many as a novel concept. It is an especially far-reaching and transforming concept in the developing world, where 130 million children who should be in school are not. Even more revolutionary is the insistence of the Convention on the Rights of the Child that this education must consist of a high-quality learning experience in a child-centred, gender-sensitive environment.

Clearly much of what currently passes for basic education is simply indefensible. Its inadequacy can be illustrated by the following examples of school experience:

[In Japan]: Children are thrown into this severe and endless competition for better social position at the age of kindergarten because all educational institutions are hierarchically ranked from top to bottom according to prestige, actually defined by the number of students whom an institution can send to a 'better' or 'famous' higher educational institution or big company. Only children who have been well trained to learn almost inhumane perseverance and self-restraint can succeed in getting ahead... [they] know well that if they *drop out of the school system, [they]* will easily be driven to the socially marginal rubble.<sup>1</sup>

[In Zambia]: The average pupil walks seven kilometres every morning in order to get to school, has not eaten, is tired, undernourished, malnourished, suffers [from] intestinal worms, is sweating and lacks concentration on arrival. He or she sits with 50 other pupils in a similarly poor condition. Their receptivity is minimal. The teacher is poorly educated, badly motivated and underpaid. He speaks bad English but still tries to teach in that language.... He does not The commitment to education... has been renewed in the 1990s by the awareness that human rights are key to human development.

Photo: The world's poorer nations carry \$2.2 trillion of external debt, making it extremely difficult for them to invest in education. A girl with a tablet on her way to school in Cambodia.



In Pakistan, a man holds an informal class for neighbourhood children on the street so that he can also tend his nearby store.

know his subjects well and uses poor teaching methods during his lessons.... The acoustics and ventilation are bad, the room dark, there are no chalks, the blackboard shines, there are too few notepads and pencils.... The school is an alien world, which ineffectively tries to offer knowledge of very little relevance to the pupil, his or her social environment or the society he or she will meet as an adult in the labour market.<sup>2</sup>

[In Brazil]: The municipal primary school class... uninspirational to begin with and lacking basic instructional materials, was filled with dozing and daydreaming children... [who] were grossly undersized for their ages; others, with obviously distended bellies, complained of stomach-aches from parasites and worms, while still others were tormented by itching from lice, pinworms, scabies and other common skin infections. Children of all ages and talents were exposed to the same repetitive lessons pitched always to the slowest learners.<sup>3</sup>

Many learning environments are far from the stimulating, child-friendly ones stipulated by the Convention on the Rights of the Child. But if the failures of the existing education systems are manifest, so too are the successes of the pioneering examples described in the previous section - not only in their teaching and learning environments but also in the flexible and responsive management systems they have established. In addition, a positive by-product of education's extreme financial problems over the last two difficult decades has been the elimination of whatever excess might have been in the system, leaving it more cost-effective and less wasteful than ever before.

A number of economical and highquality routes to achieving the world's educational goals have been investigated over the last decade, and many show promise. These need to be supported by sufficient resources and political will — nationally and internationally — if all schools, in rich and poor countries alike, are to benefit.

#### The duty of the State

National governments are obligated to ensure basic education and to make all necessary changes in policy and practice towards this vital end. Many were inspired by the Jomtien agenda to find more money for education, but many others have failed to make education a sufficient priority. Developing countries tend to plead poverty as an excuse for failing to allocate sufficient resources for Education For All, despite the evidence amassed over four decades of development that poor countries can work wonders with commitment and far-sightedness.

Comparisons within Asia make the point. The state of Kerala in India has achieved a 90 per cent literacy rate, far in excess of the 58 per cent rate in Punjab, which has more than double the per capita income.4 Viet Nam has reached 94 per cent literacy, while Pakistan, with a much greater per capita income, languishes at just 38 per cent. Among the factors influencing these results must be counted political commitment, exemplified in specific policy measures to ensure Education For All. A general plea of poverty can be rejected when military spending in South Asia remains so high — about \$13.6 billion a year in the region.5

UNICEF has conducted a detailed study of nine countries and the Indian state of Kerala that have all achieved much better health and education results than others in the same region with similar income levels. All of them achieved universal primary enrolment early in their development process. Regardless of political and other differences, all share a policy of strong state support for basic social services, refusing to rely on 'trickledown' from economic growth or the free play of market forces. Each has consistently spent a higher proportion of per capita income on primary education than have lower-performing neighbours, while keeping down unit costs. They have managed to improve quality while keeping repetition and drop-out rates low, and they have kept primary schooling free of tuition fees.<sup>6</sup>

The countries that are furthest from achieving Education For All have not as a rule adopted the policies and interventions of those countries that have made significant progress in education. They have not, for example, ensured a balance in public spending, funding basic education as well as higher-education levels equitably. Nor have they kept costs low as coverage expands. The experience in particular of francophone Africa is illustrative. There, unit costs (per pupil and per graduate) remain among the highest in the world, and enrolment rates among the lowest.

The policy lesson is that the cost to parents has to be minimized, yet there may be evidence that the out-ofpocket costs of sending a child to school in sub-Saharan Africa in the 1980s rose. The progress achieved in the nine study countries and the Indian state of Kerala provides other useful lessons — the positive effect of a high proportion of female teachers on girls' enrolment, for example, and the advantages of instruction in the mother tongue in the earliest grades.

In India, there is now a concerted move to increase the proportion of female teachers in the northern states, where girls' enrolment is the lowest in the country, while in the rest of South Asia, and certainly in most of Africa, this remains an issue that deserves much greater attention from policy makers.<sup>7</sup> However, on the language of instruction issue, a consensus has emerged only in the last few years, particularly in West African countries, that the mother tongue should be the medium of instruction in the early primary grades.

The lesson is clear: National governments have the capacity to devote far more resources to the movement towards Education For All, although too few do. Perhaps even more significantly, under the European Community's Lomé IV aid agreement, only 20 per cent of the 70 African, Caribbean and Pacific countries ranked education and training a high priority, 45 countries saw it as a low priority, and 6 countries had no education or training projects at all.<sup>8</sup>

International aid, although important, is no solution to the funding crisis. Aid contributions generally account for less than 2 per cent of a recipient country's education budget, and rates of aid continue to drop to record low levels.

The proportion of bilateral aid committed to education in 1993-1994 was 10.1 per cent, compared with 10.2 per cent in 1989-1990, and 11.0 per cent in 1987-1988.9 Within the overall amount, aid to basic education, which traditionally received minimal amounts of bilateral funds, tripled in the first half of the decade — a significant increase attributable to the impact of the Jomtien conference. But a more detailed look at the figures and donor countries shows that over 95 per cent of the increase is accounted for by just three countries that shifted their aid policies substantially over the period: Germany, Japan and the United Kingdom.<sup>10</sup> Other countries either increased their aid to basic education very slightly or reduced it.

Even the World Bank, one of the Jomtien convenors and now the greatest single provider of funds to the education sector, has a varied record in The lesson is clear: National governments have the capacity to devote far more resources to the movement towards Education For All, although too few do.



The value of investing in basic education is almost universally acknowledged, but rich and poor countries have yet to find and allocate the additional \$7 billion annually for 10 years to achieve Education For All. Students in Uzbekistan navigate their school globe.

funding education in the 1990s. Its total lending certainly increased in the wake of Jomtien. In 1989, 4.5 per cent of the Bank's lending was allocated to education; by 1994, it was allocating 10.4 per cent of its funds to this area. But by 1997, the proportion had fallen back to 4.8 per cent. The trend appears to be changing again, and the Bank estimates that it will allocate 8.6 per cent of its total lending to education in 1998. Between 1991 and 1997, 45 per cent of education loans by the World Bank went to fund basic education programmes.<sup>11</sup>

It should be noted, however, that allocation does not equal spending and there is much World Bank money for education still unspent. In addition, the World Bank lends money rather than providing grants, and the majority of its loans are made to middle-income countries and carry commercial interest rates. When money is lent to middle-income countries, the Bank is moreover somewhat constrained by the purposes for which recipient governments wish to borrow money, and many cash-strapped governments are unwilling to take on debt at commercial interest rates to advance the cause of basic education.

However, the Bank does have a soft-loan subsidiary, the International Development Association (IDA), over whose money it has more control. IDA lends to low-income countries at highly concessional terms. Given this flexibility, the alarming fall-off in IDA loans to countries in sub-Saharan Africa is even more troubling than the Bank's reduced lending to education. IDA loans to the region stood at \$417 million in 1993 but have fallen precipitously each year since, arriving at a low point of \$132 million in 1996. This is less than the average annual lending in the pre-Jomtien period of 1986-1990. Sub-Saharan Africa, the continent most in need of financial assistance, is currently receiving less than 10 per cent of the World Bank's total lending to education.<sup>12</sup>

The big increases in World Bank educational lending post-Jomtien have been to Latin America and the Caribbean, where governments are more likely to be able to afford loans at commercial rates. Meanwhile, IDA has made substantial increases recently in loans to public-sector reform and private-sector development projects in Africa, reflecting the Bank's commitment to improving a country's infrastructure and professional capacity and in the long-term reduction of poverty.

While this is a common approach in development lending, it can reduce the funding available for education. New Bank loan commitments for education in Africa declined from slightly more than \$400 million in 1993 to just above \$50 million in 1997 (commitments for 1998 are back to the \$300 million level). This drop was mirrored by a commensurate decline in disbursements from slightly less than \$400 million in 1994 to approximately \$200 million in 1998.13 If, as the Bank asserts, investment in education, and particularly in girls' education, brings the highest return on investment in the developing world, the Bank may not be maximizing its African investments.

## Education: The best investment

The World Bank's influence as an advocate for financial investment in education has increased with its publication of research documenting the productive effects of primary schooling. Private rates of return — the amount earned by individuals in formal-sector employment in relation to that invested in their education — appear in all regions of the developing world to be higher for primary than

for secondary and tertiary education.<sup>14</sup> There is a great deal of evidence, for example, that basic education increases the output of small farmers: One study of 13 low-income countries demonstrated that four years of schooling resulted in an 8 per cent increase in farm production.<sup>15</sup> Another study in Bolivia, Côte d'Ivoire, Ghana and Malaysia shows a correlation between the size of a company and the number of years of schooling its owner has had.<sup>16</sup>

Even more important in recent years has been the acknowledgement of the paramount value of girls' education. In a 1992 speech before the Pakistan Society of Development Economists, Lawrence H. Summers, then Vice-President and Chief Economist of the World Bank, argued that "investment in the education of girls may well be the highest-return investment available in the developing world."<sup>17</sup> Mr. Summers stated:

Reflecting the biases of an economist, I have tried to concentrate on the concrete benefits of female education and explicitly contrast it with other proposed investments. Expenditures on increasing the education of girls do not just meet the seemingly easy test of being more socially productive than military outlays. They appear to be far more productive than other socialsector outlays and than the vastly large physical capital outlays that are projected over the next decade.<sup>18</sup>

As this report has stressed throughout, girls' schooling has a vital impact on the whole framework of human development. It not only reduces child mortality and improves the nutrition and general health of children, but it also reduces population growth since educated women tend to marry later and have fewer children. Fulfilling a girl's right to education empowers her, giving her more choices, more control over her life and more potential for exercising the full entitlements of democratic citizenship. Inevitably, studies confirm, her education has a positive effect on the larger society: Her own children are more likely to be schooled and literate, and communities are more likely to have effective health and education services if educated women and men are available to staff them.<sup>19</sup>

The value of investing in basic education, and especially the education of girls, is now almost universally accepted. Why then has the international community not rushed to embrace this most cherished project — an avenue that promises more than any other to reach the goal of delivering 'human development' worldwide?

The answer is familiar: The political will is lacking. When the international community decides that an idea or project is of urgent importance, it can move mountains. Nothing made this plainer than the economic crisis in East Asia in 1997-1998. The financial collapse first of Thailand, then the Republic of Korea, and then Indonesia (counted among the financial 'tigers' of Asia) proved such a shock to the international financial system that the OECD countries led by the Group of Seven<sup>20</sup> responded with admirable urgency. In the space of a few short months, they mobilized over \$100 billion to bolster the collapsing Asian economies, to be distributed by the International Monetary Fund (IMF) in return for sweeping structural adjustment programmes similar to those that poorer countries have been undergoing for the last 15 years. Recognizing that the crisis was so grave they could not afford to observe normal administrative procedures, donor nations bent IMF rules to accommodate the suffering 'tigers'.

In contrast, the leading industrial nations, IMF and the World Bank have been less accommodating with The world would need to spend an additional \$7 billion per year for the next 10 years, on average, to educate all children. This is less than is spent on cosmetics in the United States or on ice cream in Europe annually. It is hard to see how governments with large debts can advance towards Education For All. Tanzania is not untypical in spending six times more on debt repayments than on education. the world's poorest and most indebted countries, something that has not gone unnoticed. It cast a heavy shadow over events in the Côte d'Ivoire capital of Abidjan in February 1998, when a new structural-adjustment agreement was reached after nine months of painful negotiation, with the Government agreeing to privatization measures in return for \$2 billion in new loans from IMF. This agreement followed almost two decades of economic belt-tightening. As N'Goran Niamien, Côte d'Ivoire's Economic and Finance Minister, commented:

We have observed the speedy reaction to Asia and seen the huge sums of money they have been able to come up with almost instantaneously, often bending the rules pretty freely. When it comes to us, our negotiations can drag on for months while they split hairs and act very finicky. One can easily get the impression of a double standard.<sup>21</sup>

IMF officials have pointed out that the size and speed of their response to the Asian crisis was justified by the importance of these economies to the global financial system, which underlines the point that resources are available — almost instantaneously when there is sufficient political will. It also demonstrates short-sightedness, wrongly suggesting that Africa's survival is less important to our global system. UNICEF was not alone in calling, as it did in The State of the World's Children 1988 report, for a sustained transfer of resources to the least developed nations, on the lines of the Marshall Plan with which the United States rescued a ravaged Europe following World War II. Although the idea has been continually dismissed as impossible and unrealistic, the East Asian and recent Russian bailouts make it plain that such resource transfers are eminently possible and entirely realistic.

The message that emerges is that massive allocations of global resources are made when the economic stability and well-being of the developed countries are threatened. The calls for investment in development and human rights remain, unfortunately, only rhetoric and have not yet succeeded in generating a comparable response.

#### The shadow of debt

A way is urgently needed to address developing world indebtedness, which is a major aspect of the resource problem crippling Education For All.

Debt remains a crisis, particularly for the most severely indebted countries — and for many of their people who struggle every day to feed their families, pay for critical medical treatment or send their children to school. It is a crisis whose other face is disease, illiteracy and early death. Until the world realizes that we are globalized and dependent on the well-being of poorer nations, the struggle for resource reallocation will remain an uphill one.

Developing countries in all regions except Latin America and the Caribbean are now having to pay a larger percentage of their export earnings in debt repayments than was the case in 1980. The most indebted countries live in the shadow of a debt many times the size of their national income. Nicaragua's debt, for example, was a chilling six times the size of its GNP in 1995.<sup>22</sup> It is hard to see how governments with large debts can advance towards Education For All. Tanzania is not untypical in spending six times more on debt repayments than on education.

In September 1996, IMF and the World Bank established a new framework for relieving the most heavily indebted poor countries, years after contending that debt cancellation was impossible. Their aim was to reduce the debt burdens of low-income countries to sustainable levels by keeping the proportion of export earnings spent on debt repayments to below 25 per cent, and the ratio of debt stock to exports no higher than 250 per cent. Countries are not eligible for relief, however, until they complete six years of stringently monitored structural adjustment. Widespread criticism of this time lag did lead to an acceleration of the process for a few countries, including Bolivia, Burkina Faso, Guyana, Mali, Mozambique and Uganda. Many other countries will have to wait considerably longer for relief.

What appeared to be a promising initiative to give the world's poorest countries a prospect of starting the new millennium with a clean slate has foundered badly — not least because of petty disputes among creditor governments. While squabbles continue over which countries should pay and how much, Mozambique must continue to devote almost half of its budget to debt repayments, more than it can spend on health and primary education combined.<sup>23</sup>

The inertia should be profoundly embarrassing to an international community that responded so swiftly and munificently to the needs of much richer Asian and Latin American countries, and decades ago, European countries. When it comes to debt relief, said a senior World Bank official responsible for African programmes, "This is clearly an area where we have failed these countries. The political will to do better just did not exist."<sup>24</sup>

#### The human face of capital

Notwithstanding the stagnation on debt relief, the international economic agenda is perceptibly shifting. After almost two decades in which human development has taken a back seat to globalization and structural adjustment, we may be entering an era of investment in 'human and social capital' that will make the task of spreading the education revolution worldwide much easier.

The 'Washington Consensus' of the World Bank and IMF - that resulted in the shock therapy of economic stabilization and insisted that the State minimize its role — is now undergoing re-examination. Joseph Stiglitz, currently Senior Vice-President and Chief Economist at the World Bank, recently wrote that the Washington Consensus is incomplete because it fails to recognize that privatization is not the only key to economic well-being. The creation of competitive markets is equally important, and the State can and should, he says, play an important role in promoting long-term economic growth.<sup>25</sup>

To ensure such growth, societies need to ensure social equity, as social conditions have a direct effect on the health of markets. It is in the interest of economic growth, social stability and the State itself, therefore, to craft regulations for markets and the domestic economy and to set standards in such areas as product safety, environmental conditions and consumer protection.

Education is critical in this context, as an educated population is vital to sustain competitive markets and viable democracy. Those countries going through economic crisis that have invested in education are more likely to emerge with far less damage and much greater potential to rebound.

Argentine economist Bernardo Kliksberg makes similar arguments. Poverty and inequality are more serious in Latin America today than in the early 1980s, he points out, and the average schooling received by each inhabitant is only 5.2 years. Any new consensus must consider not only economic but two other types of 'capital' — human capital (a nation's health, education and nutrition) and

### Fig. 14 Costs of Education For All by the year 2010

Education For All carries an additional \$7 billion a year price tag — less than Americans spend annually on cosmetics and Europeans on ice cream.

UNICEF has estimated what it would cost to make up the difference between the present education spending and the additional spending that would be needed to achieve the goal of universal primary enrolment — a net primary enrolment rate of 100 per cent — by the year 2010. The greatest additional expenditures would be in sub-Saharan Africa and South Asia, the regions with the highest numbers of out-of-school children. In the Middle East and North Africa region and the Latin America and Caribbean region, the numbers of out-of-school children are lower but per-pupil costs are higher.

The table below compares actual with additional spending needed, and it shows that expenditures would have to increase by around a third in sub-Saharan Africa and a fifth in South Asia. In contrast, in Latin America and the Caribbean the required additional spending would represent less than a tenth of the current actual spending. In all regions, the average additional spending needed per year would be less than 1 per cent of GNP.

		t annual nditure	Required additional average annual expenditure
	US\$ (billions)	% of GNP*	US\$ (billions)
Sub-Saharan Africa	7.0	1.9	1.9
South Asia	9.0	1.9	1.6
Middle East/ North Africa	14.0	2.5	1.6
East Asia/ Pacific	20.0	1.2	0.7
Latin America/ Caribbean	30.0	1.8	1.1

\* Unweighted averages.

Notes: This table summarizes UNICEF estimates of the average annual cost of reaching EFA in developing countries between the years 2000 and 2010. The table also shows the present level of expenditure. Figures are expressed in 1995 dollars and as a percentage of GNP by region. Costs refer only to current costs and do not include the cost of building new schools. The latter, nevertheless, would need to be incurred only once and in most countries would not represent more than around 10 per cent of total costs. Finally, these estimates do not attempt to include the costs of upgrading educational quality.

Sources: Delamonica, Enrique, Santosh Mehrotra and Jan Vandemoortele, Universalizing Primary Education: How much will it cost?, UNICEF Staff Working Papers Series (forthcoming). Estimates are based on UNESCO data (current net enrolment rates, per-pupil cost and current primary education expenditure) and United Nations Population Division projections to the year 2010 (primary school age children for every country). Required additional expenditure from UNICEF estimates. "Education is the true essence of human development. Without education, development can be neither broad-based nor sustained."

— Mahbub ul Haq

social capital (shared values, culture and a strong civil society). Social capital has begun to be considered a key component of growth, with the World Bank announcing in April that it would incorporate social capital as an objective when it measured the impact of projects. In contrast to the assumptions of the former economic model, argues Mr. Kliksberg, there is a symmetry between equality and growth. "Now we know that inequity only reproduces inequity." <sup>26</sup>

Armed with this understanding, chances for expanding the education revolution worldwide should be improved. The late Mahbub ul Haq, one of the most influential and eloquent advocates for human-centred development, rightly deemed education "the true essence of human development. Without education, development can be neither broad-based nor sustained." <sup>27</sup>

The growing body of proof for this premise lends additional weight to the 20/20 Initiative advocated by UNICEF and other partners. The Initiative enjoins governments in developing countries to devote 20 per cent of their budgets and aid-giving industrialized nations to devote 20 per cent of their development assistance to basic social programmes. Currently, developing countries allocate on average about 13 per cent of their national budgets to basic social services, while donor countries devote around 10 per cent of official development assistance (ODA) to supporting these services. Raising these proportions to the 20 per cent mark alone would liberate sufficient resources to achieve Education For All within a decade.28 The world would need to spend an additional \$7 billion per year for the next 10 years, on average, to educate all

children.<sup>29</sup> This is less than is spent on cosmetics in the United States or on ice cream in Europe annually (Fig. 14).<sup>30</sup>

For once, demography is on our side. From the start, attempts to meet universal basic education goals have been unable to keep pace with population growth. But finally the tide has turned. After three decades of work to slow birth rates, the population of the developing world is no longer getting younger — an accomplishment in which education has played an important role. Cohorts of children at each age are still bigger than the year before, but they form a smaller percentage of the total population, requiring proportionately less money to provide for them.

It is clear that the link between human rights and sustainable human development, envisioned 50 years ago in the Universal Declaration of Human Rights and articulated in the principles of the Convention on the Rights of the Child, foreshadowed the increasingly accepted argument for equitable economic development. And in this, education's role is especially vital and unique, as it increases human potential and development at the individual as well as the social level and is fundamental in the establishment of other human rights.

It may have taken almost 50 years for the education rights proclaimed in the Universal Declaration of Human Rights to be fully accepted. But those rights are no longer negotiable. It is the world's responsibility to fulfil them without further delay.

We can move swiftly ahead knowing that Education For All — making the education revolution a global reality — is the soundest investment in a peaceful and prosperous future that we can make for our children.

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# Chapter II

# Statistical tables

Economic and social statistics on the nations of the world, with particular reference to children's well-being.

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### General note on the data

Major changes made to the statistical tables in the last report are now an integral part of *The State of the World's Children 1999.* In particular, each table now includes 193 independent, sovereign countries, listed alphabetically. The under-five mortality rate (U5MR) is a critical indicator of the well-being of children, and countries ranked in order of their U5MR are listed on the page opposite this note. Every table also includes a column providing the U5MR rank of each country.

The data presented in these tables are accompanied by definitions, sources and explanations of symbols. The tables are derived from many sources and thus will inevitably cover a wide range of data quality. Official government data received by the responsible United Nations agency have been used whenever possible. In the many cases where there are no reliable official figures, estimates made by the responsible United Nations agency have been used. Where such internationally standardized estimates do not exist, the tables draw on other sources, particularly data received from the appropriate UNICEF field office. Where possible, only comprehensive or representative national data have been used.

Data quality is likely to be adversely affected for countries that have recently suffered from man-made or natural disasters. This is particularly so where basic country infrastructure has been fragmented or major population movements have occurred.

Data for life expectancy, total fertility rates, crude birth and death rates, etc. are part of the regular work on estimates and projections undertaken by the United Nations Population Division. These and other internationally produced estimates are revised periodically, which explains why some of the data will differ from those found in earlier UNICEF publications.

In addition, the statistical tables in the present report include a substantial amount of new data, including additional data from recent Multiple Indicator Cluster Surveys. These surveys were carried out in 1995 and 1996 by more than 60 countries worldwide as a means of assessing the progress made for children in the context of the goals of the World Summit for Children.

Major changes have been made to two indicators. The net primary school enrolment ratio, which last year included both administrative and survey data, has been split into two separate indicators: 'net primary school enrolment ratio', as reported though administrative data, and 'net primary school attendance', derived from household survey data. Information on girls and boys going to school, or not going to school, is critical for assessing the achievement of basic education for all, and this warrants more attention to the relevant data, which are currently reflected by two indicators — enrolment and attendance.

The second indicator that has been changed, 'maternal mortality', has also been divided into two separate indicators. The first of these is the most recent country reported data on the maternal mortality ratio. The second is the maternal mortality estimate adjusted for underreporting and misclassification of maternal mortality deaths. This approach has been taken because the maternal mortality ratio reported by many countries does not take into account this undercoverage and hence results in a biased assessment of the maternal mortality situation.

### Explanation of symbols

Since the aim of this statistics chapter is to provide a broad picture of the situation of children and women worldwide, detailed data qualifications and footnotes are seen as more appropriate for inclusion elsewhere. Only two symbols are used to classify the table data.

- Indicates data are not available.
- Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

#### **Under-five mortality** rankings

The following list ranks countries in descending order of their estimated 1997 under-five mortality rate (U5MR). Countries are listed alphabetically in the tables that follow.

Country         Value         Rank           Niger         320         1           Sierra Leone         316         2           Angola         292         3           Afghanistan         257         4           Mali         239         5           Liberia         235         6           Guinea-Bissau         220         7           Malawi         215         8           Somalia         211         9           Mozambique         208         10           Congo, Dem. Rep.         207         11           Zambia         202         12           Guinea         201         13           Chad         198         14           Nigeria         187         15           Mauritania         183         16           Burundi         176         17           Ethiopia         175         18           Central African Rep.         173         19           Equatorial Guinea         170         21           Burkina Faso         169         22           Benin         167         23           Madagascar
Sierra Leone         316         2           Angola         292         3           Afghanistan         257         4           Mali         239         5           Liberia         235         6           Guinea-Bissau         220         7           Malawi         215         8           Somalia         211         9           Mozambique         208         10           Congo, Dem. Rep.         207         11           Zambia         202         12           Guinea         201         13           Chad         198         14           Nigeria         187         15           Mauritania         183         16           Burundi         176         17           Ethiopia         175         18           Central African Rep.         173         19           Equatorial Guinea         170         21           Burkina Faso         169         22           Benin         167         23           Cambodia         167         23           Gabonia         167         23           Otid d'Ivoire         <
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Gabon         145         29           Tanzania         143         30
Tanzania 143 <b>30</b>
Uganda 137 <b>31</b>
Pakistan 136 33
Haiti 132 <b>34</b>
Togo 125 <b>35</b>
Senegal         124         36           Irag         122         37
Iraq 122 <b>37</b> Lao People's Dem. Rep. 122 <b>37</b>
Bhutan 121 <b>39</b>
Eritrea 116 <b>40</b>
Sudan 115 <b>41</b>
Myanmar 114 <b>42</b>
Papua New Guinea 112 43
Bangladesh         109         44           Congo         108         45
India 108 45
Ghana 107 <b>47</b>
Nepal 104 <b>48</b>
Yemen 100 <b>49</b>
Cameroon 99 50
Bolivia 96 51
Swaziland         94         52           Comoros         93         53
Marshall Islands 92 54
Gambia 87 <b>55</b>
Kenya 87 <b>55</b>
Guyana 82 <b>57</b>
Zimbabwe 80 58
Sao Tome and Principe 78 59

Country	Value	ortality rate Rank	Country	Under-5 m Value	F
Turkmenistan	78		Tonga	23	- 1
Tajikistan	76	61	Bahrain	22	
Kiribati	75	62	Antigua and Barbuda	21	
Namibia	75	62	Bahamas	21	
Maldives	74	64	Saint Vincent/Grenadines		
		65		21	
Cape Verde	73		Uruguay		
Egypt	73	65	Yugoslavia	21	
Morocco	72	67	Dominica	20	
Indonesia	68	68	Latvia	20	
South Africa	65	69	Panama	20	
Uzbekistan	60	70	Qatar	20	
Nicaragua	57	71	Bulgaria	19	
Peru	56	72	Sri Lanka	19	
Tuvalu	56	72	Belarus	18	
Guatemala	55	74	Oman	18	
Dominican Rep.	53	74	Seychelles	18	
			,		
Samoa	52	76	Trinidad and Tobago	17	1
Vanuatu	50	77	Bosnia and Herzegovina	16	1
Botswana	49	78	Lithuania	15	1
Kyrgyzstan	48	79	Costa Rica	14	1
China	47	80	Estonia	14	
Azerbaijan	45	81	Chile	13	
Honduras	45	81	Kuwait	13	1
Turkey	45	81	Barbados	12	
Brazil	44	84	Hungary	11	
Kazakhstan	44	84	Jamaica	11	
Relize					
Bolleo	43	86	Malaysia	11	1
Viet Nam	43	86	Poland	11	
Philippines	41	88	Slovakia	11	1
Albania	40	89	Brunei Darussalam	10	
Algeria	39	90	Malta	10	
Ecuador	39	90	United Arab Emirates	10	
Thailand	38	92	Croatia	9	
Lebanon	37	93	Cyprus	9	
Saint Kitts and Nevis	37	93	Cuba	8	
El Salvador	36	95	Greece	8	
	35	96		8	
Iran			Portugal		
Mexico	35	96	United States	8	
Palau	34	98	Belgium	7	1
Paraguay	33	99	Canada	7	1
Syria	33	99	Czech Rep.	7	
Tunisia	33	99	Ireland	7	
Moldova, Rep. of	31	102	Liechtenstein	7	1
Armenia	30	103	Luxembourg	7	1
Colombia	30	103	New Zealand	7	
Cook Islands	30	103	United Kingdom	7	
			· · ·	-	
Korea, Dem. People's Rep.	30	103	Andorra	6	
Nauru	30	103	Australia	6	
Suriname	30	103	Denmark	6	
Georgia	29	109	Israel	6	
Grenada	29	109	Italy	6	
Saint Lucia	29	109	Japan	6	
Saudi Arabia	28	112	Korea, Rep. of	6	
Solomon Islands	28	112	Netherlands	6	
Romania	26	114	San Marino	6	
Libya	25	115	Slovenia	6	
Russian Federation	25	115	Austria	5	
Venezuela	25	115	France	5	
Argentina	24	118	Germany	5	
Fiji	24	118	Iceland	5	
Jordan	24	118	Monaco	5	
Micronesia, Fed. States of	24	118	Spain	5	
Ukraine	24	118	Switzerland	5	
Mauritius	23	123	Finland	4	
TFYR Macedonia*	23	123	Norway	4	
	20	125	Singapore	4	
*The former Yugoslav Repu	ublic of M-	codonia	Sweden	4	
referred to in the following	tables as 1	FYR	,	o data	
Macedonia			Niue n	o data	

Niue

Macedonia.

no data

#### Table 1: Basic indicators

	Under-5	mor	ler-5 tality ate	mor ra	fant tality ate ler 1)	Total population	Annual no. of births	Annual no. of under-5 deaths	GNP per capita	Life expectancy at birth	Total adult literacy	Primary school enrolment ratio	of hou inc	share usehold come 90-96
	mortality rank	1960	1997	1960	1997	(thousands) 1997	(thousands) 1997	(thousands) 1997	(US\$) 1996	(years) 1997	rate 1995	(gross) 1990-96	lowest 40%	highest 20%
Afghanistan	4	360	257	215	165	22132	1201	309	250x	45	32	49	-	-
Albania	89	151	40	112	34	3422	74	3	820	71	-	101		
Algeria	90	255	39	152	34	29473	869	34	1520	69	62	107	18x	46x
Andorra	171		6	-	5	74	1	0	С	-		-	-	-
Angola	3	345	292	208	170	11569	556	162	270	47	42x	88	-	-
Antigua and Barbuda	127	-	21	-	17	67	1	0	7330	75	95x	100x	-	
Argentina	118	72	24	60	21	35671	712	17	8380	73	96	113	-	-
Armenia	103	48	30	38	25	3642	48	1	630	71	100	82	-	
Australia	171	24	6	20	5	18250	262	2	20090	78	-	108	16x	42x
Austria	181	43	5	37	5	8161	84	0	28110	77	-	101	-	-
Azerbaijan	81	75	45	55	34	7655	149	7	480	71	100	104	-	-
Bahamas	127	68	21	51	18	288	5	0	11850x	74	98	94	-	
Bahrain	126	203	22	130	18	582	12	0	7840x	73	85	108	-	-
Bangladesh	44	247	109	151	81	122013	3282	358	260	58	38	69	23	38
Barbados	148	90	12	74	11	262	3	0	6600x	76	97	90	-	-
Belarus	138	47	18	37	14	10339	103	2	2070	70	99	97	26	33
Belgium	163	35	7	31	6	10188	114	1	26440	77	-	103	22x	36x
Belize	86	104	43	74	35	224	7	0	2700	75	70x	121	-	-
Benin	23	300	167	176	102	5720	241	40	350	55	37	72	-	-
Bhutan	39	300	121	175	87	1862	78	9	390	53	42	25x	-	-
Bolivia	51	255	96	152	69	7774	260	25	830	61	83	95	15	48
Bosnia and Herzegovina	142	155	16	105	14	3784	42	1	а	73	-	-	-	-
Botswana	78	170	49	117	39	1518	53	3	3210x	51	70	115	11x	59x
Brazil	84	177	44	115	37	163132	3200	141	4400	67	85	112	7x	68x
Brunei Darussalam	154	87	10	63	8	307	6	0	25160x	75	88	110	-	-
Bulgaria	136	70	19	49	16	8427	86	2	1190	71	98	97	21	39
Burkina Faso	22	315	169	181	110	11087	511	86	230	46	19	38	-	-
Burundi	17	255	176	151	106	6398	274	48	170	47	35	70	-	-
Cambodia	23	217	167	146	106	10516	359	60	300	54	65x	122	-	-
Cameroon	50	255	99	151	64	13937	550	54	610	56	63	88	-	-
Canada	163	33	7	28	6	29943	355	2	19020	79	97x	102	18x	40x
Cape Verde	65	164	73	110	54	406	13	1	1010	67	72	131	-	-
Central African Rep.	19	327	173	187	113	3416	129	22	310	49	60	58	-	-
Chad	14	325	198	195	118	6702	280	55	160	48	48	55	-	-
Chile	146	138	13	107	11	14625	293	4	4860	75	95	100	10	61
China	80	209	47	140	38	1243738	20481	963	750	70	82	120	15	48
Colombia	103	130	30	82	25	37068	873	26	2140	71	91	114	11	56
Comoros	53	265	93	200	69	651	26	2	450	57	57	74		-
Congo	45	220	108	143	81	2745	117	13	670	51	75	114	-	-
Congo, Dem. Rep.	11	302	207	175	128	48040	2167	449	130	53	77	72	-	-
Cook Islands	103	-	30	-	26	20	0	0	1550x	-	99x	98	-	-
Costa Rica	144	112	14	80	12	3575	86	1	2640	77	95	107	13x	51x
Côte d'Ivoire	27	300	150	195	90	14300	533	80	660	51	40	69	18x	44x
Croatia	157	98	9	70	8	4498	48	0	3800	72	98	86	-	-
Cuba	159	54	8	39	7	11068	146	1	1170x	76	96	105	-	-
Cyprus	157	36	9	30	8	766	12	0	14920x	78	94x	100	-	-
Czech Rep.	163	25	7	22	6	10237	109	1	4740	73	-	103	24	37
Denmark	171	25	6	22	6	5248	68	0	32100	76	-	99	17x	39x
Djibouti	26	289	156	186	111	634	24	4	780x	50	46	38	-	-
Dominica	132	-	20	-	17	71	2	0	3090	74	-	-		-
Dominican Rep.	75	149	53	102	44	8097	197	10	1600	71	82	103	12x	56x
Ecuador	90	180	39	115	30	11937	309	12	1500	70	90	109	14	53
Egypt	65	282	73	189	54	64465	1697	124	1080	66	51	100	21	41
El Salvador	95	210	36	130	31	5928	167	6	1700	69	72	88	-	-
Equatorial Guinea	20	316	172	188	109	420	17	3	530	50	79	149x	-	-
Eritrea	40	250	116	170	73	3409	137	16	100x	51	-	57		-
Estonia	144	52	14	40	13	1455	13	0	3080	69	98	109	17	46
Ethiopia	18	280	175	175	111	60148	2936	514	100	50	36	31	21x	41x

### ...Table 1

	Under-5	mor	ler-5 tality ate	mor ra	iant tality ite ler 1)	Total population	Annual no. of births	Annual no. of under-5 deaths	GNP per capita	Life expectancy at birth	Total adult literacy	Primary school enrolment ratio	of hou inc	share usehold come 90-96
	mortality rank	1960	1997	1960	1997	(thousands) 1997	(thousands) 1997	(thousands) 1997	(US\$) 1996	(years) 1997	rate 1995	(gross) 1990-96	lowest 40%	highest 20%
Fiji	118	97	24	71	20	809	18	0	2470	72	92	128	-	-
Finland	188	28	4	22	4	5142	61	0	23240	77	-	100	18x	38x
France	181	34	5	29	5	58542	684	4	26270	79	-	106	17x	42x
Gabon	29	287	145	171	85	1138	43	6	3950	55	63	-	-	-
Gambia	55	364	87	207	66	1169	46	4	320x	47	39	73	-	-
Georgia	109	70	29	52	23	5434	75	2	850	73	99	82	-	-
Germany	181	40	5	34	5	82190	769	4	28870	77	-	102	19x	40x
Ghana	47	215	107	127	68	18338	705	75	360	58	65	76	20	42
Greece	159	64	8	53	7	10522	104	1	11460	78	97	98	-	-
Grenada	109	-	29	-	24	93	2	0	2880	-	96x	88x	-	-
Guatemala	74	202	55	136	43	11241	412	23	1470	67	56	84	8x	63x
Guinea	13	380	201	215	126	7614	365	73	560	46	36	48	11	50
Guinea-Bissau	7	336	220	200	130	1112	45	10	250	44	55	64	9	59
Guyana	57	126	82	100	59	847	18	1	690	64	98	94	-	-
Haiti	34	253	132	169	92	7395	253	33	310	54	45	56	-	-
Holy See	-		-	-		1		-	-	-	-	-		-
Honduras	81	204	45	137	36	5981	202	9	660	70	73	111	11	57
Hungary	149	57	11	51	10	9990	101	1	4340	69	99	97	24	37
Iceland	181	22	5	17	5	274	4	0	26580	79	-	97	-	-
India	45	236	108	144	71	960178	24389	2634	380	62	52	100	21	43
Indonesia	68	216	68	128	45	203480	4756	323	1080	65	84	114	21	41
Iran	96	233	35	145	32	71518	2455	86	1033x	69	69	99	21	-
Iraq	37	171	122	143	94	21177	781	95	1035x	62	58	90	-	-
Ireland	163	36	7	31	54 6	3559	46	90	17110	77	- 10	104	-	-
Israel	103	39	6	31	6	5781	117	1	15870	78	96	99	- 18x	40x
	171	50	6	44	5	57241	523	3	19880	78	98	98	19x	40x 41x
Italy		76	11	58	10		525	3	19880	78	90 85	109		
Jamaica	149					2515	1299			75 80			16 22v	48
Japan	171	40	6	31	4	125638		8	40940		-	102	22x	38x
Jordan	118	139	24	97	20	5774	217		1650	70	87	94	16	50
Kazakhstan	84	74	44	55	37	16832	308	14	1350	68	100	96	20	40
Kenya	55	205	87	122	57	28414	1054	92	320	54	78	85	10	62
Kiribati	62	-	75	-	55	81	2	0	920	60	93x	91		-
Korea, Dem. People's Rep.	103	120	30	85	23	22837	495	15	970x	72	-	104x	-	-
Korea, Rep. of	171	127	6	90	6	45717	689	4	10610	72	98	101	20x	42x
Kuwait	146	128	13	89	12	1731	38	0	18720x	76	79	73	-	-
Kyrgyzstan	79	115	48	80	38	4481	115	6	550	68	97	107	10	57
Lao People's Dem. Rep.	37	235	122	155	99	5194	233	28	400	53	57	107	23	40
Latvia	132	44	20	35	16	2474	24	0	2300	68	100	89	23	37
Lebanon	93	85	37	65	30	3144	76	3	2970	70	92	109	-	-
Lesotho	31	203	137	137	95	2131	75	10	660	59	71	99	9x	60x
Liberia	6	288	235	190	157	2467	124	29	490x	50	38	35x	-	-
Libya	115	270	25	159	22	5784	232	6	5540x	65	76	110	-	-
Liechtenstein	163	-	7	-	6	32	0	0	С	-	100x	-	-	-
Lithuania	143	70	15	52	13	3719	39	1	2280	70	99	96	20	42
Luxembourg	163	41	7	33	5	417	5	0	45360	76	-	104	-	-
Madagascar	25	364	158	219	96	15845	656	104	250	58	46	72	16	50
Malawi	8	361	215	205	135	10086	488	105	180	41	56	135	-	-
Malaysia	149	105	11	73	10	21018	536	6	4370	72	84	91	13x	54x
Maldives	64	258	74	158	53	273	11	1	1080	64	93	134	-	-
Mali	5	517	239	293	145	11480	548	131	240	48	31	34	-	-
Malta	154	42	10	37	9	371	5	0	8650x	77	91	108	-	-
Marshall Islands	54	-	92	-	63	59	2	0	1890	-	91x	95	-	-
Mauritania	16	310	183	180	120	2392	92	17	470	53	38	78	14x	47x
Mauritius	123	92	23	67	20	1141	22	1	3710	71	83	107	-	-
Mexico	96	134	35	94	29	94281	2345	82	3670	72	90	115	12	55
Micronesia, Fed. States of	118	-	24	-	20	130	4	0	2070	66	81x	100	-	-
Moldova, Rep. of	102	88	31	64	25	4448	59	2	590	68	99	94	19	42
Monaco	181		5	-	5	32	0	0	С		-	-		

### Table 1: Basic indicators

	Under-5	mor	ler-5 tality ite	mor ra	iant tality ate ler 1)	Total population	Annual no. of births	Annual no. of under-5 deaths	GNP per capita	Life expectancy at birth	Total adult literacy	Primary school enrolment ratio	of hou inc	share isehold come 10-96
	mortality rank	1960	1997	1960	1997	(thousands) 1997	(thousands) 1997	(thousands) 1997	(US\$) 1996	(years) 1997	rate 1995	(gross) 1990-96	lowest 40%	highest 20%
Mongolia	27	185	150	128	105	2568	72	11	360	66	83	88	-	-
Morocco	67	220	72	135	58	27518	707	51	1290	66	44	83	17	46
Mozambique	10	280	208	163	130	18265	777	162	80	47	40	60	-	-
Myanmar	42	252	114	169	81	46765	1285	146	220x	60	83	100	-	-
Namibia	62	206	75	129	58	1613	58	4	2250	56	76x	133	-	-
Nauru	103	-	30	-	25	11	0	0	-	-	-	-	-	-
Nepal	48	297	104	199	75	22591	826	86	210	57	28	110	19	45
Netherlands	171	22	6	18	5	15661	187	1	25940	78	-	107	21x	37x
New Zealand	163	26	7	22	7	3641	56	0	15720	77	-	104	16x	45x
Nicaragua	71	209	57	140	42	4351	147	8	380	68	66	110	12	55
Niger	1	320	320	191	191	9788	496	159	200	48	14	29	19	44
Nigeria	15	207	187	123	112	118369	5039	942	240	52	57	89	13	49
Niue	-	-	-	-	-	2	0	-	-	-	99x	-	-	-
Norway	188	23	4	19	4	4364	58	0	34510	78	-	99	19x	37x
Oman	138	280	18	164	15	2401	106	2	4950x	71	59x	80	-	-
Pakistan	33	226	136	139	95	143831	5250	714	480	64	38	74	21	40
Palau	98	-	34	-	28	17	1	0	790x	-	98x	103	-	-
Panama	132	104	20	67	18	2722	61	1	3080	74	91	106	8x	60x
Papua New Guinea	43	204	112	137	79	4500	146	16	1150	58	72	80	-	-
Paraguay	99	90	33	66	27	5088	160	5	1850	70	92	109	-	-
Peru	72	234	56	142	44	24367	613	34	2420	68	89	123	14	50
Philippines	88	110	41	80	32	70724	2029	83	1160	68	95	116	17x	48x
Poland	149	70	11	62	10	38635	456	5	3230	71	-	98	23	37
Portugal	159	112	8	81	7	9802	110	1	10160	75	90	128	-	-
Qatar	132	239	20	145	16	569	10	0	11590x	72	79	86	-	-
Romania	114	82	26	69	22	22606	249	6	1600	70	98	100	24	35
Russian Federation	115	65	25	48	20	147708	1416	35	2410	65	99	108	12	54
Rwanda	21	210	170	124	105	5883	267	45	190	40	61	82	23x	39x
Saint Kitts and Nevis	93	-	37	-	30	41	1	0	5870	70	90x	-	-	-
Saint Lucia	109	-	29	-	24	146	3	0	3500	70	-	95x	-	-
Saint Vincent/Grenadines	127	-	21	-	18	114	2	0	2370	73	82x	95x	-	-
Samoa	76	210	52	134	41	168	4	0	1170	69	98x	116	-	-
San Marino	171	-	6	-	5	26	0	0	-	-	-	-	-	-
Sao Tome and Principe	59	-	78	-	61	138	6	0	330	64	57x	-	-	-
Saudi Arabia	112	292	28	170	24	19494	675	19	6800x	71	63	78	-	-
Senegal	36	300	124	173	72	8762	362	45	570	51	33	69	11	59
Seychelles	138	-	18	-	14	75	3	0	6850	71	84x	102x	-	-
Sierra Leone	2	390	316	220	182	4428	208	66	200	37	31	50	-	-
Singapore	188	40	4	31	4	3439	55	0	30550	77	91	104	15x	49x
Slovakia	149	40	11	33	10	5355	62	1	3410	71	-	100	28	31
Slovenia	171	45	6	37	5	1922	18	0	9240	73	100x	103	23	38
Solomon Islands	112	185	28	120	23	404	14	0	900	71	62x	97	-	-
Somalia	9	294	211	175	125	10217	519	110	110x	49	24x	11x	-	-
South Africa	69	126	65	89	49	43336	1295	84	3520	65	82	117	9	63
Spain	181	57	5	46	5	39717	386	2	14350	78	97	105	22x	37x
Sri Lanka	136	133	19	83	17	18273	324	6	740	73	90	113	22	39
Sudan	41	210	115	125	73	27899	944	109	320x	55	46	54	-	-
Suriname	103	96	30	70	24	437	9	0	1000	71	93	127x	-	-
Swaziland	52	233	94	157	66	906	33	3	1210	60	77	122	-	-
Sweden	188	20	4	16	4	8844	105	0	25710	78	-	105	21x	37x
Switzerland	181	27	5	22	5	7276	79	0	44350	79	-	107	17x	45x
Syria	99	201	33	136	27	14951	457	15	1160	69	79	101	-	
Tajikistan	61	140	76	95	56	6046	185	14	340	67	100	89	-	-
Tanzania	30	240	143	142	92	31507	1303	186	170	51	68	67	18	45
TFYR Macedonia	123	177	23	120	20	2190	31	1	990	72	-	89	-	-
Thailand	92	148	38	103	31	59159	995	38	2960	69	94	87	14	53
Togo	35	267	125	158	78	4317	181	23	300	50	52	133	-	-
Tonga	123	-	23	-	19	99	2	0	1790	72	99x	98x	-	-

### ....Table 1

	Under-5	Und mort ra	ality	mort ra	ant tality ite ler 1)	Total population	Annual no. of births	Annual no. of under-5 deaths	GNP per capita	Life expectancy at birth	Total adult literacy	Primary school enrolment ratio	of hou inc	hare isehold ome 10-96
	mortality rank	1960	1997	1960	1997	(thousands) 1997	(thousands) 1997	(thousands) 1997	(US\$) 1996	(years) 1997	rate 1995	(gross) 1990-96	lowest 40%	highest 20%
Trinidad and Tobago	141	73	17	61	15	1307	21	0	3870	74	98	96	-	-
Tunisia	99	254	33	170	27	9326	225	7	1930	69	67	116	16	46
Turkey	81	219	45	163	40	62774	1390	63	2830	69	82	105	-	-
Turkmenistan	59	150	78	100	57	4235	122	10	940	65	98x	-	18	43
Tuvalu	72	-	56	-	40	10	0	0	650x	-	99x	101	-	-
Uganda	31	224	137	133	86	20791	1070	147	300	41	62	73	17	48
Ukraine	118	53	24	41	18	51424	495	12	1200	69	99	87	24	35
United Arab Emirates	154	223	10	149	9	2308	43	0	17390x	75	79	95	-	-
United Kingdom	163	27	7	23	6	58200	693	5	19600	77	-	115	15x	44x
United States	159	30	8	26	7	271648	3757	30	28020	77	99x	102	16x	42x
Uruguay	127	56	21	48	18	3221	54	1	5760	73	97	111	-	-
Uzbekistan	70	122	60	84	46	23656	674	40	1010	68	100	77	-	-
Vanuatu	77	225	50	141	39	178	5	0	1290	67	64x	106	-	-
Venezuela	115	75	25	56	21	22777	571	14	3020	73	91	94	11	58
Viet Nam	86	219	43	147	32	76548	1952	84	290	67	94	113	19	44
Yemen	49	340	100	230	76	16294	784	78	380	58	39x	79	-	-
Yugoslavia	127	120	21	87	18	10350	130	3	b	72	98	72	-	-
Zambia	12	213	202	126	112	8478	361	73	360	43	78	89	12	50
Zimbabwe	58	159	80	97	53	11682	437	35	610	49	85	116	10	62

#### **Regional summaries**

-													
Sub-Saharan Africa	257	170	154	105	592348	25218	4289	528	51	57	74	11	58
Middle East and North Africa	241	62	154	48	325808	10364	638	1798	66	59	92	-	-
South Asia	239	116	146	78	1291153	35361	4117	380	61	49	93	21	42
East Asia and Pacific	201	52	133	40	1818498	34141	1777	1193	68	84	116	17	46
Latin America and Caribbean	154	41	103	33	486711	11190	455	3681	70	87	109	9	61
CEE/CIS and Baltic States	101	35	76	29	475816	6603	233	2182	68	97	98	18	44
Industrialized countries	37	7	31	6	842707	9950	65	27086	78	98	104	18	40
Developing countries	216	96	138	65	4655054	119457	11434	1222	63	71	99	15	51
Least developed countries	281	168	171	108	610483	24219	4073	232	51	48	68	20	43
World	192	87	124	59	5833041	132827	11574	5051	64	75	100	18	42
0 12 2 1 2 12 12 12 12	100												

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

- Under-five mortality rate Probability of dying between birth and exactly five years of age expressed per 1,000 live births.
- Infant mortality rate Probability of dying between birth and exactly one year of age expressed per 1,000 live births.
- **GNP per capita** Gross national product (GNP) is the sum of gross value added by all resident producers, plus any taxes that are not included in the valuation of output, plus net receipts of primary income from non-resident sources. GNP per capita is the gross national product, converted to United States dollars using the World Bank Atlas method, divided by the mid-year population.
- Life expectancy at birth The number of years newborn children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth.
- Adult literacy rate Percentage of persons aged 15 and over who can read and write.
- Gross primary school enrolment ratio The number of children enrolled in primary school, regardless of age, divided by the population of the age group that officially corresponds to primary schooling.
- **Income share** Percentage of income received by the 20 per cent of households with the highest income and by the 40 per cent of households with the lowest income.

#### Main data sources

**Under-five and infant mortality rates –** UNICEF, United Nations Population Division and United Nations Statistics Division.

Total population - United Nations Population Division.

Births – United Nations Population Division.

Under-five deaths - UNICEF.

GNP per capita - World Bank.

Life expectancy - United Nations Population Division.

Adult literacy - United Nations Educational, Scientific and Cultural Organization (UNESCO).

**School enrolment** – United Nations Educational, Scientific and Cultural Organization (UNESCO).

Household income - World Bank.

Notes
 a: Range \$785 or less.
 Data not available.

 b: Range \$786 to \$3115.
 x
 Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

### Table 2: Nutrition

			% of c	hildren (1990-98) v	vho are:	% 0	f under-fives (19	190-97) suffering fr	rom:		% of
	Under-5 mortality rank	% of infants with low birthweight	exclusively breastfed	breastfed with complementary food	breastfeeding	underv moderate	weight	wasting moderate	stunting moderate	Total goitre rate (6-11 years) (%)	households consuming iodized salt
Afghanistan		<b>1990-97</b>	(0-3 months) 25	(6-9 months)	(20-23 months)	& severe	severe	& severe	& severe	<b>1985-97</b>	1992-98
Albania	4 89	20 7	- 25	-	-	48	-	25	52	20 41	-
	90	9	48	29	21	13	3	9	18	9	92
Algeria Andorra	30 171	-	40	- 25	-	-	-	-	-	-	52
	3	19	12	70	49	42	14	6	53	7	10
Angola Antigua and Barbuda	127	8	12	-	43	42 10x	14 4x	10x	0x	-	-
Argentina	118	7	-	-	-	-	4X	-	-	8	90
Armenia	103	7	21	34	-	-	-	-	-	40	-
Australia	171	6	-	-	-	-		-	-	40	-
Austria	181	6	-	-	_	-	-	-	-	-	
Azerbaijan	81	6	53	75	-	10	2	3	22	20	-
Bahamas	127	-	-	-	_	-	-	-	-	- 20	-
Bahrain	126	6	-	69	_	9	2	5	10	-	-
Bangladesh	44	50	52	69	90	56	21	18	55	50	78
Barbados	148	10	-	-	-	50 5x	1x	4x	7x	-	-
Belarus	140	-	-	-	-	xc -	-	4X	/X	- 22	37
	138	-	-	-	-	-	-	-	-	5	- 37
Belgium Belize	86	4	- 24	- 49	-	-	- 1	-	-	5 0	- 90
Benin	23	-	24 15	49 97	65	29	7	- 14	25	24	90 79
Bhutan	23 39	-	- 15	97	- 60		-		25 56x	24 14	82
Bolivia						38x		4x		5	92
	51	12	53	78	36	16	4	4	28	5	92
Bosnia and Herzegovina	142	-	-	-	-						
Botswana	78	11	39	-		17	5	11	29	8	27
Brazil	84	8	42	30	17	6	1	2	11	14x	95
Brunei Darussalam	154	-	-	-	-	-	-	-	-	-	-
Bulgaria	136	6	-	-	-	-	-	-	-	20	-
Burkina Faso	22	21	12	-		30	8	13	29	16	23
Burundi	17	-	89x	66x	73x	37	11	9	43	42	80
Cambodia	23 50	-	60 7	-	48 35	52	18 3	13 3	56 24	12 26	7
Cameroon		13		77		- 14	J -		24	- 20	86
Canada	163	6	-	-	-			-	-		-
Cape Verde	65	9	18	-	-	14	2	6	16	26	99
Central African Rep.	19	15	23	-	-	27	8	7	34	63	65
Chad	14	-	2	81	62	39	14	14	40	15	55
Chile	146	5	77	17	-	1	-	0	2	1	97
China	80	9	64	-	-	16	-	-	34	20	83
Colombia	103	9	16	61	17	8	1	1	15	7	92
Comoros	53	8	5	87	45	26	8	8	34	-	-
Congo	45	16	43x	95x	27x	17x	3x	4x	21x 45	8	-
Congo, Dem. Rep.	11	15	32	40	64	34	10	10		9	90
Cook Islands	103	1	-	-	-	-	-	-	-	-	-
Costa Rica	144 27	7 12	35 3	47	12 45	2	-	-	-	4	89
Côte d'Ivoire				65		24	6	8	24		-
Croatia	157	-	24	-	-	1	-	1	1	-	70
Cuba	159	7	76	66	-	9	-	3	-	10	45
Cyprus	157	-	-		-	-	-	-	-	-	-
Czech Rep.	163	6	-	-	-	1	0	2	2	-	-
Denmark	171	6	-	-	-	-	-	-	-	5	-
Djibouti	26	11	-	-	-	18 Ev	6	13	26	-	-
Dominica	132	10	-	-	-	5x	Ox	2x	6x	-	-
Dominican Rep.	75	13	25	47	7	6	1	1	11	5	13
Ecuador	90	13	29	52	34	17x	Ox	2x	34x	10	97
Egypt	65	10	53	37	-	15	4	6	25	5	0
El Salvador	95	11	20	71	28	11	1	1	23	25	91
Equatorial Guinea	20	-	-	-	-	-	-	-	-	-	20
Eritrea	40	13	66	45	60	44	17	16	38	-	80
Estonia	144	-	-	-	-	-	-	-	-	-	-
Ethiopia	18	16	74	-	35	48	16	8	64	31	0

### ...Table 2

			% of ch	uildren (1990-98) v	vho are:	% 0	f under-fives (19	90-97) suffering fr	om:		% of
	Under-5 mortality	% of infants with low birthweight	exclusively breastfed	breastfed with complementary food	still breastfeeding	underv moderate		wasting moderate	stunting moderate	Total goitre rate (6-11 years) (%)	households consuming iodized salt
	rank	1990-97	(0-3 months)	(6-9 months)	(20-23 months)	& severe	severe	& severe	& severe	1985-97	1992-98
Fiji	118	12	-	-	-	8	1	8	3	-	31
Finland	188	4	-	-	-	-	-	-	-	-	-
France	181	5	-	-	-	-	-	-	-	5x	-
Gabon	29	-	57	-	-	-	-	-	-	5	-
Gambia	55	-	-	8	58	26	5	-	30	-	0
Georgia	109	-	-	-	-	-	-	-	-	64	-
Germany	181	-	-	-	-	-	-	-	-	10	-
Ghana	47	8	19	63	48	27	8	11	26	10	10
Greece	159	6	-	-	-	-	-	-	-	10	-
Grenada	109	9	-	-	-	-	-	-	-	-	-
Guatemala	74	15	50	56	43	27	6	3	50	20	64
Guinea	13	13	52	-	15	-	-	12	29	55	37
Guinea-Bissau	7	20	-	-	-	23x	-	-	-	19	-
Guyana	57	15	-	-	-	12	-	12	10	-	-
Haiti	34	15	3	83	25	28	8	8	32	4x	10
Holy See	-	-	-	-	-	-	-	-	-	-	-
Honduras	81	9	42	69	45	18	3	2	40	9	85
Hungary	149	9	-	-	-	2x	Ox	2x	Зx	-	-
Iceland	181	-	-	-	-	-	-	-	-	-	-
India	45	33	51	31	67	53	21	18	52	9	70
Indonesia	68	8	47	85	63	34	8	13	42	28	62
Iran	96 27	10	66	-	41	16	3	7	19	30	94
Iraq	37	15	-	-	25	23	6	10	31	7	10
Ireland	163	4	-	-	-	-	-	-	-	-	-
Israel	171	7	-	-	-	-	-	-	-	-	-
Italy	171	5	-	-	-	-	-	-	-	20	-
Jamaica	149	10	-	-	-	10	1	4	6	-	100
Japan	171 118	7	- 32	- 48	- 13	- 9	-	- 2	-	-	- 75
Jordan Kazakhstan	84	-	12	40 61	21	9	2	3	16 16	- 20	53
	55	16	12	90	54	23	6	8	34	7	100
Kenya Kiribati	55 62	3	-	- 90	- 54	23 13x	-	0 11x	28x	-	100
Korea, Dem. People's Rep.	103	-	-	-	-	-	-	-	20%	-	5
Korea, Rep. of	103	- 9	-	-	-	-	-	-	-		J
Kuwait	146	7	-	-	-	6x	-	3x	12x	-	_
Kyrgyzstan	79	-	38	50	25	-	-	-	124	20	_
Lao People's Dem. Rep.	37	18	36	-	31	40	12	11	47	25	93
Latvia	132	-		-	-	40	-	-	4/	- 20	- 55
Lebanon	93	10	-	-	-	3	-	3	12	15	92
Lesotho	31	10	54	47	52	16	4	5	44	43	73
Liberia	6	-	-	47	25	-	-	-	-	45	-
Libya	115	7		-	-	5	-	3	15	6	90
Liechtenstein	163	-	-	-	-	-	-	-	-	-	-
Lithuania	143	-	-	-	-	-	-	-	-	-	-
Luxembourg	163	-	-	-	-	-	-	-	-	-	-
Madagascar	25	5	61	93	49	40	13	7	48	15	73
Malawi	8	20	11	78	68	30	9	7	48	13	58
Malaysia	149	8	-	-	-	19	1	-	-	20	-
Maldives	64	13	8	-	-	43	10	17	27	24	-
Mali	5	16	13	33	60	40	17	23	30	29	9
Malta	154	-	-	-	-	-	-		-		-
Marshall Islands	54	14	-	-	-	-	-	-	-		-
Mauritania	16	11	60	64	59	23	9	7	44	-	3
Mauritius	123	13	16	29	-	16	2	15	10	0	0
Mexico	96	7	38x	36x	21x	14x	-	6x	22x	3	99
Micronesia, Fed. States of	118	9	-	-	-	-	-	-	-	-	-
Moldova, Rep. of	102	4	-	-	-	-	-	-	-	-	-
Monaco	181	-	-		-	-	-		-	-	-

### Table 2: Nutrition

			% of children (1990-98) v		vho are:	% 0	of under-fives (19	190-97) suffering fr	rom:		% of
	Under-5 mortality rank	% of infants with low birthweight 1990-97	exclusively breastfed (0-3 months)	breastfed with complementary food (6-9 months)	still breastfeeding (20-23 months)		weight severe	wasting moderate & severe	stunting moderate & severe	Total goitre rate (6-11 years) (%) 1985-97	households consuming iodized salt 1992-98
Mongolia	27	7	93	99	74	10	-	1	22	31	62
Morocco	67	9	31	33	20	9	2	2	23	20	-
Mozambique	10	20	37	-	-	27	11	5	55	20	62
Myanmar	42	24	30	40	56	43	16	8	45	18	14
Namibia	62	16	22	65	23	26	6	9	28	35	59
Nauru	103	-	-	-	-	-	-	-	-	-	-
Nepal	48	-	83	63	88	47	16	11	48	44	93
Netherlands	171	-	-	-	-	-	-	-	-	3	-
New Zealand	163	6	-	-	-	-				5	-
Nicaragua	71	9	11	48	17	12	-	2	24	4	98
Niger	1	15	-	67	52	43	15	15	40	9	7
Nigeria	15	15	2	52	43	45 36	12	9	40	20	98
	-	-	-	- -		-	-	-	40	20	30
Niue					-				-	-	-
Norway	188	4	-	-	-	-	-	-	-	-	-
Oman Delviater	138	8	28	85	64	23	3	13	23	10	65
Pakistan	33	25	16	31	56	38	13	-	-	32	19
Palau	98	8	-	-	-	-	-	-	-	-	-
Panama	132	8	32	38	21	7	1	1	9	13	92
Papua New Guinea	43	23	75	74	66	30x	6x	6x	43x	30	-
Paraguay	99	5	7	59	15	4	1	0	17	49	79
Peru	72	11	63	83	43	8	1	1	26	36	93
Philippines	88	9	33	52	18	28	-	6	30	7	15
Poland	149	-	-	-	-	-	-	-	-	10	-
Portugal	159	5	-	-	-	-	-	-	-	15	-
Qatar	132	-	-	-	-	6	-	2	8	-	-
Romania	114	7	-	-	-	6	1	3	8	10	-
Russian Federation	115	6	-	-	-	3	1	4	13	-	30
Rwanda	21	17	90	68	85	27	11	9	42	26	95
Saint Kitts and Nevis	93	9	-	-	-	-	-	-	-	-	-
Saint Lucia	109	8		-	-	-	-	-	-	-	-
Saint Vincent/Grenadines	127	8	-	-	-	-	-	-	-	-	-
Samoa	76	6	-	-	-	-	-	-	-	-	-
San Marino	171	-	-	-	-	-	-	_	-	-	-
Sao Tome and Principe	59	7		-	-	16	5	5	26	-	-
Saudi Arabia	112	7	-	-	-	_	-	-	-	-	-
Senegal	36	4	16	69	50	22	-	7	23	12	9
Seychelles	138	10	-	-	-	6x	Ox	2x	5x		-
Sierra Leone	2	10	-	94	41	29	-	9	35	7	75
Singapore	188	7		54	-	25		5	-	1	75
Slovakia	149	-	-			-	-	-	-	-	
Slovenia	145	-				-			-		
Solomon Islands	1/1	- 20	-	-	-	- 21x	- /v	-			-
Solomon Islands Somalia	9	20		-	-	21X -	4x	7x -	27x	- 7	
			-	-							-
South Africa	69	-	-	-	-	9	1	3	23	2	40
Spain	181	4	-	-	-	-	-	-	-	10	-
Sri Lanka	136	25	24	60	66	34	-	14	18	14	47
Sudan	41	15	14x	45x	44x	34	11	13	33	20	0
Suriname	103	13	-	-	-	-	-	-	-	-	-
Swaziland	52	10	37	51	20	10x	-	1x	30x	-	26
Sweden	188	5	-	-	-	-	-	-	-	-	-
Switzerland	181	5	-	-	-	-	-	-	-	-	-
Syria	99	7	-	50	-	13	4	9	21	73	40
Tajikistan	61	-	-	-	-	-	-	-	-	20	20
Tanzania	30	14	41	93	53	27	8	6	42	37	74
TFYR Macedonia	123	-	8	-	-	-	-	-	-	19	100
Thailand	92	6	4	71	27	19	-	6	16	4	50
Togo	35	20	15	-	-	19	4	-	34	22	1

### ....Table 2

			% of cl	ildren (1990-98) v	vho are:	% of	f under-fives (19		% of		
	Under-5	% of infants with low	exclusively	breastfed with complementary	still	underv	veight	wasting	stunting	Total goitre rate (6-11 years)	households consuming
	mortality rank	birthweight 1990-97	breastfed (0-3 months)	food (6-9 months)	breastfeeding (20-23 months)	moderate & severe	severe	moderate & severe	moderate & severe	(%) 1985-97	iodized salt 1992-98
Trinidad and Tobago	141	10	10x	39x	16x	7x	0x	4x	5x	-	-
Tunisia	99	8	12	-	16	9	-	4	23	4x	98
Turkey	81	8	14	17	14	10	3	-	-	36	18
Turkmenistan	59	5	54	-	-	-	-	-	-	20	0
Tuvalu	72	3	-	-	-	-	-	-	-	-	-
Uganda	31	13	70	64	40	26	7	5	38	7	69
Ukraine	118	-	-	-	-	-	-	-	-	10	4
United Arab Emirates	154	6	-	52	-	14	3	15	17	-	-
United Kingdom	163	7	-	-	-	-	-	-	-	-	-
United States	159	7	-	-	-	1	0	1	2	-	-
Uruguay	127	8	-	-	-	5	1	1	8	-	-
Uzbekistan	70	-	4	-	35	19	5	12	31	18	0
Vanuatu	77	7	-	-	-	20x	-	-	19x	-	-
Venezuela	115	9	-	-	-	5	1	3	13	11	65
Viet Nam	86	17	-	-	-	41	9	14	44	20	65
Yemen	49	19	-	-	31	39	13	-	39	32	21
Yugoslavia	127	-	6	35	13	2	0	2	7	-	70
Zambia	12	13	27	-	43	24	5	4	42	51x	90
Zimbabwe	58	14	16	93	26	16	3	6	21	42	80

#### **Regional summaries** Sub-Saharan Africa Middle East and North Africa South Asia East Asia and Pacific Latin America and Caribbean CEE/CIS and Baltic States Industrialized countries Developing countries Least developed countries World

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

Low	birthw	/eight –	Less	than	2.500	arams.
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- **Underweight** Moderate and severe below minus two standard deviations from median weight for age of reference population; severe below minus three standard deviations from median weight for age of reference population.
- **Wasting** Moderate and severe below minus two standard deviations from median weight for height of reference population.
- **Stunting –** Moderate and severe below minus two standard deviations from median height for age of reference population.
- Total goitre rate Percentage of children aged 6-11 with palpable or visible goitre. This is an indicator of iodine deficiency, which causes brain damage and mental retardation.

#### Main data sources

Low birthweight - World Health Organization (WHO) and UNICEF.

- Breastfeeding Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), World Health Organization (WHO) and UNICEF.
- Underweight, wasting and stunting Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), World Health Organization (WHO) and UNICEF.

Salt iodization - Multiple Indicator Cluster Surveys (MICS) and UNICEF.

Goitre rate - World Health Organization (WHO) and UNICEF.

x Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

### Table 3: Health

	% of population % of population with access to with access to						% of routine EPI vaccines financed by	% fully immunized 1995-97						
	Under-5	v	safe wate			quate sanita		government				1333-37		ORT
	mortality rank	total	1990-97 urban	rural	total	1990-97 urban	rural	1995-97 	тв	1-year-o	old children polio	measles	pregnant women tetanus	use rate (%) 1990-97
Afghanistan	4	12	39	5	8	38	1	0	66	45	45	58	3	36
Albania	89	-	-	-	-	-	-	0	94	99	99	95	50	-
Algeria	90	78	91	64	91	99	80	-	94	79	79	74	52	98
Andorra	171	-	-	-	-	-	-	-	-	90	90	90	-	-
Angola	3	31	46	22	40	62	27	-	68	41	38	78	53	-
Antigua and Barbuda	127	-	-	-	96	-	-	100	-	100	100	93	-	-
Argentina	118	71	77	29	68	73	37	100	100	86	92	92	63	-
Armenia	103	-	-	-	-	-	-	5	72	89	95	92	-	33
Australia	171	-	-	-	-	-	-	-	-	86	-	87	-	-
Austria	181	-	-	-	-	-	-	-	-	90	95	90	-	-
Azerbaijan	81	-	-	-	-	-	-	-	94	95	98	97	-	-
Bahamas	127	94	98	75	82	98	2	100	-	86	86	93	75x	-
Bahrain	126	94	94	-	97	97	-	-	-	98	98	95	56	39
Bangladesh	44	95	99	95	43	83	38	29	91	68	68	62	86	61
Barbados	148	100	100	100	100	100	100	100	-	96	96	92	100	-
Belarus	138	-	-	-	-	-	-	100	98	47	47	74	-	-
Belgium	163	-	-	-	-	-	-	-	-	62	72	64	-	-
Belize	86	83	100	69	57	23	87	100	95	86	85	98	88	-
Benin	23	56	46	71	27	57	8	15	89	78	78	82	73	33
Bhutan	39	58	75	54	70	90	66	0	92	87	87	84	70	85
Bolivia	51	63	86	32	58	74	37	65	93	82	82	98	75	41
Bosnia and Herzegovina	142	-	-	-	-	-	-	-	97	79	80	85	-	-
Botswana	78	90	100	88	55	91	41	100	59	76	80	79	49	43
Brazil	84	76	88	25	70	80	30	100	100	71	84	100	45	54
Brunei Darussalam	154	-	-	-	-	-	-	-	99	99	99	98	76	-
Bulgaria	136	-	-	-	-	-	-	-	97	94	96	93	-	-
Burkina Faso	22	42	66	37	37	41	33	100	46	28	28	33	21	100
Burundi	17	52	92	49	51	60	50	-	71	60	60	50	33	38
Cambodia	23	30	-	25	19	-	9	0	82	70	70	68	31	57
Cameroon	50	50	57	43	50	64	36	27	53	44	47	43	32	43
Canada	163	-	-	-	-	-	-	-	-	93x	89x	98x	-	-
Cape Verde	65	51	70	34	24	40	10	100	80	78	77	82	55	83
Central African Rep.	19	38	55	21	27	38	16	10	94	53	51	46	15	100
Chad	14	24	48	17	21	73	7	100	36	16	15	17	24	29
Chile	146	91	99	41	-	90	-	100	98	91	91	92	-	-
China	80	67	97	56	24	74	7	100	96	96	97	96	13	85
Colombia	103	85	97	56	85	97	56	100	98	84	85	76	57	53
Comoros	53	53	76	45	23	40	16	-	55	48	48	49	15	32
Congo Congo, Dem. Rep.	45	34	53 89	7	69	-	-	0	29	23	21	18	30	41
0 1	11	42		26	18	53	6	-	91	71	73	63	80	90
Cook Islands Costa Rica	103 144	95 96	100 100	95 92	95 84	- 95	- 70	50 100	84 91	91 91	91 93	86 99	90 90	- 31
Côte d'Ivoire	144	96 42	56	92 32	84 39	95 71	70 17	100	73	91 70	93 70	99 68	90 44	73
Croatia	157	42	00	32	- 39	/1	-	100	73 98	92	70 92	91	44 91	73 5
Cuba	157	93	96	85	66	71	51	97	98	92	92	100	91 61x	5
Cyprus	159	93 100	100	100	97	96	100	- 97	- 99	98	97	90	57x	-
Cyprus Czech Rep.	163	-	-	-	- 97	- 90	-	-	97	98	90	90	5/X	-
Denmark	103	-	-	-	-	-	-	-	97	90 89x	97 100x	97 84	-	-
Djibouti	26	90	77	100	55	64	24	-	58	69x 49	49	47	47	-
Dominica	132	90	97	95	55 80	80	24 85	- 100	100	49	49	47	47	-
Dominican Rep.	75	65	80	- 95	78	76	83	100	88	80	79	80	77	39
Ecuador	90	68	80	- 49	76	95	49	100	100	76	73	75	3	64
Egypt	90 65	87	97	49 79	88	95	49 79	100	98	94	94	92	61	95
El Salvador	95	66	84	40	90	98	80	100	93	94 97	96	97	69	69
Equatorial Guinea	20	95	88	100	54	61	48	-	99	81	81	82	70	-
Eritrea	40	22	60	8	13	48	40	20	67	60	60	53	32	- 38
Estonia	144	-	-	-	-	40	-	-	99	85	86	88	-	-
Ethiopia	144	- 25	- 91	- 19	- 19	- 97	- 7	-	90	63	64	52	- 40	- 95
Luiopia	10	20	51	19	13	3/	/	U	30	υJ	04	υZ	40	30

### ...Table 3

		% of population % of population EPI vaccines with access to with access to financed by safe water adequate sanitation government					financed by			ORT				
	Under-5 mortality		1990-97			1990-97		1995-97		1-year-o	old children		pregnant women	
	rank	total	urban	rural	total	urban	rural	total	ТВ	DPT	polio	measles	tetanus	1990-9
Fiji	118	77	-	-	92	100	85	50	95	86	88	75	100	-
Finland	188	-	-	-	-	-	-	-	100	100	100	98	-	-
France	181	-	-	-	-	-	-	-	83	96	97	97	83	-
Gabon	29	67	80	30	-	72	-	-	72	54	54	32	4	25
Gambia	55	69	80	65	37	83	23	0	99	96	98	91	86	99
Georgia	109	-	-	-	-	-	-	0	76	92	98	95	-	14
Germany	181	-	-	-	-	-	-	-	-	45	80	75	80	-
Ghana	47	65	88	52	55	62	44	4	72	60	61	59	87	93
Greece	159	-	-	-	-	-	-	-	70	85	95	90	-	-
Grenada	109	-	-	-	-	-		100	-	95	95	92	80	-
Guatemala	74	77	76	78	83	95	74	100	87	83	83	74	38	22
Guinea	13	46	69	36	31	54	19	-	69	53	53	56	45	31
Guinea-Bissau	7	43	32	67	46	-	-	0	82	63	60	51	46	-
	57	45 91	96	85		90	85	100	94	88	89		71	-
Guyana Hoiti		37	96 50		88							82	38	
Haiti	34			28	25	49	17	0	40	35	32	30		31
Holy See	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras	81	76	-	62	74	-	57	100	98	94	93	89	100	32
Hungary	149	-	-	-	-	-	-	-	100	100	100	100	-	-
Iceland	181	-	-	-	-	-	-	-	98	98x	99	98	-	-
India	45	81	85	79	29	70	14	100	96	90	91	81	80	67
Indonesia	68	75	91	66	59	77	49	100	100	91	90	92	78	97
Iran	96	90	98	82	81	86	74	100	99	97	97	96	76	37
Iraq	37	81	96	48	75	93	31	0	97	92	92	98	56	67
Ireland	163	-	-	-	-	-	-	-	-	-	63x	-	-	-
Israel	171	-	-	-	-	-	-	-	-	92	93	94	-	-
Italy	171	-	-	-	-	-	-	-	-	92	93	94	-	-
Jamaica	149	86	-	-	89	100	80	100	97	90	90	88	82	-
Japan	171	-	-	-	-	-	-	-	91x	100	98	94	-	
Jordan	118	98	-	-	77	-	-	100	24	96	96	90	40	41
Kazakhstan	84	93	99	84	99	100	98	37	99	97	100	92	-	31
Kenya	55	53	67	49	77	69	81	0	42	36	36	32	21	76
Kiribati	62	-	70	80	-	45	54	100	100	91	93	82	41	-
Korea, Dem. People's Rep.	103	81	-	-	-		-	100	99	100	100	100	80	-
Korea, Rep. of	105	93	100	76	100	100	100		90	80	81	85		-
								-						-
Kuwait	146	-	-	-	-	100x	-	100	-	96	100	95	21	-
Kyrgyzstan	79	71	-	-	94	-	-	-	99	95	95	85	-	98
Lao People's Dem. Rep.	37	44	-	-	18	-	-	0	58	60	69	67	32	32
Latvia	132	-	-	-	-	-	-	-	100	75	76	97	64	-
Lebanon	93	94	96	88	63	81	8	75	-	92	92	89	-	82
Lesotho	31	62	91	57	38	56	35	25	46	50	48	43	10	84
Liberia	6	46	79	13	30	56	4	0	38	26	25	28	35	94
Libya	115	97	97	97	98	99	94	-	99	96	96	92	45x	49
Liechtenstein	163	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	143	-	-	-	-	-	-		98	90	95	96	-	-
Luxembourg	163	-	-	-	-	-	-	-	58	94	98	91	-	-
Madagascar	25	26	68	12	40	68	30	10	64	46	45	39	35	23
Malawi	8	47	95	40	3	18	1	2	100	95	94	87	15	70
Malaysia	149	78	96	66	94	94	94	100	100	91	90	89	81	-
Maldives	64	60	98	50	44	98	26	6	99	97	97	96	96	-
Mali	5	66	87	55	6	12	3	65	76	74	52	56	32	29
Malta	154	-	-	- 55	-	-	-	-	96	84	92	51	-	- 25
Marshall Islands		- 82					- 57	100	90 94		92 71			
	54		82	-	-	88		100		78		52	15x	-
Mauritania	16	74	88	59	32	44	19	0	69	28	28	20	63	51
Mauritius	123	98	95	100	100	100	100	100	84	87	87	84	78	-
Mexico	96	85	-	-	72	-	-	100	99	95	95	91	70	81
Micronesia, Fed. States of	118	22	-	-	39	-	-	100	48	75	75	74	44	-
Moldova, Rep. of	102	55	98	18	50	90	8	36	99	97	98	99	-	-
Monaco	181	-	-	-	-	-	-	-	90	99	99	98x	-	-

### Table 3: Health

		%	of populati	on				% of routine EPI vaccines								
		v	ith access safe water	to		ith access t uate sanita		financed by government		% fully i	mmunized 1	1995-97		ORT		
	Under-5 mortality		1990-97			1990-97		1995-97		1-year-o	ld children		pregnant women			
	rank	total	urban	rural	total	urban	rural	total	ТВ	DPT	polio	measles	tetanus	1990-97		
Mongolia	27	40	73	3	86	99	74	-	96	92	92	91	-	-		
Morocco	67	65	98	34	58	94	24	100	94	95	95	92	42	29		
Mozambique	10	63	-	-	54	-	-	0	79	59	55	57	68	49		
Myanmar	42	60	78	50	43	56	36	0	94	90	90	88	83	96		
Namibia	62	83	100	71	62	93	20	100	65	65	65	58	78	100		
Nauru	103	-	-	-	-	-	-		78	50	36	100	-	-		
Nepal	48	71	93	68	16	28	14	50	96	78	78	85	19	29		
Netherlands	171	-	-	-	-	-	-		-	95	95	96	-	-		
New Zealand	163	97	100	82	-	-	-	-	20x	86	100	100	-	-		
Nicaragua	71	62	88	32	35	34	35	100	100	94	100	94	95	54		
Niger	1	48	76	44	17	79	5	80	44	28	28	42	19	85		
Nigeria	15	49	58	40	41	50	32	100	29	21	25	38	23	86		
Niue	-	100	-	-	100	100	100	25	100	100	100	100	40	-		
Norway	188	-	-	-	-	-	-	-	-	92x	92x	93x	-	-		
Oman	138	85	-	-	78	90	57	100	96	99	99	98	98	61		
Pakistan	33	79	89	73	56	93	39	100	90	74	74	74	57	97		
Palau	98	88	-	-	98	-	-	-	0	91	90	83	55	-		
Panama	132	93	-	-	83	-	-	100	99	95	99	92	24	94		
Papua New Guinea	43	32	78	23	83	93	80	90	68	45	35	41	64	-		
Paraguay	99	60	-	-	41	65	14	90	87	82	82	61	32	33		
Peru	72	67	84	33	72	89	37	90	98	98	97	94	57	55		
Philippines	88	84	93	80	75	89	63	100	82	70	67	72	46	87		
Poland	149	-	-	-	-	-	-	-	94	95	95	91	-	-		
Portugal	159	-	-	-	-	-	-	-	91	95	99	94	-	-		
Qatar	132	-	100	-	97	100	85	-	99	92	92	87	-	71		
Romania	114	-	-	-	-	-	-	100	100	97	97	97	-	-		
Russian Federation	115	-	-	-	-	-	-	100	99	96	98	91	-	-		
Rwanda	21	-	-	79	-	-	85	-	79	77	77	66	43	47		
Saint Kitts and Nevis	93	100	100	100	100	98	100	100	99	100	100	97	-	-		
Saint Lucia	109	85	-	-	-	-	-	100	100	98	98	95	-	-		
Saint Vincent/Grenadines	127	89	100	85	98	100	100	100	98	100	100	100	-	-		
Samoa	76	68	-	-	-	100	95	30	99	99	99	99	96	-		
San Marino	171	-	-	-	-	-	-	-	97x	98x	100x	96x	-	-		
Sao Tome and Principe	59	82	-	-	35	-	-	-	70	73	73	60	65	74		
Saudi Arabia	112	95x	100x	74x	86x	100x	30x	-	99	92	92	87	60	58		
Senegal	36	63	90	44	39	71	15	100	80	65	65	65	34	39		
Seychelles	138	-	-	-	-	-	-	43	100	98	98	100	100	-		
Sierra Leone	2	34	58	21	11	17	8	3	38	26	28	26	11	-		
Singapore	188	100x	100x	-	-	-	-	-	98	93	94	89	-	-		
Slovakia	149	-	-	-	-	-	-	-	90	98	98	98	-	-		
Slovenia	171	-	-	-	-	-	-	-	98	91	98x	92	-	-		
Solomon Islands	112	-	80	62	-	60	9	60	73	72	70	68	63	-		
Somalia	9	26	-	-	-	-	-	0	37	19	19	25	30	-		
South Africa	69	87	99	70	87	92	80	100	95	73	73	76	26	-		
Spain	181	-	-	-	-	-	-	-	-	88	90	90x	-	-		
Sri Lanka	136	57	88	52	63	68	62	100	96	97	98	94	89	34		
Sudan	41	73	-	-	51	-	-	13	79	75	75	71	46	31		
Suriname	103	-	-	-	-	-	43	100	-	85	81	78	99x	-		
Swaziland	52	50	-	-	59	-	-	-	85	82	81	82	85	99		
Sweden	188	-	-	-	-	-	-	-	12	99	99	96	-	-		
Switzerland	181	-	-	-	-	-	-	-	-	-	-	-	-	-		
Syria	99	86	95	77	67	96	31	100	100	95	95	93	92	27		
Tajikistan	61	60	82	49	-	46	-	-	99	95	92	95	-	-		
Tanzania	30	66	92	58	86	98	83	0	82	74	73	69	27	50		
TFYR Macedonia	123	-	-	-	-	-	-	14	97	97	97	98	91x	-		
Thailand	92	81	88	73	96	97	94	100	98	94	94	91	88	95		
Togo	35	55	82	41	41	76	22	0	53	33	33	38	65	94		
Tonga	123	95	-	-	95	-	-	50	100	95	95	97	92	-		

### ....Table 3

	Under-5	mortality			w	of populatio vith access t quate sanita 1990-97	0	% of routine EPI vaccines financed by government 1995-97	% fully immunized 1995-97 					
	mortality rank	total	urban	rural	total	urban	rural	total	тв	DPT	polio	measles	women tetanus	(%) 1990-97
Trinidad and Tobago	141	97	99	91	79	99	98	100	-	90	91	88	19x	-
Tunisia	99	98	100	95	80	96	52	100	93	96	96	92	80	41
Turkey	81	49	66	25	80	95	56	100	73	79	79	76	32	100
Turkmenistan	59	74	-		91	-		16	97	98	99	100	-	98
Tuvalu	72	100	-	-	78	-	-	70	100	77	78	100	53	-
Uganda	31	46	77	41	57	75	55	35	84	58	59	60	45	49
Ukraine	118	-	-	-	-	-	-	-	95	96	97	97	-	-
United Arab Emirates	154	97	-	-	92	-	-	90	98	94	94	35	-	42
United Kingdom	163	-	-	-	-	-	-	-	99	95	96	95	-	-
United States	159	-	-		-	-	-	-	-	94x	84x	89x	-	-
Uruguay	127	-	95	-	-	98	-	100	99	88	88	80	13x	-
Uzbekistan	70	90	99	88	100	100	99	33	97	96	97	88	-	37
Vanuatu	77	77	96	67	28	72	18	100	60	66	62	59	15	-
Venezuela	115	79	80	75	58	64	30	100	89	60	76	68	72	-
Viet Nam	86	43	47	42	21	43	15	58	96	95	95	96	84	-
Yemen	49	61	88	55	24	47	17	42	54	40	46	43	17	92
Yugoslavia	127	76	98	57	69	92	49	100	87	94	95	94	-	99
Zambia	12	38	84	10	71	94	57	10	81	70	70	69	37	57
Zimbabwe	58	79	99	69	52	96	32	100	82	78	79	73	70	60

#### **Regional summaries**

•													
Sub-Saharan Africa	50	75	39	44	66	34	48	66	51	52	52	39	72
Middle East and North Africa	83	97	70	75	92	60	77	91	88	88	86	59	59
South Asia	80	86	78	33	74	20	89	94	84	85	78	74	69
East Asia and Pacific	68	95	57	36	77	19	92	95	92	93	93	36	87
Latin America and Caribbean	77	87	42	71	81	44	96	96	82	87	89	57	58
CEE/CIS and Baltic States	-	-	-	-	-	-	-	92	91	92	89	-	-
Industrialized countries	-	-	-	-	-	-	-	-	90	89	90	-	-
Developing countries	71	89	62	44	78	25	82	88	80	81	79	52	73
Least developed countries	56	82	50	36	66	28	19	79	62	62	60	48	64
World	72	90	62	44	78	25	82	89	81	82	80	52	73

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

- **Government funding of vaccines** Percentage of vaccines routinely administered in a country to protect children against TB, DPT, measles and polio that are financed by the national government.
- EPI Extended Programme on Immunization: The immunizations in this programme include those against TB, DPT, polio and measles, as well as protecting babies against neonatal tetanus by vaccination of pregnant women. Other vaccines (e.g. against hepatitis B or yellow fever) may be included in the programme in some countries.
- DPT Diphtheria, pertussis (whooping cough) and tetanus.
- **ORT use** Percentage of all cases of diarrhoea in children under five years of age treated with oral rehydration salts and/or recommended home fluids.

#### Main data sources

Access to safe drinking water and adequate sanitation facilities – Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), World Health Organization (WHO) and UNICEF.

#### Government funding of vaccines - UNICEF.

- Immunization Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), World Health Organization (WHO) and UNICEF.
- **ORT use** Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), World Health Organization (WHO) and UNICEF.

Notes - Data not available.

x Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

### Table 4: Education

			Adult lite	eracy rate		р	o. of sets er 1000 pulation	Prin	nary school	enrolment	ratio	Net primary school attendance (%)		% of primary school entrants	Secondary school enrolment ratio 1990-96	
	Under-5 mortality		980		995		1995		6 (gross)		95 (net)	199	13-97	reaching grade 5	(gi	ross)
	rank	male	female	male	female	radio	television	male	female	male	female	male	female	1990-95	male	female
Afghanistan	4	33	6	47	15	122	10	64	32	42	15	36	11	43x	32	11
Albania	89	-	-	-	-	207	103	100	102	95	97	-	-	82	35	35
Algeria	90	55	24	74	49	238	89	112	100	99	91	95	90	95	66	59
Andorra	171	-	-	-	-	212	368	-	-	-	-	-	-	-		-
Angola	3	16x	7x	56x	29x	34	7	95	88	-	-	-	-	34	-	-
Antigua and Barbuda	127	-	-	-	-	439	424	-	-	-	-	-	-	-	-	-
Argentina	118	94	94	96	96	676	219	114	113	95x	95x	-	-	-	73	81
Armenia	103	-	-	100	99	5	224	86	90	-	-	-	-	-	85	91
Australia	171	-	-	-	-	1304	495	108	108	98	98	-	-	99	147	146
Austria	181	-	-	-	-	620	497	101	101	100	100	-	-	99	107	102
Azerbaijan	81	-	-	100	99	20	33	100	108	-	-	-	-	-	76	80
Bahamas	127	98	96	99	98	735	229	95	94	92x	96x	-	-	78	88	91
Bahrain	126	80	60	89	79	575	467	107	109	99	100	-	-	94	95	99
Bangladesh	44	41	17	49	26	47	6	74	64	66x	58x	75	76	47	28	14
Barbados	148	97	94	98	97	900	284	90	91	78x	78x	-	-	-	90x	80x
Belarus	138	-	-	100	99	285	227	98	95	97	94	-	-	100	92	96
Belgium	163	99x	99x	-	-	790	454	103	102	98	98	-	-	-	140	148
Belize	86	-	-	70x	70x	587	178	124	118	100	98	-	-	70	47	52
Benin	23	28	10	49	26	92	6	92	52	74	43	52	34	61	23	10
Bhutan	39	41	15	56	28	17	6	31x	19x	-	-	-	-	82	7x	2x
Bolivia	51	81	59	91	76	672	115	99	90	95x	87x	90x	89x	60	40	34
Bosnia and Herzegovina	142	-	-	-	-	235	-	-	-	-	-	-	-	-	-	-
Botswana	78	70	43	81	60	131	19	114	117	94	99	-	-	89	54	58
Brazil	84	76	73	83	83	399	220	100x	96x	-	-	93x	94x	71	31x	36x
Brunei Darussalam	154	86	68	93	83	273	239	113	107	91	91	-	-	95	75	81
Bulgaria	136	-	-	99	98	471	378	98	96	98	96	-	-	95	78	77
Burkina Faso	22	19	4	30	9	28	6	46	30	37	24	38	28	79	11	6
Burundi	17	37	12	49	23	68	2	77	63	56x	48x	-	-	74	8	5
Cambodia	23	74x	23x	80x	53x	112	9	134	109	-	-	-	-	50	34	20
Cameroon	50	59	30	75	52	152	24	93	84	81x 96	71x	69x	60x	60	32	22
Canada Cana Varda	163	-	-	-	-	1053	714	103	101		94	-	-	99 60v	106	105
Cape Verde Central African Rep.	65 19	64	38	81	64	179	4	132	129	100 65 v	100			60x	28	26
		41 47	19	69	52	75		71 74	46	65x	43x	70	55	24	15	6
Chad	14		19	62	35	248	215		36	52x	23x			28	15	4
Chile	146	92	91	95	95	348	215	100	98	87	85	-	-	92	66	73
China	80	79	53	90	73	185	205	121	120	99	98	95	94	92	73	66
Colombia	103 53	87	87	91	91	564	117	115	114	-	-	90	91	58	62	72
Comoros		56	40	64	50	137	1	85	71	58	48	45x	42x	78	21	
Congo Congo, Dem. Rep.	45	65 75	40	83 87	67 68	116 08	8	119	109	99x	93x	-	-	54 64	62 32	45 10
0.1	11		45	87	68 99x	98 705	2 184	86	59	71	50	59	53	64	32	19
Cook Islands Costa Rica	103	- 02	- 91	- 95		705		- 107	- 106		- 87v			-	- 48	- 52
Côte d'Ivoire	144 27	92 34			95 30	263	143 62			86x	87x	- 50v	- /6x	89		
			14	50	30 07	153 266	62 255	79 87	58 86	-	-	59x	46x	73	30 81	15 83
Croatia	157	- 91	-	98	97			87 107	86	83	82	-	-	98	81	
Cuba	159		87	96 08v	95 01v	351	228	107	103	99	99			94	78	82
Cyprus	157	-	-	98x	91x	309	322	100	100	96	96	-	-	100	96	99
Czech Rep.	163	-	-	-	-	638	482	103	102	98	98	-	-	100	94 116	97 120
Denmark	171	-	-	-	-	1034 on	574	98	99	98 27	99	-	- 62v	100	116	120
Djibouti	26	45	18	60	33	80	43	44	33	37	28	73x	62x	94	15	11
Dominica Dominican Bon	132	-	-	-	-	634	70	-	-	-	-	-	-	84	-	-
Dominican Rep.	75	75	74	82	82	176	93	103	104	79	83	91x	93x	58	34	47
Ecuador	90	86	79	92	88	332	96	109	108	91	92	-	-	77	50	50
Egypt	65	54	26	64	39	312	110	107	93	95	82	83	72	98	80	68
El Salvador	95	66	60	74	70	459	689	88	89	78	80	-	-	58	30	34
Equatorial Guinea	20	77	45	90	68	425	10	-	-	-	-	-	-	-	-	-
Eritrea	40		-	-	-	98	0	63	51	33	30	39x	35x	79	22	16
Estonia	144	-	-	98	98	491	383	110	108	93	94	-	-	100	82	90
Ethiopia	18	32	14	46	25	193	4	39	24	28	19	-	-	51	12	10

			Adult lite	eracy rate		р	o. of sets er 1000	Prin	nary school	enrolment	ratio	scl	rimary 1001	% of primary school	enrolm	ary school nent ratio
	Under-5 mortality	19	980	1	995		pulation 1995	1990-96	6 (gross)	1993-9	95 (net)		ance (%) 13-97	entrants reaching grade 5		90-96 ross)
	rank	male	female	male	female	radio	television	male	female	male	female	male	female	1990-95	male	female
Fiji	118	87	79	94	89	612	18	128	127	99x	100x	-	-	87	64	65
Finland	188	-	-	-	-	1008	519	100	100	99	99	-	-	100	108	124
France	181	99x	98x	-	-	895	589	107	105	99	99	-	-	99	112	111
Gabon	29	54	28	74	53	181	47		-	-	-	87	86	50x		-
Gambia	55	37	13	53	25	164	3	78	67	64x	46x	51	43	87	28	15
Georgia	109	-	-	100	99	551	468	81	82	81	82	-	-	98	74	72
Germany	181	-	-	-	-	944	564	102	101	100	100	-	-	100	104	102
Ghana	47	59	31	76	54	231	92	83	70	-		70	69	80	45	29
Greece	159	93x	76x	98	95	430	220	98	98	91	91	-	-	100	99	90
Grenada	109	-	-	-	-	598	348	-	-	-	-	-	-	-	-	-
Guatemala	74	56	41	63	49	71	56	90	78	-	-	61x	55x	-	25	23
Guinea	13	34	11	50	22	44	9	63	34	36x	18x	39	26	80	18	6
Guinea-Bissau	7	53	26	68	43	42	-	81	47	58x	32x	55	20	20x	11x	4x
	57	96	93	99	98	494	48	95	93	90	89	-	-	93	68	85
Guyana Haiti	34	36	29	48	42	494 53	40 5	95 58	93 54	90 25x	09 26x		69x	93 47	23	22
		30				53		20	54	25X	20X	68x	DAX		23	22
Holy See	-	-	-	-	-	400	-	110			-	-	-	-		
Honduras	81	64	61	73	73	409	88	110	112	89	91	-	-	60	29	37
Hungary	149	98x	98x	99	99	643	433	97	97	92	94	-	-	98	79	83
Iceland	181	-	-	-	-	799	353	99	95	-	-	-	-	-	104	102
India	45	55	25	66	38	81	51	110	90	-	-	75x	61x	62	59	38
Indonesia	68	78	58	90	78	149	66	117	112	99	95	91	92	90	52	44
Iran	96	61	37	78	59	228	63	103	96	85x	72x	99	93	90	76	62
Iraq	37	55	25	71	45	224	80	97	83	83x	74x	88	80	72	53	34
Ireland	163	-	-	-	-	649	409	104	103	100	100	-	-	100	111	117
Israel	171	93x	83x	98	94	489	290	96	96	-	-	-	-	100	84	89
Italy	171	95x	92x	99	98	822	446	99	97	-	-	-	-	100	87	88
Jamaica	149	73	81	81	89	438	162	110	109	100x	100x	-	-	96	62	70
Japan	171	100x	99x	-	-	916	684	102	102	100	100	-	-	100	98	100
Jordan	118	82	54	93	79	251	80	94	95	89x	89x	97x	97x	98	63x	62x
Kazakhstan	84	-	-	100	99	384	256	96	96	-	-	-	-	-	82	83
Kenya	55	72	44	86	70	96	18	85	85	92x	89x	85x	83x	68	26	22
Kiribati	62	-	-	-	92x	212	9	-	-	-	-	-	-	90		-
Korea, Dem. People's Rep.	103	-	-	-	-	136	48	108x	101x	-	-	-	-	-	-	-
Korea, Rep. of	171	97	90	99	97	1024	334	100	101	93	94	-	-	100	101	101
Kuwait	146	73	59	82	75	473	370	73	72	65	65	-	-	99	64	64
Kyrgyzstan	79	-	-	99	95	114	34	108	105	99	95	86x	87x	92	76	85
Lao People's Dem. Rep.	37	56	28	69	44	129	9	123	91	75	61	70	67	53	31	19
Latvia	132	-	-	100	100	678	477	91	86	86	82	-	-	96	83	87
Lebanon	93	91	82	95	90	891	366	111	108	-	-	-		-	77	84
Lesotho	33 31	71	45	81	62	37	12	92	105	- 60	71	- 71x	- 79x	79	22	34
Liberia	6	38	40	54	22	318	26	92 51x	28x	-	-	59x	79x 53x	-	22	34
Libya	115	38 73	31	54 88	63	231	102	51X 110	28x 110	- 98x	- 96x	03X	- 53X	-	- 95	- 95
												-	-	-	90	30
Liechtenstein	163	-	-	100x	100x	665	339	-	-	-	-	-	-	-	-	-
Lithuania	143	-	-	100	99	401	415	97	95	-	-	-	-	98	83	86
Luxembourg	163	-	-	-	-	639	381	88	94	80x	82x	-	-	-	72	76
Madagascar	25	56x	43x	60	32	192	20	73	70	64x	63x	62x	61x	28	14	14
Malawi	8	64	28	72	42	256	-	142	128	100	100	83	83	94	7	4
Malaysia	149	80	60	89	78	432	164	92	92	91	92	-	-	94	56	61
Maldives	64	91	89	93	93	118	26	136	132	-	-	-	-	93	49	49
Mali	5	20	9	39	23	46	2	41	27	30	19	45	36	72	12	6
Malta	154	-	-	91	92	545	749	111	105	100	99	-	-	97	93	86
Marshall Islands	54	-	-	-	90x	-	-	-	-	-	-	-	-	-	-	-
Mauritania	16	41	19	50	26	150	25	85	72	64	55	55	53	63	19	11
Mauritius	123	82	67	87	79	367	222	107	106	96	96	-	-	99	60	64
Mexico	96	86	80	92	87	263	219	116	113	-	-	-	-	84	58	59
Micronesia, Fed. States of	118	-	-	-	79x	-	-	-	-	-	-	-	-	-	-	-
Moldova, Rep. of	102	-	-	98	99	699	273	95	93	-	-	-	-	93	78	81
						1019	750							98		

### Table 4: Education

			Adult lite	eracy rate		p	. of sets er 1000 pulation	Prim	nary school	enrolment	ratio	scl	rimary hool ance (%)	% of primary school entrants	enrolm	ary school ient ratio 30-96
	Under-5 mortality		980		995		1995		i (gross)		95 (net)	199	13-97	reaching grade 5	(gr	ross)
	rank	male	female	male	female	radio	television	male	female	male	female	male	female	1990-95	male	female
Mongolia	27	82	63	89	77	134	45	87	90	78	81	-	-	-	50	68
Morocco	67	42	16	57	31	226	94	94	71	81	62	61x	45x	78	44	33
Mozambique	10	44	12	58	23	38	4	70	50	45	35	54x	50x	47	9	5
Myanmar	42	86	68	89	78	89	5	105	102	-	-	85	85	-	29	30
Namibia	62	-	-	78x	74x	140	25	132	134	86x	93x	74x	79x	82	57	67
Nauru	103	-	-	-	-	580	-	100	-	-	-	-	-	-	-	-
Nepal	48	31	7	41	14	36	5	129	89	80x	41x	80	60	52	49	25
Netherlands	171	-	-	-	-	937 997	497	108	106	99	99	-	-	96	143	136
New Zealand	163 71	- 61	-	65	- 67	280	514	105 109	104 112	100 82	100		-	90 54	118 43	116 50
Nicaragua	1	14	61 3	21	7	68	73 11	36	22	02 32x	85 18x	- 34x	- 19x	54 77	43 9	4
Niger	15	47	23	67	47	197	55	100	79	-	10X	60	58	80	33	28
Nigeria Niue	-	47	-	-	47 99x	564	- 55	-	75	-	-	-	50	-	-	-
Norway	- 188		-	-	- 33%	808	433	- 99	- 99	- 99	- 99		-	100	- 119	113
Oman	138		-	71x	46x	580	657	82	78	72	70		-	96	68	64
Pakistan	33	- 38	- 15	50	40x 24	92	20	101	45	12	70	- 71	- 62	90 48	33	17
Palau	98	-	-	-	24 97x	52	- 20	-	40	-	-	-	02	40	-	-
Panama	132	- 86	85	- 91	90	- 228	175	- 108	- 104	- 91x	- 92x	-	-	82	60	65
Papua New Guinea	43	70	45	81	63	77	4	87	74	79x	67x	32x	31x	59	17	11
Paraguay	99	90	84	94	91	180	93	110	107	89	89	93x	93x	71	38	39
Peru	72	89	71	95	83	259	106	125	121	91	90	87x	87x	-	72	67
Philippines	88	91	89	95	94	147	49	110	112	97x	96x	89	91	70	64x	65x
Poland	149	99x	97x	-	-	454	311	99	98	97	96	-	-	98	95	96
Portugal	159	78x	65x	92	87	245	326	131	124	100	100			-	98	106
Qatar	132	72	65	79	80	438	401	88	84	81	80		-	95	82	82
Romania	114	98x	93x	99	97	211	220	101	99	92	92			99	77	78
Russian Federation	115	-	-	100	99	340	377	108	107	100	100	-	-	-	84	91
Rwanda	21	55	30	70	52	101	-	83	81	76x	76x	61x	61x	60	12	9
Saint Kitts and Nevis	93		-	-	-	668	244		-	-	-	-	-	-	-	-
Saint Lucia	109		-		-	765	211		-		-		-	95	-	-
Saint Vincent/Grenadines	127	-	-	-	-	670	158	-	-	-	-	-	-	-	-	-
Samoa	76	-	-	-	98x	485	41	117	115	100	99	-	-	-	44	50
San Marino	171	-	-	-	-	600	360	-	-	-	-	-	-	100	-	-
Sao Tome and Principe	59		-	-	-	271	162			-	-		-	-	-	
Saudi Arabia	112	60	32	72	50	291	257	79	76	63	61	-	-	94	62	54
Senegal	36	31	12	43	23	120	38	76	62	60	48	48	42	81	20	12
Seychelles	138	-	-	83x	86x	548	137	-	-	-	-	-	-	97	-	-
Sierra Leone	2	30	9	45	18	250	12	59	41	-	-		-	-	22	13
Singapore	188	92	74	96	86	601	361	110x	106x	100x	100x	-	-	100	58x	60x
Slovakia	149	-	-	-	-	570	476	100	100	-	-	-	-	97	89	93
Slovenia	171	-	-	100x	99x	384	327	103	103	100	99	-	-	98	90	92
Solomon Islands	112	-	-	-	56x	122	6	104	90	-	-	-	-	81	21	14
Somalia	9	8x	1x	36x	14x	42	13	15x	8x	11x	6x	21x	13x	-	-	-
South Africa	69	77	75	82	82	316	109	118	116	95	96	-	-	65	77	92
Spain	181	94x	86x	98	96	314	404	105	105	100	100	-	-	98	112	123
Sri Lanka	136	91	80	93	87	206	51	114	112	-	-	-	-	98	71	78
Sudan	41	43	17	58	35	270	84	59	48	-	-	59x	52x	94	14	12
Suriname	103	92	84	95	91	679	141	129x	125x	-	-	-	-	99	50x	58x
Swaziland	52	64	57	78	76	163	21	125	119	95	96	-	-	78	53	51
Sweden	188	-	-	-	-	882	478	104	105	100	100	-	-	98	130	133
Switzerland	181	-	-	-	-	851	419	108	107	100	100	-	-	100	94	88
Syria	99	72	34	86	56	264	67	106	95	95	87	98	95	91	47	40
Tajikistan	61	-	-	100	100	-	-	91	88	-	-	-	-	-	86	77
Tanzania	30	66	34	79	57	276	2	68	66	47	48	61x	68x	83	6	5
TFYR Macedonia	123	-	-	-	-	183	167	90	87	86	84	-	-	99	56	57
Thailand	92	92	84	96	92	189	189	99	96	-	-	-	-	88	38	37
Togo	35	49	18	67	37	215	12	147	118	98	72	-	-	71	41	14
Tonga	123	-	-	-	99x	571	16	-	-	-	-		-	92	-	-

			Adult lite	racy rate		р	o. of sets er 1000 pulation	Prin	nary school	enrolment	ratio	scl	rimary hool ance (%)	% of primary school entrants	enrolm	ary school Ient ratio 10-96
	Under-5 mortality	1	980	1	995		1995	1990-96	i (gross)	1993-9	95 (net)		111Ce (%) 13-97	reaching		oss)
	rank	male	female	male	female	radio	television	male	female	male	female	male	female	grade 5 1990-95	male	female
Trinidad and Tobago	141	97	93	99	97	505	322	91	102	83	94	-	-	95	66	79
Tunisia	99	61	32	79	55	200	89	119	112	98	95	-	-	92	63	59
Turkey	81	81	50	92	72	164	189	107	102	98	94	74	71	89	67	45
Turkmenistan	59	-	-	99x	97x	81	180	-	-	-	-	81x	80x	-	-	-
Tuvalu	72	-	-	-	-	320	-	-	-	-	-	-	-	96	-	-
Uganda	31	62	32	74	50	117	13	79	67	58x	51x	65x	63x	55	15	9
Ukraine	118	-	-	98	99	856	339	87	86	-	-	-	-	-	88	94
United Arab Emirates	154	72	64	79	80	271	104	97	93	84	82	-	-	98	74	81
United Kingdom	163	-	-	-	-	1433	448	114	115	100	100	-	-	-	123	145
United States	159	99x	99x	-	-	2093	805	103	102	96	97	-	-	99	97	98
Uruguay	127	94	95	97	98	609	235	112	110	95	95	-	-	94	74	89
Uzbekistan	70	-	-	100	100	81	191	78	76	-	-	-	-	-	99	87
Vanuatu	77	-	-	-	60x	296	13	105	107	76x	72x	-	-	61	23	18
Venezuela	115	86	82	92	90	458	169	93	96	87x	90x	-	-	78	29	41
Viet Nam	86	90	78	97	91	106	43	111x	106x	-	-	-	-	-	44x	41x
Yemen	49	14x	Зx	53x	26x	43	28	113	45	-	-	73x	39x	-	36	8
Yugoslavia	127	-	-	99	97	141	190	71	72	69x	70x	-	-	100	64	67
Zambia	12	65	43	86	71	99	32	92	86	76	75	74	74	84	34	21
Zimbabwe	58	83	68	90	80	89	29	117	114	-	-	91	90	76	49	39

#### **Regional summaries**

¥															
Sub-Saharan Africa	51	30	66	47	164	31	82	67	60	51	61	57	67	28	23
Middle East and North Africa	55	27	70	47	256	103	99	85	88	77	85	76	91	62	51
South Asia	52	24	63	36	81	42	105	80	-	-	74	62	59	52	33
East Asia and Pacific	80	58	91	76	197	169	117	115	98	97	94	93	90	65	59
Latin America and Caribbean	82	77	88	85	383	190	106	103	87	87	89	90	74	47	51
CEE/CIS and Baltic States	-	-	98	95	370	303	99	97	97	96	-	-	-	82	81
Industrialized countries	98	96	-		1288	625	104	103	98	98	-	-	99	104	107
Developing countries	68	46	79	62	184	115	105	93	86	81	81	75	75	54	45
Least developed countries	47	24	59	38	113	11	76	60	56	44	64	59	58	23	14
World	74	56	81	66	358	202	104	94	88	84	81	75	78	61	53

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

Adult literacy rate - Percentage of persons aged 15 and over who can read and write.

- Gross primary or secondary school enrolment ratio The number of children enrolled in a level (primary or secondary), regardless of age, divided by the population of the age group which officially corresponds to the same level.
- Net primary school enrolment ratio The number of children enrolled in primary school, who belong to the age group that officially corresponds to primary schooling, divided by the total population of the same age group.
- Net primary school attendance Percentage of children in the age group that officially corresponds to primary schooling who attend primary school. These data come from national household surveys. While both the attendance and enrolment data should report on children going to primary school, the number of children of primary school age is uncertain for many countries, and this can lead to significant biases in the enrolment ratio.
- Primary school entrants reaching grade five Percentage of the children entering the first grade of primary school who eventually reach grade five.

#### Main data sources

Adult literacy - United Nations Educational, Scientific and Cultural Organization (UNESCO).

- Radio and television United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Primary and secondary school enrolment United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Net primary school attendance Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).
- Gross school enrolment and reaching grade five United Nations Educational, Scientific and Cultural Organization (UNESCO).

Notes - Data not available.

x Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

# Table 5: Demographic indicators

	Under-5	(thou	ulation ısands) 997	anr grow	lation 1ual th rate %)	Cru deatl			ude 1 rate	Li expec	fe	Total fertility	% of population	an grow of u	erage nual rth rate irban ation (%)
	mortality rank	under 18	under 5	1970-90	1990-97	1970	1997	1970	1997	1970	1997	rate 1997	urbanized 1997	1970-90	1990-97
Afghanistan	4	10240	4055	0.4	5.8	27	21	52	53	37	45	6.9	21	2.9	7.6
Albania	89	1242	358	2.2	0.6	8	6	33	22	67	71	2.6	38	2.7	1.5
Algeria	90	13284	3964	3.0	2.4	16	6	49	29	53	69	3.9	57	4.3	3.8
Andorra	171	15	4	5.3	5.0		-	-	-		-	-	95	5.0	5.1
Angola	3	6259	2250	2.5	3.2	27	19	49	48	37	47	6.7	32	5.6	5.6
Antigua and Barbuda	127	24	7	0.6	0.7	-	5	26	17	67	75	1.7	36	1.0	0.6
Argentina	118	12155	3454	1.5	1.3	9	8	23	20	67	73	2.6	89	2.0	1.7
Armenia	103	1191	267	1.7	0.4	6	7	24	14	72	71	1.7	69	2.3	0.7
Australia	171	4633	1316	1.5	1.1	9	7	20	14	71	78	1.9	85	1.5	1.0
Austria	181	1728	457	0.2	0.8	13	10	15	10	70	77	1.4	64	0.1	0.8
Azerbaijan	81	2820	767	1.6	1.0	7	7	29	20	68	71	2.3	56	2.1	1.4
Bahamas	127	96	24	2.0	1.7	7	5	27	18	66	74	2.0	87	2.8	2.3
Bahrain	126	210	64	4.0	2.5	9	4	40	21	62	73	3.0	91	4.5	3.0
Bangladesh	44	57167	13552	2.5	1.5	21	10	48	27	44	58	3.2	20	6.1	4.7
Barbados	148	72	19	0.4	0.3	9	9	22	14	69	76	1.7	48	1.3	1.4
Belarus	138	2606	557	0.6	0.1	9	12	17	10	71	70	1.4	72	2.7	1.2
Belgium	163	2161	588	0.2	0.3	12	11	15	11	71	77	1.6	97	0.3	0.4
Belize	86	108	34	2.1	2.6	8	4	40	32	66	75	3.7	46	1.7	2.2
Benin	23	3126	1039	2.7	2.9	25	13	53	42	43	55	5.9	40	6.4	5.0
Bhutan	39	914	316	2.3	1.8	23	14	43	41	40	53	5.9	7	4.9	5.2
Bolivia	51	3625	1175	2.2	2.4	20	9	45	33	46	61	4.4	62	3.8	4.1
Bosnia and Herzegovina	142	952	207	0.9	-1.9	7	7	23	11	66	73	1.4	43	2.8	-0.6
Botswana	78	758	240	3.5	2.5	15	13	50	35	52	51	4.5	66	11.4	9.1
Brazil	84	59851	15491	2.2	1.4	10	7	35	20	59	67	2.2	80	3.6	2.3
Brunei Darussalam	154	119	35	3.4	2.5	7	3	36	22	67	75	2.7	70	3.7	3.5
Bulgaria	136	1860	427	0.1	-0.5	9	13	16	10	71	71	1.5	69	1.4	0.0
Burkina Faso	22	5985	2101	2.6	2.8	25	18	53	46	40	46	6.6	17	6.9	6.1
Burundi	17	3373	1145	2.2	2.2	20	17	44	43	44	47	6.3	8	7.0	6.0
Cambodia	23	4974	1571	1.1	2.7	21	12	42	34	43	54	4.5	22	3.1	5.8
Cameroon	50	7053	2377	2.8	2.8	21	12	45	39	44	56	5.3	47	6.2	4.9
Canada	163	7186	1952	1.3	1.1	7	7	17	12	73	79	1.6	77	1.4	1.1
Cape Verde	65	193	60	1.2	2.5	12	7	41	32	57	67	3.6	58	5.3	6.4
Central African Rep.	19	1657	545	2.3	2.2	22	16	43	38	42	49	5.0	40	3.4	3.1
Chad	14	3327	1151	2.1	2.7	26	17	45	42	38	48	5.5	23	5.0	3.9
Chile	146	5005	1461	1.6	1.6	10	6	30	20	62	75	2.5	84	2.1	1.7
China	80	378704	100050	1.6	1.1	9	7	33	16	61	70	1.8	32	3.7	3.9
Colombia	103	14744	4293	2.1	1.8	9	6	37	24	61	71	2.7	74	3.1	2.5
Comoros	53	345	115	3.2	3.1	19	10	50	41	47	57	5.6	32	5.1	4.9
Congo	45	1433	500	2.8	3.0	20	15	46	43	46	51	5.9	60	5.3	4.7
Congo, Dem. Rep.	11	25934	9270	3.1	3.6	20	14	48	45	45	53	6.3	29	2.7	4.3
Cook Islands	103	8	2	-0.8	1.5	-	-	-	-	-	-	-	60	0.0	1.2
Costa Rica	144	1441	423	2.8	2.3	7	4	35	24	67	77	3.0	50	3.6	3.3
Côte d'Ivoire	27	7307	2268	3.8	2.9	20	14	52	37	44	51	5.2	45	5.7	4.3
Croatia	157	1018	243	0.4	-0.1	10	12	15	11	69	72	1.6	57	1.9	0.6
Cuba	159	2862	760	1.1	0.6	7	7	29	13	70	76	1.6	77	2.1	1.2
Cyprus	157	228	63	0.5	1.7	10	8	20	16	71	78	2.3	55	1.7	2.7
Czech Rep.	163	2342	580	0.2	-0.1	13	12	16	11	70	73	1.4	66	1.4	0.1
Denmark	171	1116	343	0.2	0.3	10	12	16	13	73	76	1.8	85	0.5	0.4
Djibouti	26	298	99	6.3	2.9	23	15	48	39	40	50	5.4	83	7.5	3.4
Dominica	132	25	7	0.1	0.0	11	8	26	19	-	74	2.3	69	1.9	0.3
Dominican Rep.	75	3275	951	2.4	1.9	11	5	42	24	58	71	2.8	63	4.2	3.0
Ecuador	90	5006	1460	2.7	2.2	12	6	42	26	58	70	3.1	60	4.4	3.5
Egypt	65	28017	7817	2.3	1.9	17	7	40	26	51	66	3.4	45	2.5	2.3
El Salvador	95	2579	781	1.7	2.3	12	6	44	28	57	69	3.1	46	2.2	2.9
Equatorial Guinea	20	208	72	1.0	2.5	25	16	42	41	40	50	5.5	45	2.4	5.8
Eritrea	40	1713	584	2.3	2.4	21	15	47	40	43	51	5.4	18	4.0	4.2
Estonia	144	347	69	0.7	-1.1	11	13	15	9	70	69	1.3	74	1.2	-0.7
Ethiopia	18	31741	11663	2.6	3.2	24	16	50	48	40	50	7.0	16	4.8	6.1

	Under-5	(thou	ulation ısands) 996	anı	lation 1ual th rate %)	Crı deatl			ude 1 rate		fe stancy	Total fertility	% of population	anı grow of u	rage nual th rate rban tion (%)
	mortality rank	under 18	under 5	1970-90	1990-97	1970	1997	1970	1997	1970	1997	rate 1997	urbanized 1997	1970-90	1990-97
Fiji	118	325	88	1.7	1.5	7	5	35	23	64	72	2.8	41	2.3	2.3
Finland	188	1166	322	0.4	0.4	10	10	15	12	70	77	1.8	64	1.4	1.0
France	181	13414	3517	0.6	0.5	11	9	17	12	72	79	1.6	75	0.8	0.6
Gabon	29	505	175	3.1	2.8	21	14	32	37	44	55	5.4	52	6.0	5.1
Gambia	55	549	192	3.4	3.4	28	18	49	40	36	47	5.2	30	6.1	5.8
Georgia	109	1510	392	0.7	-0.1	10	9	19	14	68	73	1.9	59	1.6	0.7
Germany	181	15826	3939	0.1	0.5	12	11	14	9	71	77	1.3	87	0.4	0.7
Ghana	47	9340	3046	2.8	2.9	17	11	46	38	49	58	5.3	37	3.6	4.1
Greece	159	2125	517	0.8	0.4	8	10	17	10	72	78	1.4	60	1.3	0.6
Grenada	109	33	10	-0.2	0.3	-	8	-	21		-	-	37	0.2	1.3
Guatemala	74	5691	1859	2.8	2.9	15	7	45	37	52	67	4.9	40	3.1	3.5
Guinea	13	4080	1473	1.9	4.0	28	19	52	48	37	46	6.6	30	5.0	6.4
Guinea-Bissau	7	534	183	3.0	2.0	27	21	41	41	36	44	5.5	23	4.5	3.8
Guyana	57	315	91	0.6	0.9	11	7	38	22	60	64	2.3	37	1.2	2.3
Haiti	34	3452	1106	1.8	1.9	19	13	39	34	47	54	4.6	33	3.7	3.9
Holy See	-	- 3452	-	1.0	-	13	-	- 35	- 34	47	- 14	4.0	100	J./	-
Honduras	81	2983	950	3.2	2.9	15	5	48	34	53	70	4.4	45	4.9	4.4
Hungary	149	2963	900 543	0.0	-0.5	15	5 15	40 15	34 10	53 69	69	4.4	45 65	4.9	4.4 0.2
Iceland	149	78	23	1.1	-0.5	7	7	22	10	74	79	2.2	92	1.2	1.2
India	45	78 385784	23 111294	2.1	1.0	17	9	39	25	74 49	79 62	3.1	92	3.4	2.8
Indonesia	68	77903	22016	2.1	1.7	18	8	40	23	49	65	2.7	37	5.0	4.4
Iran	96	36399	11413	3.7	2.7	16	6		23 34		69	4.8	57 60	5.0	4.4 3.6
	30				2.7		9	45		55	62		76		
Iraq		10342	3231	3.3		16		48	37	55	77	5.3		4.5	3.1
Ireland	163	1015	237	0.9	0.2	11	9	22	13	71		1.8	58	1.3	0.5
Israel	171	1973	575	2.2	3.1	7	6	26	20	71	78	2.8	90	2.6	3.1
Italy	171	10312	2663	0.3	0.1	10	10	17	9	72	78	1.2	67	0.5	0.1
Jamaica	149	923	279	1.2	0.9	8	6	35	22	67	75	2.5	55	2.3	1.8
Japan	171	24335	6239	0.8	0.2	7	8	19	10	72	80	1.5	78	1.3	0.4
Jordan	118	2876	989	3.1	4.3	18	5	51	38	54	70	5.2	72	4.6	5.2
Kazakhstan	84	5827	1489	1.2	0.1	9	8	26	18	64	68	2.3	61	1.9	0.8
Kenya	55	14914	4497	3.6	2.7	18	11	53	37	50	54	4.9	31	7.8	6.1
Kiribati	62	37	12	1.8	1.7	10	9	37	32	49	60	4.4	37	3.3	2.6
Korea, Dem. People's Rep.	103	7125	2355	1.8	1.6	10	6	40	21	60	72	2.1	62	2.3	2.1
Korea, Rep. of	171	12533	3400	1.5	0.9	10	6	30	15	60	72	1.7	83	4.5	2.6
Kuwait	146	759	185	5.3	-3.1	6	2	47	22	66	76	2.8	100	6.3	-2.3
Kyrgyzstan	79	1898	553	2.0	0.3	11	7	31	26	62	68	3.2	39	2.1	0.7
Lao People's Dem. Rep.	37	2667	949	2.2	3.0	23	14	44	44	40	53	6.7	22	5.3	5.8
Latvia	132	594	126	0.6	-1.2	11	14	14	10	70	68	1.4	74	1.3	-0.7
Lebanon	93	1240	377	0.2	3.0	11	6	35	24	64	70	2.8	88	1.9	3.6
Lesotho	31	1031	332	2.6	2.5	20	11	43	36	48	59	4.9	26	6.8	6.1
Liberia	6	1224	404	3.1	-0.6	21	17	49	48	46	50	6.4	48	5.5	1.4
Libya	115	2988	1015	4.1	3.4	16	7	49	40	52	65	6.0	87	7.1	4.3
Liechtenstein	163	7	2	1.6	1.4	-	-	-	-	-	-	-	19	2.0	0.0
Lithuania	143	942	218	0.9	-0.1	9	12	17	11	71	70	1.5	73	2.5	0.8
Luxembourg	163	89	26	0.6	1.3	12	10	13	13	70	76	1.8	90	1.8	1.8
Madagascar	25	8428	2823	3.1	3.2	19	10	47	41	45	58	5.7	28	5.6	5.7
Malawi	8	5390	1897	3.6	1.1	25	22	56	48	40	41	6.7	14	7.0	4.0
Malaysia	149	9055	2660	2.5	2.3	10	5	37	26	61	72	3.3	55	4.5	3.8
Maldives	64	145	49	2.9	3.3	17	8	40	42	50	64	6.8	27	6.3	4.2
Mali	5	6182	2230	2.6	3.1	26	17	51	48	38	48	6.7	28	5.1	5.6
Malta	154	97	26	0.8	0.7	9	8	17	14	70	77	2.1	90	1.4	1.0
Marshall Islands	54	27	9	3.0	3.6		4	-	26	-	-	-	71	3.1	4.8
Mauritania	16	1179	388	2.5	2.5	22	13	45	38	43	53	5.1	54	8.3	5.7
Mauritius	123	376	111	1.2	1.1	7	7	29	19	62	71	2.3	41	1.0	1.2
Mexico	96	38677	11235	2.5	1.8	10	5	44	25	61	72	2.8	74	3.5	2.0
Micronesia, Fed. States of	118	60	19	2.9	2.6	-	7	-	29	58	66	4.1	28	3.1	4.0
Moldova, Rep. of	102	1362	314	1.0	0.3	10	11	19	14	65	68	1.8	53	3.0	1.8

# Table 5: Demographic indicators

	Under-5	(thou	ulation Isands) 996	anı grow	llation nual th rate		ıde		ude		ife	Total	% of	an grow of u	erage nual rth rate irban
	mortality rank	under 18	under 5	1970-90	%) 1990-97	1970	1 rate	1970	1 rate 1997	1970	1997	fertility rate 1997	population urbanized 1997	1970-90	ation (%) 
Mongolia	27	1146	318	2.8	2.1	14	7	42	28	53	66	3.3	62	4.1	3.1
Morocco	67	11565	3367	2.3	1.9	17	7	47	26	52	66	3.2	53	3.9	3.4
Mozambique	10	9361	3250	2.1	3.6	22	18	46	43	42	47	6.1	36	9.8	8.1
Myanmar	42	19253	5737	2.1	1.8	17	10	40	27	49	60	3.3	27	2.5	2.9
Namibia	62	784	256	2.7	2.5	18	12	43	36	48	56	4.9	38	5.2	5.4
Nauru	103	5	2	2.6	1.4	-		-		-		-	100	2.6	1.4
Nepal	48	11142	3638	2.5	2.6	22	11	45	37	42	57	5.0	11	6.7	5.6
Netherlands	171	3410	968	0.7	0.7	8	9	17	12	74	78	1.6	89	0.8	0.7
New Zealand	163	996	289	0.9	1.1	9	8	22	16	72	77	2.0	86	1.1	1.4
Nicaragua	71	2164	671	2.8	2.8	14	6	48	34	54	68	3.9	63	3.9	3.7
Niger	1	5382	1988	3.1	3.4	26	17	58	50	38	48	7.1	19	6.3	5.9
Nigeria	15	61393	21437	2.8	3.0	20	14	46	43	43	52	6.0	42	5.6	5.4
Niue	-	1	0	-	-	-	-	-	-	-	-	-	50	-	-
Norway	- 188	1008	297	- 0.4	- 0.4	10	11	- 17	- 13	- 74	- 78	- 1.9	74	- 1.0	- 0.6
Oman	138	1290	466	4.5	4.2	21	4	50	44	47	70	7.2	80	13.0	7.8
Pakistan	33	70052	23084	4.5 3.0	4.2	19	8	50 48	44 36	47	64	5.1	36	4.2	4.3
Palau	98	70052	23064	2.0	1.8	-	-	40		49	04	-	71	4.Z 3.0	4.3
Panama	98 132	1046	304	2.0	1.8	- 8	- 5	37	- 23	- 65	- 74	- 2.7	57	3.0 2.9	2.5
Panama Papua New Guinea	43	2052	304 649	2.3	2.3	8	5 10	42	32	65 46	74 58	4.7	57	2.9 4.4	2.5
Paraguay Peru	99 72	2411	2001	2.9	2.7	9 14	5 6	37	32 25	66 54	70 68	4.2 3.0	54	4.3	4.2 2.3
		10113	2901	2.5	1.7			42		54			72	3.4	
Philippines	88	31331	9657	2.4	2.2	10	6	39	29	57	68	3.7	56	4.4	4.1
Poland	149	10370	2360	0.8	0.2	8	11	17	12	70	71	1.7	64	1.6	0.8
Portugal	159	2103	555	0.4	-0.1	11	11	20	11	67	75	1.5	37	1.7	1.2
Qatar	132	178	50	7.4	2.3	13	4	34	18	61	72	3.8	92	7.9	2.6
Romania	114	5505	1175	0.7	-0.4	9	12	20	11	69	70	1.4	57	1.9	0.5
Russian Federation	115	36309	7112	0.6	-0.1	9	14	15	10	69	65	1.4	77	1.5	0.4
Rwanda	21	3115	1025	3.1	-2.4	21	22	53	43	44	40	6.1	6	5.7	-0.2
Saint Kitts and Nevis	93	14	4	-0.6	-0.3	11	11	26	20	-	70	2.4	34	-0.3	-1.0
Saint Lucia	109	51	15	1.4	1.3	-	6	41	24	62	70	2.6	38	1.0	1.4
Saint Vincent/Grenadines	127	40	12	1.0	0.9	-	6	-	21	63	73	2.2	51	6.0	4.3
Samoa	76	75	20	0.5	0.7	12	6	44	27	57	69	3.8	21	0.8	0.8
San Marino	171	5	1	1.2	1.8	-	-	-	-	-	-	-	96	3.2	2.5
Sao Tome and Principe	59	73	26	2.4	2.1	-	9	-	35	-	64	4.7	44	5.0	4.0
Saudi Arabia	112	9303	3068	5.1	2.8	18	4	48	34	52	71	5.9	85	7.5	3.8
Senegal	36	4459	1500	2.8	2.6	25	15	49	41	39	51	5.7	45	3.8	4.2
Seychelles	138	40	14	1.4	1.0	-	7	-	21	-	71	2.4	56	4.6	2.6
Sierra Leone	2	2230	785	2.0	1.5	30	26	49	47	34	37	6.1	35	4.7	3.7
Singapore	188	905	292	1.9	1.9	5	5	23	16	69	77	1.8	100	1.9	1.8
Slovakia	149	1435	336	0.7	0.3	10	11	19	12	70	71	1.5	60	2.3	1.0
Slovenia	171	414	91	0.7	0.0	10	11	17	10	70	73	1.3	52	2.2	0.4
Solomon Islands	112	204	67	3.4	3.3	10	4	46	36	60	71	5.0	18	6.1	6.3
Somalia	9	5533	2027	2.9	2.4	24	17	50	50	40	49	7.0	27	3.8	3.8
South Africa	69	18689	5854	2.5	2.2	14	8	39	30	53	65	3.8	50	2.6	2.5
Spain	181	7954	1927	0.8	0.2	9	9	20	10	72	78	1.2	77	1.4	0.4
Sri Lanka	136	6317	1585	1.5	1.0	8	6	30	18	65	73	2.1	23	1.4	1.9
Sudan	41	13173	4080	2.8	2.1	21	12	47	34	43	55	4.6	33	5.2	5.4
Suriname	103	174	49	0.4	1.3	8	6	37	22	63	71	2.4	50	0.5	2.2
Swaziland	52	448	147	2.9	2.8	19	9	48	37	46	60	4.5	33	7.8	6.1
Sweden	188	1975	570	0.3	0.5	10	11	14	12	74	78	1.8	83	0.4	0.5
Switzerland	181	1512	418	0.5	0.9	9	9	16	11	73	79	1.5	62	1.0	1.3
Syria	99	7579	2117	3.4	2.7	14	5	47	31	56	69	4.1	53	4.1	3.5
Tajikistan	61	2877	836	2.9	1.9	10	7	40	31	63	67	4.0	33	2.3	2.0
Tanzania	30	16490	5568	3.1	3.0	19	14	50	41	45	51	5.5	26	8.8	6.1
TFYR Macedonia	123	631	160	1.3	1.0	8	7	25	15	66	72	1.9	61	2.4	1.7
Thailand	92	19245	4781	2.2	0.9	10	7	38	17	58	69	1.8	21	3.9	2.3
Togo	35	2259	780	2.8	2.9	20	15	46	42	44	50	6.1	32	6.7	4.5
Tonga	123	41	12	0.8	0.4	-	6	-	31	-	72	4.0	42	3.5	3.0

	Under-5	(thou 1	ulation Isands) 996	anı grow	lation 1ual th rate %)		ıde 1 rate		ude 1 rate		fe stancy	Total fertility	% of population	ann	
	mortality rank	under 18	under 5	1970-90	1990-97	1970	1997	1970	1997	1970	1997	rate 1997	urbanized 1997	1970-90	1990-97
Trinidad and Tobago	141	461	107	1.2	0.8	7	6	28	17	66	74	2.1	73	1.7	1.5
Tunisia	99	3759	1052	2.3	1.9	14	6	39	24	54	69	3.0	63	3.6	3.2
Turkey	81	22870	6450	2.3	1.6	13	7	37	22	56	69	2.5	72	4.6	3.9
Turkmenistan	59	1910	568	2.6	2.1	11	8	38	29	60	65	3.6	45	2.3	2.1
Tuvalu	72	4	1	2.0	1.5	-	-	-	-	-	-	-	40	6.9	0.0
Uganda	31	11566	4198	2.6	3.2	19	21	50	51	46	41	7.1	13	4.3	5.6
Ukraine	118	12131	2655	0.5	-0.1	9	14	15	10	71	69	1.4	71	1.5	0.6
United Arab Emirates	154	794	212	10.8	2.6	11	3	36	19	61	75	3.5	85	12.5	3.3
United Kingdom	163	13321	3618	0.2	0.2	12	11	16	12	72	77	1.7	89	0.2	0.2
United States	159	70739	19717	1.0	1.0	9	9	17	14	71	77	2.0	77	1.1	1.2
Uruguay	127	938	263	0.5	0.6	10	10	21	17	69	73	2.3	91	0.9	0.9
Uzbekistan	70	10741	3158	2.7	2.0	10	7	36	29	63	68	3.5	42	3.2	2.4
Vanuatu	77	88	27	2.7	2.5	14	6	46	33	53	67	4.4	19	4.5	3.3
Venezuela	115	9503	2777	3.0	2.2	7	5	38	25	65	73	3.0	86	3.8	2.6
Viet Nam	86	32519	9511	2.2	2.0	15	7	38	25	49	67	3.0	20	2.6	1.8
Yemen	49	8847	3222	3.0	4.9	23	11	53	48	41	58	7.6	35	6.9	7.8
Yugoslavia	127	2652	648	0.8	0.3	9	10	19	13	68	72	1.8	58	2.3	1.5
Zambia	12	4653	1508	2.7	2.3	19	18	49	43	46	43	5.5	44	4.4	2.9
Zimbabwe	58	5944	1967	3.1	2.4	16	15	50	37	50	49	4.7	33	5.7	4.7

### **Regional summaries**

Sub-Saharan Africa	306563	105461	2.8	2.9	21	15	48	42	44	51	5.9	33	4.5	4.9
Middle East and North Africa	153129	46851	3.0	2.5	17	7	45	32	52	66	4.4	57	4.2	3.6
South Asia	541761	157573	2.2	1.9	18	9	41	27	48	61	3.4	27	3.6	3.2
East Asia and Pacific	600414	164242	1.7	1.3	11	7	35	18	58	68	2.1	34	3.8	3.8
Latin America and Caribbean	189857	53723	2.2	1.7	11	6	37	23	60	70	2.7	74	3.2	2.3
CEE/CIS and Baltic States	136131	32568	0.9	0.3	9	12	20	14	66	68	1.8	67	1.9	1.1
Industrialized countries	190720	51199	0.7	0.6	10	9	17	12	72	78	1.7	78	0.9	0.8
Developing countries	1845341	542905	2.1	1.8	14	9	38	25	53	63	3.1	39	3.7	3.4
Least developed countries	305800	99573	2.5	2.6	22	14	48	39	43	51	5.3	24	4.5	5.2
World	2118575	611617	1.7	1.5	13	9	32	23	56	64	2.8	46	2.4	2.5
Countries in each region are listed on page 122														

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

Life expectancy at birth – The number of years newborn children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth.

Crude death rate - Annual number of deaths per 1,000 population.

Crude birth rate – Annual number of births per 1,000 population.

**Total fertility rate** – The number of children that would be born per woman if she were to live to the end of her childbearing years and bear children at each age in accordance with prevailing age-specific fertility rates.

**Urban population** – Percentage of population living in urban areas as defined according to the national definition used in the most recent population census.

#### Main data sources

Life expectancy – United Nations Population Division.

Child population - United Nations Population Division.

Crude death and birth rates - United Nations Population Division.

Fertility - United Nations Population Division.

Urban population - United Nations Population Division.

Notes - Data not available.

x Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

### Table 6: Economic indicators

	Under-5 mortality	GNP per capita (US\$)	average	er capita e annual rate (%)	Annual rate of inflation (%)	% of population below \$1 a day		f central gover enditure alloca (1990-97)		ODA inflow in millions US\$	ODA inflow as a % of recipient GNP	as a expo	service % of orts of d services
	rank	1996	1965-80	1990-96	1990-96	1990-95	health	education	defence	1996	1996	1970	1996
Afghanistan	4	250x	0.6	-	-	-	-	-	-	228	6	-	-
Albania	89	820	-	2.2	68	-	6	2	7	222	8	-	2
Algeria	90	1520	4.2	-1.9	25	2	-	-	-	309	1	3	26
Andorra	171	С	-	-	-	-	-	-	-	-	-	-	-
Angola	3	270	-	-5.6	1103	-	6x	15x	34x	544	18	-	12
Antigua and Barbuda	127	7330	-	2.0	3	-	-	-	-	12	2	-	2x
Argentina	118	8380	1.7	3.9	16	-	3	5	5	277	0	22	40
Armenia	103	630	-	-15.0	897	-	-	-	-	295	12	-	10
Australia	171	20090	2.2	2.7	1	-	13	7	7	-	-	-	-
Austria	181	28110	4.0	0.9	3	-	13	9	2	-	-	-	-
Azerbaijan	81	480	-	-18.7	590	-	-	-	-	106	3	-	1
Bahamas	127	11850x	-	-2.0	3	-	15	19	3	4x	Ox	-	-
Bahrain	126	7840x	-	3.8	-1	-	10	14	19	5	0	-	2x
Bangladesh	44	260	-0.3	2.7	5	-	5x	11x	10x	1255	4	0	10
Barbados	148	6600x	-	-0.8	1	-	-	-	-	5	0	-	5
Belarus	138	2070	-	-8.6	715	2	2	18	4	-	-	-	2
Belgium	163	26440	3.6	1.2	3	-	2x	12x	5x	-	-	-	-
Belize	86	2700	-	0.7	4	-	13	20	5	18	3	-	12
Benin	23	350	-0.3	1.9	11	-	6x	31x	17x	293	15	2	6
Bhutan	39	390	-	2.0	9	-	8	10	-	62	22	-	5
Bolivia	51	830	1.7	1.8	11	7	4	17	7	850	13	11	27
Bosnia and Herzegovina	142	а	-	-	-	-	-	-	-	812	-	-	0x
Botswana	78	3210x	9.9	1.3	10	33x	5	25	10	81	2	1	5
Brazil	84	4400	6.3	2.0	675	24	5	3	3	408	0	12	38
Brunei Darussalam	154	25160x	-	-1.5	0	-	-	-	-	4x	0x	-	-
Bulgaria	136	1190	-	-1.8	80	3	3	3	5	-	-	-	16
Burkina Faso	22	230	1.7	-0.1	7	-	7	17	14	418	17	4	10
Burundi	17	170	2.4	-6.4	14	-	4	15	20	204	19	4	38
Cambodia	23	300	-	2.9	45	-	-	-	-	453	15	-	1
Cameroon	50	610	2.4	-3.8	6	-	4	15	12	413	5	3	22
Canada	163	19020	3.3	0.6	1	-	5	3	6	-	-	-	-
Cape Verde	65	1010	-	-16.7	4	-	-	-	-	120	31	-	3
Central African Rep.	19	310	0.8	-1.7	7	-	-	-	-	167	16	5	3
Chad	14	160	-1.9	-1.7	9	-	8x	8x	-	305	29	4	7
Chile	146	4860	0.0	6.4	14	15	12	15	8	203	0	19	30
China	80	750	4.1	11.0	12	22	0	2	13	2617	0	0x	8
Colombia	103	2140	3.7	3.0	23	7	5	19	9	251	0	12	33
Comoros	53	450	-	-1.8	4	-	-	-	-	40	18	-	2
Congo	45	670	2.7	-4.3	8	-	-	-	-	430	24	11	20
Congo, Dem. Rep.	11	130	-1.3	-10.4	2747	-	1	1	4	167	3	5	0
Cook Islands	103	1550x	-	-	-	-	-	-	-	11	16x	-	-
Costa Rica	144	2640	3.3	2.4	18	19x	21	17	-	-7	0	10	13
Côte d'Ivoire	27	660	2.8	0.2	10	18x	4x	21x	4x	968	10	7	25
Croatia	157	3800	-	2.2	218	-	15	7	14	133	1	-	5
Cuba	159	1170x	-	-	-	-	23x	10x	-	68	0x	-	-
Cyprus	157	14920x	-	2.6	4	-	6	12	4	30	0	-	-
Czech Rep.	163	4740	-	0.9	18	3	17	12	5	-	-	-	8
Denmark	171	32100	2.2	2.1	2	-	1	9	4	-	-	-	-
Djibouti	26	780x	-	-	5	-	-	-	-	97	-	-	5
Dominica	132	3090	-	2.3	4x	-	-	-	-	43	19	-	4
Dominican Rep.	75	1600	3.8	3.1	12	20x	11	13	4	106	1	4	9
Ecuador	90	1500	5.4	0.8	35	30	11x	18x	13x	261	1	9	20
Egypt	65	1080	2.8	2.2	11	8	2	13	8	2212	3	26	11
El Salvador	95	1700	1.5	3.5	11	-	10	16	7	317	3	4	8
Equatorial Guinea	20	530	-	15.9	4	-	-	-	-	31	14	-	2
Eritrea	40	100x	-	-	16	-	-	-	-	157	46x	-	0
Estonia	144	3080	-	-4.9	117	6	16	10	3	-	-	-	1
Ethiopia	18	100	0.4	2.0	10	46x	5	15	14	849	14	11	42

	Under-5 mortality	GNP per capita	GNP pe average growth		Annual rate of inflation	% of population below \$1		f central gover enditure alloca (1990-97)		ODA inflow in millions	ODA inflow as a % of recipient	as a expo	service % of orts of d services
	rank	(US\$) 1996	1965-80	1990-96	(%) 1990-96	a day 1990-95	health	education	defence	US\$ 1996	GNP 1996	1970	1996
Fiji	118	2470	-	0.6	3	-	9	18	6	45	2	-	4
Finland	188	23240	3.6	-0.2	2	-	3	11	4	-	-	-	-
France	181	26270	3.7	0.7	2	-	16x	7x	6x	-	-	-	-
Gabon	29	3950	5.6	-1.2	10	-	-	-	-	127	3	6	10
Gambia	55	320x	-	-0.5	5	-	7x	12x	4x	38	11	1	9
Georgia	109	850	-	-19.3	2279	-	-	-	-	318	7	-	4x
Germany	181	28870	3.0x	0.7	3	-	17x	1x	7x	-	-	-	-
Ghana	47	360	-0.8	1.5	27	-	7	22	5	654	11	5	17
Greece	159	11460	4.8	1.3	12	-	7	9	7	-	-	9	17x
Grenada	109	2880	-	0.6	2	-	10	17	-	11	4	-	5x
Guatemala	74	1470	3.0	0.5	13	53x	11	17	11	216	1	7	10
Guinea	13	560	1.3	1.9	9	26	Зx	11x	29x	295	8	-	13
Guinea-Bissau	7	250	-2.7	0.5	48	88	1x	Зx	4x	180	67	-	42
Guyana	57	690	-	10.4	26	-	-	-	-	144	25	-	13x
Haiti	34	310	0.9	-6.9	25	-	-	-	-	375	16	5	11
Holy See	-	-	-	-	-	-	-	-	-		-	-	-
Honduras	81	660	1.1	1.2	20	47	10x	19x	7x	367	9	3	26
Hungary	149	4340	5.1	-0.6	23	2	8x	3x	4x	-	-	-	39
Iceland	181	26580	-	0.5	3	-	23	12	-	-	-	-	-
India	45	380	1.5	3.8	9	53	1	2	13	1936	1	21	22
Indonesia	68	1080	5.2	5.9	8	12	3	9	7	1121	1	7	34
Iran	96	1033x	2.9	1.0	32	-	6	14	7	171	0	-	28x
Iraq	37	1036x	-	-	-	-	-	-	-	387	1	-	-
Ireland	163	17110	2.8	5.1	2	-	15	13	3	-	-	-	-
Israel	171	15870	3.7	3.2	12	-	10	14	18	2217	2	3	-
Italy	171	19880	3.2	0.9	5	-	11x	8x	4x	-	-	-	-
Jamaica	149	1600	-0.1	0.9	36	4	7x	11x	8x	60	1	3	15
Japan	171	40940	5.1	1.2	1	-	2 7	6	4	-	- 7	-	-
Jordan Kazakhatan	118	1650	5.8x	4.0		3 2	-	15	20	514		4	11
Kazakhstan	84 55	1350 320	3.1	-10.3 -0.5	605 17	50			6x	124 606	1	6	9 25
Kenya Kiribati	55 62	920	- -	-0.5	6	- 50	5x	19x	0X	13	17	-	20
Korea, Dem. People's Rep.	103	920 970x	-	-0.0	-	-	-	-	-	43	0x	-	-
Korea, Rep. of	103	10610	7.3	6.2	6	-	1	20	16	-147	0	20	3x
Kuwait	146	18720x	0.6x	15.7	-1x	-	6	11	28	6x	Ox	-	-
Kyrgyzstan	79	550	0.0X	-12.7	256	19	-	-	-	232	9	-	8
Lao People's Dem. Rep.	37	400	-	3.9	11	-	-	-	-	339	18	-	5
Latvia	132	2300		-10.1	111	-	6	12	2	-	-	-	1
Lebanon	93	2970	-	5.4	33	-	3	7	12	233	2	-	5
Lesotho	31	660	6.8	0.9	9	49x	13	21	6	107	8	1	5
Liberia	6	490x	0.5	-	-	-	5x	11x	9x	207	18	8	Зx
Libya	115	5540x	0.0	-	-	-	-	-	-	10	0	-	-
Liechtenstein	163	С	-	-	-	-	-	-	-	-	-	-	-
Lithuania	143	2280	-	-6.0	179	2	7	7	2	-	-	-	2
Luxembourg	163	45360	-	0.1	3	-	2	10	2	-	-	-	-
Madagascar	25	250	-0.4	-2.0	25	72	7	9	5	364	11	32	7
Malawi	8	180	3.2	-0.2	33	-	7x	12x	5x	501	27	8	14
Malaysia	149	4370	4.7	6.1	4	6x	6	23	11	-452	-1	4	8
Maldives	64	1080	-	4.1	10	-	11	13	-	33	12	-	3
Mali	5	240	2.1x	-0.2	11	-	2x	9x	8x	505	21	1	16
Malta	154	8650x	-	3.1	4	-	11	12	2	72	2	-	1
Marshall Islands	54	1890	-	-4.0	6	-	-	-	-	73	41	-	-
Mauritania	16	470	-0.1	1.7	6	31x	4x	23x	-	274	25	3	19
Mauritius	123	3710	3.7	3.6	7	-	8	17	1	20	0	3	7
Mexico	96	3670	3.6	-0.3	19	15	3	24	4	289	0	24	31
Micronesia, Fed. States of	118	2070	-	-1.3	5	-	-	-	-	113	50	-	-
Moldova, Rep. of	102	590	-	-16.8	308	7	-	-	-	-	-	-	4
Monaco	181	С	-	-	-	-	-	-	-	-	-	-	-

### Table 6: Economic indicators

	Under-5 mortality	GNP per capita (US\$)	average	er capita e annual rate (%)	Annual rate of inflation (%)	% of population below \$1 a day		f central gover enditure alloca (1990-97)		ODA inflow in millions US\$	ODA inflow as a % of recipient GNP	as a expo	service % of orts of d services
	rank	1996	1965-80	1990-96	1990-96	1990-95	health	education	defence	1996	1996	1970	1996
Mongolia	27	360	-	-2.3	106	-	4x	7x	12x	203	23	-	8
Morocco	67	1290	2.7	0.2	4	2	3	18	14	651	2	8	27
Mozambique	10	80	-	2.6	47	-	5x	10x	35x	923	63	-	26
Myanmar	42	220x	1.6	3.9	22	-	4	10	37	56	2x	18	14x
Namibia	62	2250	-	1.6	10	-	10x	22x	7x	189	5	-	-
Nauru	103	-	-	-	-	-	-	-	-	3	-	-	-
Nepal	48	210	-	2.3	10	50	5	14	4	401	9	3	7
Netherlands	171	25940	2.7	1.8	2	-	14	11	4	-	-	-	-
NewZealand	163	15720	1.7	1.7	2	-	15	15	3	-	-	-	-
Nicaragua	71	380	-0.7	-0.2	71	44	13	15	6	954	56	11	23
Niger	1	200	-2.5	-2.3	7	62	-	-	-	259	14	4	13
Nigeria	15	240	4.2	1.2	38	31	1x	Зx	Зx	192	1	4	16
Niue	-	-	-	-	-	-	-	-	-	7	-	-	-
Norway	188	34510	3.6	3.7	2	-	4	7	7	-	-	-	-
Oman	138	4950x	9.0	-0.3	-3	-	7	14	35	62	1	-	9
Pakistan	33	480	1.8	1.1	11	12	1x	2x	31x	877	1	22	22
Palau	98	790x	-	-	-	-	-	-	-	62	-	-	-
Panama	132	3080	2.8	3.6	3	26x	18	17	5	90	1	8	9
Papua New Guinea	43	1150	-	5.0	7	-	8	15	4	385	8	1	12
Paraguay	99	1850	4.1	-1.5	17	-	7	22	11	97	1	12	4
Peru	72	2420	0.8	4.8	49	49	5x	16x	11x	410	1	12	31
Philippines	88	1160	3.2	1.0	9	29	2	18	8	883	1	8	12
Poland	149	3230	-	3.3	32	7	11	6	4	-	-	-	6
Portugal	159	10160	4.6	1.5	7	-	9x	11x	6x	-	-	7	16x
Qatar	132	11590x	-	-5.1	-	-	-	-	-	Зx	Ox	-	-
Romania	114	1600	-	0.1	133	18	8	10	7	-	-	0x	8
Russian Federation	115	2410	-	-9.2	394	2	2	2	12	-	-	-	6
Rwanda	21	190	1.6	-8.2	20	46x	5x	26x	-	674	53	1	18
Saint Kitts and Nevis	93	5870	-	3.5	4	-	-	-	-	7	3	-	4
Saint Lucia	109	3500	-	2.8	3	-	-	-	-	39	7	-	3
Saint Vincent/Grenadines	127	2370	-	2.4	3	-	13	16	-	27	10	-	5
Samoa	76	1170	-	0.1	2	-		-	-	32	16	-	4
San Marino	171	-	-	-	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	59	330	-	-1.7	53	-	-	-	-	47	104	-	21
Saudi Arabia	112	6800x	4.0x	-3.1	1	-	6x	14x	36x	29	0	-	1x
Senegal	36	570	-0.5	-0.6	8	54	-	-	-	582	12	4	13
Seychelles	138	6850	-	1.5	2	-	8	12	4	19	4	-	4
Sierra Leone	2	200	0.7	-3.9	38	-	10x	13x	10x	195	21	11	48
Singapore	188	30550	8.3	6.6	3	-	8	19	29	16x	Ox	1	-
Slovakia	149	3410	-	-1.2	14	13		-	-	-	-	-	9
Slovenia	171	9240	-	4.4	39	-	-	-	-	82	0	-	9
Solomon Islands	112	900	-	1.3	11	-	-	-	-	43	12	-	4
Somalia	9	110x	-0.1	-2.3x	75x	-	1x	2x	38x	91	9	2	25x
South Africa	69	3520	3.2	-0.2	11	24	-	-	-	361	0	-	11
Spain	181	14350	4.1	1.0	5	-	6	4	3	-	-	-	-
Sri Lanka	136	740	2.8	3.4	10	4	6	10	18	494	4	11	6
Sudan	41	320x	0.8	0.6x	86	-	-	-	-	230	3	11	0
Suriname	103	1000	-	-0.3	138	-	-	-	-	111	26	-	-
Swaziland	52	1210	-	-1.2	11	-	-	-	-	31	3	-	3
Sweden	188	25710	2.0	-0.2	3	-	0	5	4	-	-	-	-
Switzerland	181	44350	1.5	-1.0	2	-	20	3	6	-	-	-	-
Syria	99	1160	5.1	4.3	9	-	4	10	29	225	1	11	2
Tajikistan	61	340	-	-18.5	394	-	-	-	-	113	6	-	0
Tanzania	30	170	0.8	-0.2	26	11	6x	8x	16x	894	17	1	17
TFYR Macedonia	123	990	-	-8.5	286	-	-	-	-	105	5	-	3
Thailand	92	2960	4.4	6.7	5	2	8	21	13	832	0	3	9
Togo	35	300	1.7	-3.9	9	-	5x	20x	11x	166	13	3	8
Tonga	123	1790	-	2.0	4	-	7x	13x	-	32	18	-	5

	Under-5 mortality	GNP per capita (US\$)	average	er capita e annual rate (%)	Annual rate of inflation (%)	% of population below \$1 a day		f central gover enditure alloca (1990-97)		ODA inflow in millions US\$	ODA inflow as a % of recipient GNP	as a expo	service % of orts of d services
	rank	1996	1965-80	1990-96	1990-96	1990-95	health	education	defence	1996	1996	1970	1996
Trinidad and Tobago	141	3870	3.1	0.1	7	-	9	15	2	17	0	5	14
Tunisia	99	1930	4.7	1.3	5	4	7	19	6	126	1	18	15
Turkey	81	2830	3.6	1.7	78	-	2	11	8	233	0	16	19
Turkmenistan	59	940	-	-13.1	1074	5	-	-	-	24	1	-	10
Tuvalu	72	650x	-	-	-	-	-	-	-	10	-	-	-
Uganda	31	300	-2.2	4.0	20	69x	2x	15x	26x	684	12	3	13
Ukraine	118	1200	-	-13.5	801	-	-	-	-	-	-	-	6
United Arab Emirates	154	17390x	-	-4.8	-	-	7	17	37	8x	Ox	-	-
United Kingdom	163	19600	2.0	1.5	3	-	14	5	8	-	-	-	-
United States	159	28020	1.8	1.2	3	-	20	2	16	-	-	-	-
Uruguay	127	5760	2.5	3.8	50	-	6	7	5	51	0	22	13
Uzbekistan	70	1010	-	-5.6	547	-	-	-	-	87	0	-	8
Vanuatu	77	1290	-	-1.1	3	-	-	-	-	31	14	-	1
Venezuela	115	3020	2.3	-0.3	47	12	10x	20x	6x	44	0	3	14
Viet Nam	86	290	-	6.2	23	-	-	-	-	927	4	-	3
Yemen	49	380	-	-2.2	27	-	4	20	32	260	4	-	2
Yugoslavia	127	b	-	-	-	-	-	-	-	70	-	-	-
Zambia	12	360	-1.2	-4.8	87	85	10	18	5	614	18	6	24
Zimbabwe	58	610	1.7	-1.1	26	41	8x	24x	17x	374	5	2	19

### **Regional summaries**

J												
Sub-Saharan Africa	528	2.8	-0.4	82	39	5	14	10	15360	5	6	14
Middle East and North Africa	1798	3.1	0.4	15	-	5	14	20	5568	1	12	17
South Asia	380	1.4	3.3	9	47	1	3	15	5286	1	17	20
East Asia and Pacific	1193	4.9	8.1	9	20	2	11	13	7755	0	6	12
Latin America and Caribbean	3681	4.0	2.1	286	22	5	11	5	6125	0	13	29
CEE/CIS and Baltic States	2182	-	-4.4	284	5	5	6	9	-	-	-	10
Industrialized countries	27086	2.9	1.1	2	-	13	4	9	-	-	-	-
Developing countries	1222	3.7	4.0	113	30	4	11	11	43843	1	11	18
Least developed countries	232	-0.1	0.0	181	-	5	13	14	14231	11	6	10
World	5051	3.1	1.5	31	28	11	6	9	45339	1	11	16

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

- **GNP per capita** Gross national product (GNP) is the sum of gross value added by all resident producers, plus any taxes that are not included in the valuation of output, plus net receipts of primary income from non-resident sources. GNP per capita is the gross national product, converted to United States dollars using the World Bank Atlas method, divided by the mid-year population.
- % of population below \$1 a day Percentage of population living on less than \$1 a day at 1985 international prices, adjusted for purchasing power parity.
- **ODA** Official development assistance.
- **Debt service** The sum of interest payments and repayments of principal on external public and publicly guaranteed long-term debts.

#### Main data sources

GNP per capita - World Bank.

% of population below \$1 a day - World Bank.

Expenditure on health, education and defence - International Monetary Fund (IMF).

ODA - Organisation for Economic Co-operation and Development (OECD).

Debt service - World Bank.

Ν	otes

a: Range \$785 or less. b: Range \$786 to \$3115. c: Range \$9636 or more. Data not available.

Х

Indicates data that refer to years or periods other than those specified in

the column heading, differ from the standard definition, or refer to only part of a country.

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### Table 7: Women

	Under-5 mortality	Life expectancy females as a % of males	Adult literacy rate females as a % of males	females as	nent ratios s a % of males 190-96	Contraceptive prevalence (%)	% of pregnant women immunized against tetanus	% of births attended by trained health personnel	morta	ternal lity ratio 80-97*
	rank	<sup>%</sup> 01 mates 1997	1995	primary school	secondary school	1990-98	1995-97	1990-97	reported	adjusted
Afghanistan	4	102	32	50	34	2x	3	9x	-	-
Albania	89	109	-	102	100	-	50	99x	-	-
Algeria	90	104	66	89	89	57	52	77	220	-
Andorra	171	-	-	-	-	-	-	-	-	-
Angola	3	107	52x	93	-	8	53	15x	-	-
Antigua and Barbuda	127	110	-	-	-	53x	-	100	150	-
Argentina	118	110	100	99	111	74x	63	97	44	85
Armenia	103	110	99	105	107	60	-	96	35	-
Australia	171	108	-	100	99	76x	-	100	-	-
Austria	181	108	-	100	95	71x	-	100	-	-
Azerbaijan	81	112	99	108	105	-	-	99	37	-
Bahamas	127	110	99	99	103	62x	75x	100x	-	-
Bahrain	126	106	89	102	104	62	56	98	46	-
Bangladesh	44	100	53	86	50	49	86	8	440	-
Barbados	148	107	99	101	89x	55x	100	100	0	-
Belarus	138	117	99	97	104	50	-	100x	22	-
Belgium	163	109	-	99	106	79	-	100x	-	-
Belize	86	104	100x	95	111	47	88	79	140	140
Benin	23	110	53	57	43	37	73	60	500	-
Bhutan	39	108	50	61x	29x	19	70	15	380	-
Bolivia	51	105	84	91	85	45	75	47	390	-
Bosnia and Herzegovina	142	109	-	-	-	-	-	97	10	-
Botswana	78	106	74	103	107	48	49	78x	330	-
Brazil	84	113	100	96x	116x	77	45	92	160	-
Brunei Darussalam	154	107	89	95	108	-	76	98	0	-
Bulgaria	136	110	99	98	99	76x	-	100x	15	-
Burkina Faso	22	104	30	65	55	8	21	42	-	-
Burundi	17	109	47	82	63	9x	33	19x	-	-
Cambodia	23	106	66x	81	59	13	31	31	470	-
Cameroon	50	106	69	90	69	16	32	64	-	-
Canada	163	108	-	98	99	73x	-	99x	-	-
Cape Verde	65	103	79	98	93	27	55	54	55	-
Central African Rep.	19	111	75	65	40	15	15	46	1100	-
Chad	14	107	56	49	27	4	24	15	830	-
Chile	146	108	100	98	111	43x	-	100	23	-
China	80	106	81	99	90	83	13	89	60	60
Colombia	103	109	100	99	116	72	57	85	80	80
Comoros	53	102	78	84	81	21	15	52	500	-
Congo	45	108	81	92	73	-	30	-	-	-
Congo, Dem. Rep.	11	106	78	69	59	8	80	-	-	-
Cook Islands	103	-	-	-	-	50	90	99	-	-
Costa Rica	144	107	100	99	108	75	90	98	29	35
Côte d'Ivoire	27	104	60	73	50	11	44	45	600	-
Croatia	157	112	99	99	102		91	-	12	-
Cuba	159	105	99	96	105	82	61x	99	24	24
Cyprus	157	107	93x	100	103	-	57x	100x	0	-
Czech Rep.	163	109	-	99	103	69	-	-	9	-
Denmark	171	107	-	101	103	78x	-	100x	10	-
Djibouti	26	106	55	75	73	-	47	79x	-	-
Dominica	132	106	-	-	-	50x	-	98	65	-
Dominican Rep.	75	106	100	101	138	64	77	96	230	-
Ecuador	90	107	96	99	100	57	3	64	160	-
Egypt	65	105	61	87	85	55	61	56	170	170
El Salvador	95	109	95	101	113	53	69	87	160	-
Equatorial Guinea	20	106	76	-	-	-	70	58x	-	-
Eritrea	40	106	-	81	73	8	32	21	1000	-
Estonia	144	117	100	98	110	70	-	-	50	-
Ethiopia	18	106	54	62	83	4	40	14x	-	-

	Under-5 mortality	Life expectancy females as a % of males	Adult literacy rate females as a % of males	females a	nent ratios s a % of males 990-96	Contraceptive prevalence (%)	% of pregnant women immunized against tetanus	% of births attended by trained health personnel	morta	ternal lity ratio 80-97*
	rank	1997	1995	primary school	secondary school	1990-98	1995-97	1990-97	reported	adjusted
Fiji	118	107	95	99	102	32x	100	96x	38	-
Finland	188	110	-	100	115	80x	-	100	6	6
France	181	111	-	98	99	75	83	99	10	20
Gabon	29	106	72	-	-	-	4	80x	-	-
Gambia	55	107	47	86	54	12	86	44	-	-
Georgia	109	112	99	101	97	-	-	-	60	-
Germany	181	110	-	99	98	75	80	99	8	-
Ghana	47	107	71	84	64	20	87	41	210	-
Greece	159	108	97	100	91	-	-	97x	1	-
Grenada	109	-	-	-	-	54	80	99	0	-
Guatemala	74	109	78	87	92	31	38	35	190	-
Guinea	13	102	44	54	33	29	45	31	670	-
Guinea-Bissau	7	107	63	58	36x	1x	46	27x	910	910
Guyana	57	111	99	98	125	-	71	95	190	-
Haiti	34	106	88	93	96	18	38	21	-	-
Holy See	-	-	-	-	-	-	-	-	-	-
Honduras	81	107	100	102	128	50	100	61	220	220
Hungary	149	114	100	100	105	73x	-	99x	15	-
Iceland	181	105	-	96	98	-	-	100x	-	-
India	45	100	58	82	64	41	80	34	440	-
Indonesia	68	106	87	96	85	55	78	54	450	-
Iran	96	103	76	93	82	73	76	86	37	37
Iraq	37	105	63	86	64	18x	56	54x	-	-
Ireland	163	107	-	99	105	-	-	-	6	-
Israel	171	104	96	100	106	-	-	99x	5	-
Italy	171	108	99	98	101	78x		-	7	-
Jamaica	149	107	110	99	113	65	82	91	120	120
Japan	171	108	-	100	102	59	-	100x	8	-
Jordan	118	106	85	100	98x	53	40	97	41	41
Kazakhstan	84	116	99	100	101	59	-	100	70	-
Kenya	55	108	81	100	85	33	21	45	370	-
Kiribati	62	109	-	-	-	28	41	72	-	_
Korea, Dem. People's Rep.	103	109	-	94x	-	-	80	100x	110	
Korea, Rep. of	171	110	98	101	100	79	-	98	20	20
Kuwait	146	105	91	99	100	35x	21	99x	5	20
Kyrgyzstan	79	103	96	97	112	60	-	98	65	
Lao People's Dem. Rep.	37	106	64	74	61	19	32	-	650	
Latvia	132	100	100	95	105	-	64		45	-
Lebanon	93	106	95	97	109	63	-	98	100	
Lesotho	33	105	77	114	155	23	10	50	-	-
Liberia	6	106	41	55x	-	6x	35	58x	-	
Libya	115	105	72	100	- 100	-	45x	76x	- 75	-
Liechtenstein	163	-	100x	-	-	-	-	-	-	-
Lithuania	103	- 117	99	- 98	- 104	-	-	-	- 18	-
Luxembourg	143	117	-	107	104	-	-	99x	0	-
Madagascar	25	105	- 53	96	100	- 19	- 35	99x 47	490	-
Malawi	25 8	105	53 58	90	57	22	35 15	47	490 620	-
Malaysia	8 149	103	58 88	90	57	22 48x	81	99	39	- 39
Maldives	64	97	100	97	109	48x 17	96	99	39	39
Mali	5	97	59	97 66	50	7	32	90 25	350 580	390
Malta	5 154	107	59 101	95	50 92		-	- 25		
						-			-	-
Marshall Islands	54	-	-	-	-	37	15x	-	-	-
Mauritania	16	106	52	85	58	4	63	40	550	-
Mauritius	123	110	91	99	107	75	78	97	30	-
Mexico	96	109	95	97	102	53x	70	91	48	85
Micronesia, Fed. States of	118	106	-	-	-	-	44	90x	-	-
Moldova, Rep. of	102	113	101	98	104	-	-	-	42	-
Monaco	181	-	-	-	-	-	-	-	-	-

### Table 7: Women

	Under-5 mortality	Life expectancy females as a % of males	Adult literacy rate females as a % of males	females as	nent ratios s a % of males 190-96	Contraceptive prevalence	% of pregnant women immunized against totopus	% of births attended by trained health	morta	ternal lity ratio 80-97*
	rank	% of males 1997	% of males 1995	primary school	secondary school	(%) 1990-98	tetanus 1995-97	personnel 1990-97	reported	adjusted
Mongolia	27	105	87	103	136	-	-	100	150	-
Morocco	67	105	54	76	75	59	42	43	230	-
Mozambique	10	107	40	71	56	6	68	44	1100	-
Myanmar	42	107	88	97	103	33	83	56	230	-
Namibia	62	104	95x	102	118	29	78	68	230	-
Nauru	103	-	-	-	-	-	-	-	-	-
Nepal	48	100	34	69	51	30	19	9	540	-
Netherlands	171	108	-	98	95	80	-	100x	7	10
New Zealand	163	107	-	99	98	70x	-	99x	15	15
Nicaragua	71	106	103	103	116	49	95	61	160	-
Niger	1	106	33	61	44	4	19	15	590	-
Nigeria	15	106	70	79	85	6	23	31	-	-
Niue	-	-	-	-	-	-	40	99	-	-
Norway	188	108	-	100	95	76x	-	100x	6	-
Oman	138	106	65x	95	94	40	98	93	21	-
Pakistan	33	103	48	45	52	17	57	18	-	-
Palau	98	-	-	-	-	38x	55	99	-	-
Panama	132	106	99	96	108	58x	24	86	85	-
Papua New Guinea	43	104	78	85	65	26	64	53	370	-
Paraguay	99	107	97	97	103	51	32	61	190	-
Peru	72	108	87	97	93	64	57	56	270	-
Philippines	88	106	99	102	102x	40	46	64	210	-
Poland	149	113	-	99	101	75x	-	99x	8	-
Portugal	159	110	95	95	108	66x	-	90x	8	-
Qatar	132	107	101	95	100	32x	-	98	10	-
Romania	114	111	98	98	101	57	-	100x	41	-
Russian Federation	115	124	99	99	108	-	-	99	49	-
Rwanda	21	105	74	98	75	21	43	26	-	-
Saint Kitts and Nevis	93	107	-	-	-	41x	-	100	130	-
Saint Lucia	109	110	-	-	-	47x	-	100	30	-
Saint Vincent/Grenadines	127	110	-	-	-	58x	-	96	43	-
Samoa	76	106	-	98	114	21	96	76	-	-
San Marino	171	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	59	106	-	-	-	10x	65	86x	-	-
Saudi Arabia	112	104	69	96	87	-	60	90	-	-
Senegal	36	104	53	82	60	13	34	47	560	-
Seychelles	138	110	104x	_	_	-	100	99x	-	-
Sierra Leone	2	108	40	69	59	4x	11	25x		-
Singapore	188	105	90	96x	103x	74x	-	100x	6	-
Slovakia	149	113	-	100	104	74	-	-	9	-
Slovenia	171	113	99x	100	102	-	-	-	11	-
Solomon Islands	112	107	-	87	67	25	63	87x	550	-
Somalia	9	106	39x	53x	-	1x	30	2x	-	-
South Africa	69	110	100	98	119	50x	26	82	-	-
Spain	181	109	98	100	110	59x	-	96x	6	-
Sri Lanka	136	106	94	98	110	66	89	94	60	60
Sudan	41	106	60	81	86	8	46	69	550	-
Suriname	103	107	96	97x	116x	-	99x	91x	110	110
Swaziland	52	109	97	95	96	21x	85	56	230	-
Sweden	188	107	-	101	102	78x	-	100x	5	-
Switzerland	181	109	-	99	94	70x	-	99x	5	-
Syria	99	106	65	90	85	36	92	67	110	
Tajikistan	61	109	100	97	90	-	-	79	85	-
Tanzania	30	105	72	97	83	18	27	38	530	
TFYR Macedonia	123	107	-	97	102	-	91x	95	11	-
Thailand	92	107	- 96	97	97	- 74	88	95 71x	44	- 44
Togo	32	109	55	97 80	34	24	65	54x	- 44	- 44
1040	00	100	55	00	54	24	00	JHA	-	-

	Under-5 mortality	Life expectancy females as a % of males	Adult literacy rate females as a % of males	females as	nent ratios s a % of males 190-96	Contraceptive prevalence (%)	% of pregnant women immunized against tetanus	% of births attended by trained health personnel	morta	ternal lity ratio 10-97*
	rank	1997	1995	primary school	secondary school	1990-98	1995-97	1990-97	reported	adjusted
Trinidad and Tobago	141	107	98	112	120	53x	19x	98x	-	-
Tunisia	99	104	70	94	94	60	80	81	70	70
Turkey	81	108	78	95	67	63	32	76	130	-
Turkmenistan	59	111	98x	-	-	-	-	96	110	-
Tuvalu	72	-	-	-	-	-	53	100	-	-
Uganda	31	105	68	85	60	15	45	38	510	-
Ukraine	118	116	101	99	107	-	-	100	30	-
United Arab Emirates	154	103	101	96	109	28	-	96x	3	-
United Kingdom	163	108	-	101	118	82	-	100x	7	10
United States	159	110	-	99	101	74x	-	99x	8	12
Uruguay	127	109	101	98	120	84	13x	96x	21	-
Uzbekistan	70	111	100	97	88	56	-	98	21	-
Vanuatu	77	106	-	102	78	15	15	87	-	-
Venezuela	115	109	98	103	141	49x	72	69x	65	-
Viet Nam	86	106	94	95x	93x	65	84	85	160	160
Yemen	49	102	49x	40	22	21	17	43	-	-
Yugoslavia	127	107	98	101	105	-	-	93	10	-
Zambia	12	105	83	93	62	26	37	47	650	-
Zimbabwe	58	104	89	97	80	48	70	69	400	-

### **Regional summaries**

nogronal caliniarios									
Sub-Saharan Africa	106	71	82	82	16	39	37	-	-
Middle East and North Africa	104	67	86	83	50	59	70	-	-
South Asia	101	57	77	63	39	74	28	-	-
East Asia and Pacific	106	84	98	91	75	36	81	-	-
Latin America and Caribbean	110	97	97	109	65	57	82	-	-
CEE/CIS and Baltic States	114	97	98	98	64	-	93	-	-
Industrialized countries	109	-	99	102	72	-	99	-	-
Developing countries	105	78	89	83	55	52	55	-	-
Least developed countries	105	63	78	60	22	48	28	-	-
World	106	81	90	88	58	52	60	-	-

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

- Life expectancy at birth The number of years newborn children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth.
- Adult literacy rate Percentage of persons aged 15 and over who can read and write.
- Primary or secondary enrolment ratios The number of children enrolled in a schooling level (primary or secondary), regardless of age, divided by the population of the age group which officially corresponds to that level.
- **Contraceptive prevalence** Percentage of married women aged 15-49 years currently using contraception.
- Births attended Percentage of births attended by physicians, nurses, midwives, or primary health care workers trained in midwifery skills.
- Maternal mortality ratio Annual number of deaths of women from pregnancy-related causes per 100,000 live births. 'Reported' column shows country reported figures; 'adjusted' column shows figures from special studies that take account of misclassification and underreporting.

#### Main data sources

Life expectancy - United Nations Population Division.

Adult literacy - United Nations Educational, Scientific and Cultural Organization (UNESCO).

- School enrolment Demographic and Health Surveys (DHS) and United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Immunization Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), World Health Organization (WHO) and UNICEF.
- Contraceptive prevalence Demographic and Health Surveys (DHS), United Nations Population Division and UNICEF.

Births attended - World Health Organization (WHO) and UNICEF.

Maternal mortality - World Health Organization (WHO) and UNICEF.

\* Since maternal deaths are often misclassified or underreported and data collection methods vary considerably, maternal mortality estimates are being adjusted to improve comparability and to better reflect the true levels of maternal mortality. As the 'adjusted' column in this table shows, only partial data are currently available, and therefore no regional averages could be calculated.

Notes - Data not available.

x Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

Regional averages given at the end of each table are calculated using data from the countries as grouped below.

### Sub-Saharan Africa

Angola; Benin; Botswana; Burkina Faso; Burundi; Cameroon; Cape Verde; Central African Rep.; Chad; Comoros; Congo; Congo, Dem. Rep.; Côte d'Ivoire; Equatorial Guinea; Eritrea; Ethiopia; Gabon; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Mauritius; Mozambique; Namibia; Niger; Nigeria; Rwanda; Sao Tome and Principe; Senegal; Seychelles; Sierra Leone; Somalia; South Africa; Swaziland; Tanzania; Togo; Uganda; Zambia; Zimbabwe

### Middle East and North Africa

Algeria; Bahrain; Cyprus; Djibouti; Egypt; Iran; Iraq; Jordan; Kuwait; Lebanon; Libya; Morocco; Oman; Qatar; Saudi Arabia; Sudan; Syria; Tunisia; United Arab Emirates; Yemen

### South Asia

Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka

### **East Asia and Pacific**

Brunei Darussalam; Cambodia; China; Cook Islands; Fiji; Indonesia; Kiribati; Korea, Dem. People's Rep.; Korea, Rep. of; Lao People's Dem. Rep.; Malaysia; Marshall Islands; Micronesia, Fed. States of; Mongolia; Myanmar; Nauru; Niue; Palau; Papua New Guinea; Philippines; Samoa; Singapore; Solomon Islands; Thailand; Tonga; Tuvalu; Vanuatu; Viet Nam

### Latin America and Caribbean

Antigua and Barbuda; Argentina; Bahamas; Barbados; Belize; Bolivia; Brazil; Chile; Colombia; Costa Rica; Cuba; Dominica; Dominican Rep.; Ecuador; El Salvador; Grenada; Guatemala; Guyana; Haiti; Honduras; Jamaica; Mexico; Nicaragua; Panama; Paraguay; Peru; Saint Kitts and Nevis; Saint Lucia; Saint Vincent/Grenadines; Suriname; Trinidad and Tobago; Uruguay; Venezuela

### **CEE/CIS and Baltic States**

Albania; Armenia; Azerbaijan; Belarus; Bosnia and Herzegovina; Bulgaria; Croatia; Czech Rep.; Estonia; Georgia; Hungary; Kazakhstan; Kyrgyzstan; Latvia; Lithuania; Moldova, Rep. of; Poland; Romania; Russian Federation; Slovakia; Tajikistan; TFYR Macedonia; Turkey; Turkmenistan; Ukraine; Uzbekistan; Yugoslavia

### Industrialized countries

Andorra; Australia; Austria; Belgium; Canada; Denmark; Finland; France; Germany; Greece; Holy See; Iceland; Ireland; Israel; Italy; Japan; Liechtenstein; Luxembourg; Malta; Monaco; Netherlands; New Zealand; Norway; Portugal; San Marino; Slovenia; Spain; Sweden; Switzerland; United Kingdom; United States

#### **Developing countries**

Afghanistan; Algeria; Angola; Antigua and Barbuda; Argentina; Armenia; Azerbaijan; Bahamas; Bahrain; Bangladesh; Barbados; Belize; Benin; Bhutan; Bolivia; Botswana; Brazil; Brunei Darussalam; Burkina Faso; Burundi; Cambodia; Cameroon; Cape Verde; Central African Rep.; Chad; Chile; China; Colombia; Comoros; Congo; Congo, Dem. Rep.; Cook Islands; Costa Rica; Côte d'Ivoire; Cuba; Cvprus: Diibouti: Dominica: Dominican Rep.: Ecuador; Egypt; El Salvador; Equatorial Guinea; Eritrea; Ethiopia; Fiji; Gabon; Gambia; Georgia; Ghana; Grenada; Guatemala; Guinea; Guinea-Bissau; Guyana; Haiti; Honduras; India; Indonesia; Iran; Iraq; Israel; Jamaica; Jordan; Kazakhstan; Kenya; Kiribati; Korea, Dem. People's Rep.; Korea, Rep. of; Kuwait; Kyrgyzstan; Lao People's Dem. Rep.; Lebanon; Lesotho; Liberia; Libya; Madagascar; Malawi; Malaysia; Maldives; Mali; Marshall Islands; Mauritania; Mauritius; Mexico; Micronesia, Fed. States of; Mongolia; Morocco; Mozambique; Myanmar; Namibia; Nauru; Nepal; Nicaragua; Niger; Nigeria; Niue; Oman; Pakistan; Palau; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Qatar; Rwanda; Saint Kitts and Nevis; Saint Lucia; Saint Vincent/Grenadines; Samoa; Sao Tome and Principe; Saudi Arabia; Senegal; Seychelles; Sierra Leone; Singapore; Solomon Islands; Somalia; South Africa; Sri Lanka; Sudan; Suriname; Swaziland; Syria; Tajikistan; Tanzania; Thailand; Togo; Tonga; Trinidad and Tobago; Tunisia; Turkey; Turkmenistan; Tuvalu; Uganda; United Arab Emirates; Uruguay; Uzbekistan; Vanuatu; Venezuela; Viet Nam; Yemen; Zambia; Zimbabwe

#### Least developed countries

Afghanistan; Angola; Bangladesh; Benin; Bhutan; Burkina Faso; Burundi; Cambodia; Cape Verde; Central African Rep.; Chad; Comoros; Congo, Dem. Rep.; Djibouti; Equatorial Guinea; Eritrea; Ethiopia; Gambia; Guinea; Guinea-Bissau; Haiti; Kiribati; Lao People's Dem. Rep.; Lesotho; Liberia; Madagascar; Malawi; Maldives; Mali; Mauritania; Mozambique; Myanmar; Nepal; Niger; Rwanda; Samoa; Sao Tome and Principe; Sierra Leone; Solomon Islands; Somalia; Sudan; Tanzania; Togo; Tuvalu; Uganda; Vanuatu; Yemen; Zambia

### Measuring human development

An introduction to table 8

If development in the 1990s is to assume a more human face then there arises a corresponding need for a means of measuring human as well as economic progress. From UNICEF's point of view, in particular, there is a need for an agreed method of measuring the level of child well-being and its rate of change.

The under-five mortality rate (U5MR) is used in table 8 (next page) as the principal indicator of such progress.

The U5MR has several advantages. First, it measures an end result of the development process rather than an 'input' such as school enrolment level, per capita calorie availability, or the number of doctors per thousand population — all of which are means to an end.

Second, the U5MR is known to be the result of a wide variety of inputs: the nutritional health and the health knowledge of mothers; the level of immunization and ORT use; the availability of maternal and child health services (including prenatal care); income and food availability in the family; the availability of clean water and safe sanitation; and the overall safety of the child's environment.

Third, the U5MR is less susceptible than, say, per capita GNP to the fallacy of the average. This is because the natural scale does not allow the children of the rich to be one thousand times as likely to survive, even if the man-made scale does permit them to have one thousand times as much income. In other words, it is much more difficult for a wealthy minority to affect a nation's U5MR, and it therefore presents a more accurate, if far from perfect, picture of the health status of the majority of children (and of society as a whole).

For these reasons, the U5MR is chosen by UNICEF as its single most important indicator of the state of a nation's children. That is why the tables rank the nations of the world not in ascending order of their per capita GNP but in descending order of their under-five mortality rates.

The speed of progress in reducing the U5MR can be measured by calculating its average annual reduction rate (AARR). Unlike the comparison of absolute changes, the AARR reflects the fact that the lower limits to U5MR are approached only with increasing difficulty. As lower levels of under-five mortality are reached, for example, the same absolute reduction obviously represents a greater percentage of reduction. The AARR therefore shows a higher rate of progress for, say, a 10-point reduction if that reduction happens at a lower level of under-five mortality. (A fall in U5MR of 10 points from 100 to 90 represents a reduction of 10 per cent, whereas the same 10-point fall from 20 to 10 represents a reduction of 50 per cent).

When used in conjunction with GNP growth rates, the U5MR and its reduction rate can therefore give a picture of the progress being made by any country or region, and over any period of time, towards the satisfaction of some of the most essential of human needs.

As table 8 shows, there is no fixed relationship between the annual reduction rate of the U5MR and the annual rate of growth in per capita GNP. Such comparisons help to throw the emphasis on to the policies, priorities, and other factors which determine the ratio between economic and social progress.

Finally, the table gives the total fertility rate for each country and its average annual rate of reduction. It will be seen that many of the nations that have achieved significant reductions in their U5MR have also achieved significant reductions in fertility.

# Table 8: The rate of progress

	Under-5		Under-5 mortality rate		ra	Average ann ite of reductio	n (%)	average	er capita e annual rate (%)		Total fertility rate			e annual luction (%)
	mortality rank	1960	1990	1997	1960-90	1990-97	required 1997-2000	1965-80	1990-96	1960	1990	1997	1960-90	1990-97
Afghanistan	4	360	260	257	1.1	0.2	43.4	0.6	-	6.9	6.9	6.9	0.0	0.0
Albania	89	151	41	40	4.3	0.4	12.7	-	2.2	5.9	3.0	2.6	2.3	2.0
Algeria	90	255	48	39	5.6	3.0	6.6	4.2	-1.9	7.3	4.6	3.9	1.5	2.4
Andorra	171	-	-	6	-	-	-	-	-	-	-	-	-	-
Angola	3	345	297	292	0.5	0.2	47.6	-	-5.6	6.4	7.2	6.7	-0.4	1.0
Antigua and Barbuda	127	-	-	21	-	-	-	-	2.0	-	1.8	1.7	-	0.8
Argentina	118	72	28	24	3.1	2.2	8.3	1.7	3.9	3.1	2.9	2.6	0.2	1.6
Armenia	103	48	31	30	1.5	0.5	12.4	-	-15.0	4.5	2.4	1.7	2.1	4.9
Australia	171	24	10	6	2.9	7.3	-3.7	2.2	2.7	3.3	1.9	1.9	1.8	0.0
Austria	181	43	9	5	5.2	8.4	-6.1	4.0	0.9	2.7	1.5	1.4	2.0	1.0
Azerbaijan	81	75	44	45	1.8	-0.3	14.3	-	-18.7	5.5	2.7	2.3	2.4	2.3
Bahamas	127	68	29	21	2.8	4.6	2.8	-	-2.0	3.8	2.1	2.0	2.0	0.7
Bahrain	126	203	23	22	7.3	0.6	12.1	-	3.8	7.1	3.7	3.0	2.2	3.0
Bangladesh	44	247	140	109	1.9	3.6	14.8	-0.3	2.7	6.7	4.1	3.2	1.6	3.5
Barbados	148	90	13	12	6.4	1.1	10.7	-	-0.8	4.5	1.7	1.7	3.2	0.0
Belarus	138	47	20	18	2.8	1.5	10.1	-	-8.6	2.7	1.9	1.4	1.2	4.4
Belgium	163	35	9	7	4.5	3.6	5.1	3.6	1.2	2.6	1.6	1.6	1.6	0.0
Belize	86	104	49	43	2.5	1.9	9.1	-	0.7	6.5	4.4	3.7	1.3	2.5
Benin	23	300	185	167	1.6	1.5	29.0	-0.3	1.9	6.9	6.6	5.9	0.1	1.6
Bhutan	39	300	166	121	2.0	4.5	18.2	-	2.0	5.9	5.9	5.9	0.0	0.0
Bolivia	51	255	124	96	2.4	3.7	10.5	1.7	1.8	6.7	4.9	4.4	1.0	1.5
Bosnia and Herzegovina	142	155	20	16	6.8	3.2	6.2	-	-	4.0	1.7	1.4	2.9	2.8
Botswana	78	170	62	49	3.4	3.4	5.7	9.9	1.3	6.8	5.0	4.5	1.0	1.5
Brazil	84	177	60	44	3.6	4.4	3.2	6.3	2.0	6.2	2.7	2.2	2.8	2.9
Brunei Darussalam	154	87	11	10	6.9	1.4	10.5	-	-1.5	6.9	3.2	2.7	2.6	2.4
Bulgaria	136	70	18	19	4.5	-0.8	15.3	-	-1.8	2.2	1.7	1.5	0.9	1.8
Burkina Faso	22	315	196	169	1.6	2.1	29.4	1.7	-0.1	6.7	7.3	6.6	-0.3	1.4
Burundi	17	255	180	176	1.2	0.3	30.7	2.4	-6.4	6.8	6.8	6.3	0.0	1.1
Cambodia	23	217	193	167	0.4	2.1	29.0	-	2.9	6.3	4.9	4.5	0.8	1.2
Cameroon	50	255	125	99	2.4	3.3	11.6	2.4	-3.8	5.8	5.9	5.3	-0.1	1.5
Canada	163	33	9	7	4.3	3.6	5.1	3.3	0.6	3.8	1.7	1.6	2.7	0.9
Cape Verde	65	164	73	73	2.7	0.0	13.5	-	-16.7	7.0	4.3	3.6	1.6	2.5
Central African Rep.	19	327	177	173	2.0	0.3	30.2	0.8	-1.7	5.6	5.5	5.0	0.1	1.4
Chad	14	325	198	198	1.7	0.0	34.7	-1.9	-1.7	6.0	5.9	5.5	0.1	1.0
Chile	146	138	20	13	6.4	6.2	-0.8	0.0	6.4	5.3	2.6	2.5	2.4	0.6
China	80	209	47	47	5.0	0.0	13.6	4.1	11.0	5.7	2.2	1.8	3.2	2.9
Colombia	103	130	40	30	3.9	4.1	3.9	3.7	3.0	6.8	3.0	2.7	2.7	1.5
Comoros	53	265	120	93	2.6	3.6	9.5	-	-1.8	6.8	6.3	5.6	0.3	1.7
Congo	45	220	110	108	2.3	0.3	14.5	2.7	-4.3	5.9	6.3	5.9	-0.2	0.9
Congo, Dem. Rep.	11	302	207	207	1.3	0.0	36.1	-1.3	-10.4	6.0	6.7	6.3	-0.4	0.9
Cook Islands	103	-	32	30	-	0.9	11.4	-	-	-	-	-	-	-
Costa Rica	144	112	16	14	6.5	1.9	9.0	3.3	2.4	7.0	3.3	3.0	2.5	1.4
Côte d'Ivoire	27	300	150	150	2.3	0.0	25.4	2.8	0.2	7.2	6.3	5.2	0.4	2.7
Croatia	157	98	13	9	6.7	5.3	1.1	-	2.2	2.3	1.7	1.6	1.0	0.9
Cuba	159	54	13	8	4.7	6.9	-2.8	-	-	4.2	1.7	1.6	3.0	0.9
Cyprus	157	36	12	9	3.7	4.1	3.9	-	2.6	3.5	2.4	2.3	1.3	0.6
Czech Rep.	163	25	11	7	2.7	6.5	-1.4	-	0.9	2.3	1.8	1.4	0.8	3.6
Denmark	171	25	9	6	3.4	5.8	0.0	2.2	2.1	2.6	1.6	1.8	1.6	-1.7
Djibouti	26	289	164	156	1.9	0.7	26.7	-	-	7.0	6.0	5.4	0.5	1.5
Dominica	132	-	23	20	-	2.0	8.9	-	2.3	-	2.7	2.3	-	2.3
Dominican Rep.	75	149	65	53	2.8	2.9	6.7	3.8	3.1	7.4	3.3	2.8	2.7	2.3
Ecuador	90	140	50	39	4.3	3.5	5.3	5.4	0.8	6.7	3.8	3.1	1.9	2.9
Egypt	65	282	106	73	3.3	5.3	1.4	2.8	2.2	7.0	4.2	3.4	1.5	3.0
El Salvador	95	202	54	36	4.5	5.8	0.0	1.5	3.5	6.8	3.8	3.4	1.7	2.9
Equatorial Guinea	95 20	316	206	172	4.5	2.6	30.0	-	15.9	5.5	5.9	5.5	-0.2	1.0
Eritrea	20 40	250	160	172	1.4	4.6	16.8	-	-	5.5 6.6	5.9 5.9	5.5 5.4	-0.2	1.0
Estonia	144	52	21	14	3.0	4.0 5.8	0.0	-	-4.9	2.0	5.9 1.9	1.3	0.4	5.4
Ethiopia	144		190	14			30.5				7.0	7.0		0.0
силоріа	10	280	190	1/0	1.3	1.2	30.3	0.4	2.0	6.9	1.0	7.U	0.0	0.0

	Under-5		Under-5 mortality rate		ra	Average anno te of reductio		average	er capita e annual rate (%)		Total fertility rate	9		e annual duction (%)
	mortality rank	1960	1990	1997	1960-90	1990-97	required 1997-2000	1965-80	1990-96	1960	1990	1997	1960-90	1990-97
Fiji	118	97	31	24	3.8	3.7	4.9	-	0.6	6.4	3.1	2.8	2.4	1.5
Finland	188	28	7	4	4.6	8.0	-5.4	3.6	-0.2	2.7	1.7	1.8	1.5	-0.8
France	181	34	9	5	4.4	8.4	-6.1	3.7	0.7	2.8	1.8	1.6	1.5	1.7
Gabon	29	287	164	145	1.9	1.8	24.3	5.6	-1.2	4.1	5.0	5.4	-0.7	-1.1
Gambia	55	364	127	87	3.5	5.4	7.2	-	-0.5	6.4	5.9	5.2	0.3	1.8
Georgia	109	70	31	29	2.7	1.0	11.2	-	-19.3	2.9	2.2	1.9	0.9	2.1
Germany	181	40	9	5	5.0	8.4	-6.1	3.0x	0.7	2.4	1.4	1.3	1.8	1.1
Ghana	47	215	127	107	1.8	2.4	14.1	-0.8	1.5	6.9	6.0	5.3	0.5	1.8
Greece	159	64	11	8	5.9	4.5	3.1	4.8	1.3	2.2	1.5	1.4	1.3	1.0
Grenada	109	-	37	29	-	3.5	5.3	-	0.6	-	-	-	-	-
Guatemala	74	202	81	55	3.0	5.5	0.6	3.0	0.5	6.9	5.6	4.9	0.7	1.9
Guinea	13	380	237	201	1.6	2.4	35.2	1.3	1.9	7.0	7.0	6.6	0.0	0.8
Guinea-Bissau	7	336	246	220	1.0	1.6	38.2	-2.7	0.5	5.1	5.8	5.5	-0.4	0.8
Guyana	57	126	90	82	1.1	1.3	10.4	-	10.4	6.5	2.6	2.3	3.1	1.8
Haiti	34	253	148	132	1.8	1.6	21.1	0.9	-6.9	6.3	4.9	4.6	0.8	0.9
Holy See	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honduras	81	204	61	45	4.0	4.3	3.3	1.1	1.2	7.5	5.1	4.4	1.3	2.1
Hungary	149	57	16	11	4.2	5.4	0.9	5.1	-0.6	2.0	1.8	1.4	0.4	3.6
Iceland	145	22	5	5	4.2	0.0	13.9	-	0.5	4.0	2.2	2.2	2.0	0.0
India	45	236	131	108	2.0	2.8	14.5	1.5	3.8	5.9	3.7	3.1	1.6	2.5
Indonesia	68	230	95	68	2.7	4.8	2.4	5.2	5.9	5.5	3.1	2.7	1.9	2.0
Iran	96	233	59	35	4.6	7.5	-3.9	2.9	1.0	7.2	5.7	4.8	0.8	2.5
Iraq	37	171	48	122	4.2	-13.3	44.6	-	-	7.2	5.9	5.3	0.7	1.5
Ireland	163	36	40	7	4.6	3.6	5.1	2.8	5.1	3.8	2.1	1.8	2.0	2.2
Israel	103	39	12	6	3.9	9.9	-9.6	3.7	3.2	3.9	3.0	2.8	0.9	1.0
Italy	171	50	10	6	5.4	7.3	-3.7	3.2	0.9	2.5	1.3	1.2	2.2	1.0
Jamaica	149	76	16	11	5.2	5.4	0.9	-0.1	0.9	5.4	2.6	2.5	2.2	0.6
Japan	145	40	6	6	6.3	0.0	13.5	5.1	1.2	2.0	1.6	1.5	0.7	0.0
Jordan	171	139	37	24	4.4	6.2	-1.0	5.8x	4.0	7.7	5.8	5.2	0.7	1.6
Kazakhstan	84	74	48	44	4.4	1.2	-1.0	J.0X	-10.3	4.5	2.8	2.3	1.6	2.8
Kenya	55	205	97	87	2.5	1.2	9.9	3.1	-10.5	4.5	6.1	4.9	0.9	3.1
Kiribati	62	- 200	88	75	2.0	2.3	9.9 8.2	-	-0.5	-	4.0	4.5	-	-1.4
	103	120		30	4.1	2.3	8.4	-	-0.0	5.8	4.0	2.1		
Korea, Dem. People's Rep.			35					- 7.0					3.4	0.0
Korea, Rep. of	171	127	9	6	8.8	5.8	0.0	7.3	6.2	6.0	1.7	1.7	4.2	0.0
Kuwait	146	128	16	13	6.9	3.0	6.5	0.6x	15.7	7.3	3.5	2.8	2.5	3.2
Kyrgyzstan	79	115	55	48	2.5	1.9	8.9	-	-12.7	5.1	3.8	3.2	1.0	2.5
Lao People's Dem. Rep.	37	235	163	122	1.2	4.1	18.5	-	3.9	6.2	6.7	6.7	-0.3	0.0
Latvia	132	44	20	20	2.6	0.0	13.6	-	-10.1	1.9	1.9	1.4	0.0	4.4
Lebanon	93	85	40	37	2.5	1.1	10.9	-	5.4	6.3	3.3	2.8	2.2	2.3
Lesotho	31	203	148	137	1.1	1.1	22.4	6.8	0.9	5.8	5.3	4.9	0.3	1.1
Liberia	6	288	235	235	0.7	0.0	40.4	0.5	-	6.6	6.8	6.4	-0.1	0.9
Libya	115	270	42	25	6.2	7.4	-3.8	0.0	-	7.1	6.6	6.0	0.2	1.4
Liechtenstein	163	-	-	7	-	-	-	-	-	-	-	-	-	-
Lithuania	143	70	17	15	4.7	1.8	9.4	-	-6.0	2.5	1.9	1.5	0.9	3.4
Luxembourg	163	41	9	7	5.1	3.6	5.1	-	0.1	2.3	1.6	1.8	1.2	-1.7
Madagascar	25	364	168	158	2.6	0.9	27.1	-0.4	-2.0	6.6	6.4	5.7	0.1	1.7
Malawi	8	361	230	215	1.5	1.0	37.4	3.2	-0.2	6.9	7.3	6.7	-0.2	1.2
Malaysia	149	105	21	11	5.4	9.2	-8.0	4.7	6.1	6.8	3.8	3.3	1.9	2.0
Maldives	64	258	84	74	3.7	1.8	9.3	-	4.1	7.0	6.8	6.8	0.1	0.0
Mali	5	517	254	239	2.4	0.9	40.9	2.1x	-0.2	7.1	7.1	6.7	0.0	0.8
Malta	154	42	14	10	3.7	4.8	2.4	-	3.1	3.4	2.1	2.1	1.6	0.0
Marshall Islands	54	-	92	92	-	0.0	13.5	-	-4.0	-	-	-	-	-
Mauritania	16	310	183	183	1.8	0.0	32.0	-0.1	1.7	6.5	5.6	5.1	0.5	1.3
Mauritius	123	92	25	23	4.3	1.2	10.7	3.7	3.6	5.8	2.3	2.3	3.1	0.0
Mexico	96	134	46	35	3.6	3.9	4.4	3.6	-0.3	6.9	3.4	2.8	2.4	2.8
Micronesia, Fed. States of	118	-	31	24	-	3.7	4.9	-	-1.3	-	4.8	4.1	-	2.3
Moldova, Rep. of	102	88	37	31	2.9	2.5	7.6	-	-16.8	3.3	2.4	1.8	1.1	4.1
Monaco	181	-	-	5	-	-	-	-	-	-	-	-	-	-

# Table 8: The rate of progress

	Under-5		Under-5 mortality rate		ra	Average annu te of reductio		average	er capita e annual rate (%)		Total fertility rate	9		e annual luction (%)
	mortality rank	1960	1990	1997	1960-90	1990-97	required 1997-2000	1965-80	1990-96	1960	1990	1997	1960-90	1990-97
Mongolia	27	185	150	150	0.7	0.0	25.4	-	-2.3	6.0	4.2	3.3	1.2	3.4
Morocco	67	220	83	72	3.2	2.0	8.8	2.7	0.2	7.2	4.1	3.2	1.2	3.5
Mozambique	10	280	250	208	0.4	2.6	36.3	-	2.6	6.3	6.5	6.1	-0.1	0.9
Myanmar	42	252	130	114	2.2	1.9	16.3	1.6	3.9	6.0	3.9	3.3	1.4	2.4
Namibia	62	206	84	75	3.0	1.6	9.7	-	1.6	6.0	5.4	4.9	0.4	1.4
Nauru	103	-	-	30	-	-	-	-		-	-	-	-	-
Nepal	48	297	138	104	2.6	4.0	13.2	-	2.3	5.8	5.6	5.0	0.1	1.6
Netherlands	171	22	8	6	3.4	4.1	4.1	2.7	1.8	3.1	1.6	1.6	2.2	0.0
New Zealand	163	26	11	7	2.9	6.5	-1.4	1.7	1.7	3.9	2.1	2.0	2.1	0.7
Nicaragua	71	209	75	57	3.4	3.9	4.4	-0.7	-0.2	7.3	4.7	3.9	1.5	2.7
Niger	1	320	320	320	0.0	0.0	50.7	-2.5	-2.3	7.3	7.6	7.1	-0.1	1.0
Nigeria	15	207	190	187	0.3	0.2	32.8	4.2	1.2	6.5	6.5	6.0	0.0	1.1
Niue	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Norway	188	23	9	4	3.1	11.6	-13.5	3.6	3.7	2.9	1.8	1.9	1.6	-0.8
Oman	138	280	30	18	7.4	7.3	-3.5	9.0	-0.3	7.2	7.2	7.2	0.0	0.0
Pakistan	33	226	138	136	1.6	0.2	22.1	1.8	1.1	6.9	5.8	5.1	0.6	1.8
Palau	98	-	34	34	-	0.0	13.5	-	-	-	-	-	-	-
Panama	132	104	21	20	5.3	0.7	11.9	2.8	3.6	5.9	3.0	2.7	2.3	1.5
Papua New Guinea	43	204	112	112	2.0	0.0	15.7	-	5.0	6.3	5.1	4.7	0.7	1.2
Paraguay	99	90	37	33	3.0	1.6	9.7	4.1	-1.5	6.5	4.7	4.2	1.1	1.6
Peru	72	234	75	56	3.8	4.2	3.8	0.8	4.8	6.9	3.7	3.0	2.1	3.0
Philippines	88	110	63	41	1.9	6.1	-0.8	3.2	1.0	6.9	4.2	3.7	1.7	1.8
Poland	149	70	19	11	4.3	7.8	-4.8	-	3.3	3.0	2.0	1.7	1.4	2.3
Portugal	159	112	15	8	6.7	9.0	-7.4	4.6	1.5	3.1	1.6	1.5	2.2	0.9
Qatar	132	239	36	20	6.3	8.4	-6.1	-	-5.1	7.0	4.4	3.8	1.5	2.1
Romania	114	82	32	26	3.1	3.0	6.6	-	0.1	2.3	1.9	1.4	0.6	4.4
Russian Federation	115	65	30	25	2.6	2.6	7.4	-	-9.2	2.6	1.8	1.4	1.2	3.6
Rwanda Soint Kitte and Neuia	21 93	210	161	170 37	0.9	-0.8	29.6	1.6	-8.2	7.5	6.8 2.7	6.1	0.3	1.6
Saint Kitts and Nevis Saint Lucia	93 109	-	44 24	29	-	2.5 -2.7	7.8 19.8	-	3.5 2.8	- 6.9	3.3	2.4 2.6	- 2.5	1.7 3.4
Saint Vincent/Grenadines	109	-	24	29	-	-2.7	6.5	-	2.0	7.3	2.6	2.0	3.4	2.4
Samoa	76	210	62	52	4.1	2.5	7.7	-	0.1	8.3	4.5	3.8	2.0	2.4
San Marino	171	- 210	10	6	-	7.3	-3.7	-	-	-	-	-	-	-
Sao Tome and Principe	59	-	90	78	-	2.0	8.7	-	-1.7	-	5.1	4.7		1.2
Saudi Arabia	112	292	45	28	6.2	6.8	-2.3	4.0x	-3.1	7.2	6.6	5.9	0.3	1.6
Senegal	36	300	147	124	2.4	2.4	19.1	-0.5	-0.6	7.0	6.3	5.7	0.4	1.4
Seychelles	138	-	21	18	-	2.2	8.4	-	1.5	-	2.8	2.4	-	2.2
Sierra Leone	2	390	323	316	0.6	0.3	50.2	0.7	-3.9	6.2	6.5	6.1	-0.2	0.9
Singapore	188	40	8	4	5.4	9.9	-9.4	8.3	6.6	5.5	1.8	1.8	3.7	0.0
Slovakia	149	40	15	11	3.3	4.4	3.2	-	-1.2	3.1	2.0	1.5	1.5	4.1
Slovenia	171	45	9	6	5.4	5.8	0.0	-	4.4	2.4	1.5	1.3	1.6	2.0
Solomon Islands	112	185	36	28	5.5	3.6	5.1	-	1.3	6.4	5.6	5.0	0.4	1.6
Somalia	9	294	215	211	1.0	0.3	36.8	-0.1	-2.3x	7.0	7.0	7.0	0.0	0.0
South Africa	69	126	73	65	1.8	1.7	9.6	3.2	-0.2	6.5	4.2	3.8	1.5	1.4
Spain	181	57	9	5	6.2	8.4	-6.1	4.1	1.0	2.8	1.4	1.2	2.3	2.2
Sri Lanka	136	133	23	19	5.8	2.7	7.2	2.8	3.4	5.3	2.4	2.1	2.6	1.9
Sudan	41	210	125	115	1.7	1.2	16.5	0.8	0.6x	6.7	5.2	4.6	0.8	1.8
Suriname	103	96	38	30	3.1	3.4	5.7	-	-0.3	6.6	2.8	2.4	2.9	2.2
Swaziland	52	233	115	94	2.4	2.9	9.8	-	-1.2	6.5	5.1	4.5	0.8	1.8
Sweden	188	20	6	4	4.0	5.8	0.0	2.0	-0.2	2.3	2.0	1.8	0.5	1.5
Switzerland	181	27	8	5	4.1	6.7	-1.9	1.5	-1.0	2.4	1.5	1.5	1.6	0.0
Syria	99	201	44	33	5.1	4.1	4.0	5.1	4.3	7.3	5.7	4.1	0.8	4.7
Tajikistan	61	140	78	76	1.9	0.4	12.6	-	-18.5	6.3	4.9	4.0	0.8	2.9
Tanzania	30	240	150	143	1.6	0.7	23.8	0.8	-0.2	6.8	6.1	5.5	0.4	1.5
TFYR Macedonia	123	177	41	23	4.9	8.3	-5.7	-	-8.5	4.2	2.2	1.9	2.2	2.1
Thailand	92	148	41	38	4.3	1.1	11.0	4.4	6.7	6.4	2.3	1.8	3.4	3.5
Togo	35	267	142	125	2.1	1.8	19.3	1.7	-3.9	6.6	6.6	6.1	0.0	1.1
Tonga	123	-	27	23	-	2.3	8.2	-	2.0	-	4.2	4.0	-	0.7

	Under-5		Under-5 mortality rate		ra	Average ann te of reductio		average	er capita e annual rate (%)		Total fertility rate	9		e annual luction (%)
	mortality rank	1960	1990	1997	1960-90	1990-97	required 1997-2000	1965-80	1990-96	1960	1990	1997	1960-90	1990-97
Trinidad and Tobago	141	73	24	17	3.7	4.9	2.0	3.1	0.1	5.1	2.5	2.1	2.4	2.5
Tunisia	99	254	52	33	5.3	6.5	-1.7	4.7	1.3	7.1	3.6	3.0	2.3	2.6
Turkey	81	219	70	45	3.8	6.3	-1.2	3.6	1.7	6.3	3.2	2.5	2.3	3.5
Turkmenistan	59	150	80	78	2.1	0.4	12.7	-	-13.1	6.4	4.3	3.6	1.3	2.5
Tuvalu	72	-	56	56	-	0.0	13.5	-	-	-	-	-	-	-
Uganda	31	224	165	137	1.0	2.7	22.4	-2.2	4.0	6.9	7.1	7.1	-0.1	0.0
Ukraine	118	53	24	24	2.6	0.0	13.5	-	-13.5	2.2	1.8	1.4	0.7	3.6
United Arab Emirates	154	223	14	10	9.2	4.8	2.4	-	-4.8	6.9	4.2	3.5	1.7	2.6
United Kingdom	163	27	9	7	3.7	3.6	5.1	2.0	1.5	2.7	1.8	1.7	1.4	0.8
United States	159	30	10	8	3.7	3.2	5.9	1.8	1.2	3.5	2.0	2.0	1.9	0.0
Uruguay	127	56	24	21	2.8	1.9	9.1	2.5	3.8	2.9	2.4	2.3	0.6	0.6
Uzbekistan	70	122	63	60	2.2	0.7	11.9	-	-5.6	6.3	4.1	3.5	1.4	2.3
Vanuatu	77	225	70	50	3.9	4.8	2.3	-	-1.1	7.2	4.8	4.4	1.4	1.2
Venezuela	115	75	27	25	3.4	1.1	11.0	2.3	-0.3	6.6	3.5	3.0	2.1	2.2
Viet Nam	86	219	55	43	4.6	3.5	5.3	-	6.2	6.1	3.8	3.0	1.6	3.4
Yemen	49	340	129	100	3.2	3.6	11.9	-	-2.2	7.6	7.6	7.6	0.0	0.0
Yugoslavia	127	120	30	21	4.6	5.1	1.6	-	-	2.7	2.1	1.8	0.8	2.2
Zambia	12	213	192	202	0.3	-0.7	35.3	-1.2	-4.8	6.6	6.2	5.5	0.2	1.7
Zimbabwe	58	159	81	80	2.2	0.2	13.1	1.7	-1.1	7.5	5.4	4.7	1.1	2.0

### **Regional summaries**

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Sub-Saharan Africa	257	180	170	1.2	0.8	30.4	2.8	-0.4	6.6	6.3	5.9	0.2	1.1
Middle East and North Africa	241	74	62	3.9	2.7	9.1	3.1	0.4	7.1	5.1	4.4	1.1	2.2
South Asia	239	135	116	1.9	2.1	17.2	1.4	3.3	6.1	4.0	3.4	1.4	2.3
East Asia and Pacific	201	58	52	4.1	1.6	10.3	4.9	8.1	5.8	2.5	2.1	2.8	2.4
Latin America and Caribbean	154	53	41	3.5	3.8	5.3	4.0	2.1	6.0	3.2	2.7	2.1	2.3
CEE/CIS and Baltic States	101	42	35	3.0	2.4	6.3	-	-4.4	3.0	2.3	1.8	1.0	3.0
Industrialized countries	37	9	7	4.7	4.5	3.1	2.9	1.1	2.8	1.7	1.7	1.6	0.5
Developing countries	216	104	96	2.4	1.2	18.7	3.7	4.0	6.0	3.6	3.1	1.8	1.9
Least developed countries	281	182	168	1.4	1.1	29.3	-0.1	0.0	6.6	5.8	5.3	0.4	1.2
World	192	94	87	2.4	1.1	18.4	3.1	1.5	5.0	3.2	2.8	1.5	1.7

Countries in each region are listed on page 122.

#### **Definitions of the indicators**

Under-five mortality rate – Probability of dying between birth and exactly five years of age expressed per 1,000 live births.

**GNP per capita** – Gross national product (GNP) is the sum of gross value added by all resident producers, plus any taxes that are not included in the valuation of output, plus net receipts of primary income from non-resident sources. GNP per capita is the gross national product, converted to United States dollars using the World Bank Atlas method, divided by the mid-year population.

**Total fertility rate** – The number of children that would be born per woman if she were to live to the end of her childbearing years and bear children at each age in accordance with prevailing age-specific fertility rates.

Average annual rate of reduction required 1997-2000 – The average annual reduction rate required, for the period 1997-2000, to achieve an under-five mortality rate in the year 2000 of 70 per 1,000 live births or two-thirds the 1990 rate, whichever is less.

#### Main data sources

Under-five mortality – United Nations Population Division, United Nations Statistics Division and UNICEF.

GNP per capita - World Bank.

Fertility - United Nations Population Division.

Notes - Data not available.

x Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

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# Glossary

#### ABC

Assessment of Basic Competencies (Bangladesh)

**AGEI** African Girl's Education Initiative

AIDS acquired immune deficiency syndrome

BRAC Bangladesh Rural Advancement Committee

**CAPS** Continuous Assessment and Progression System (Myanmar)

**CEE** Central and Eastern Europe

CHILD Children's Integrated Learning and Development (Thailand)

CIDA

Canadian International Development Agency

**CIS** Commonwealth of Independent States

**COPE** Complementary Opportunities for Primary Education

**CRI** Children's Resources International

ECCD early childhood care for child growth and development

EDUCO Programa de Educación con Participación de la Communidad (El Salvador)

**EFA** Education For All

FAWE Forum for African Women Educationalists

GAPS Gender and Primary Schooling in Africa

### GDP

gross domestic product

**GNP** gross national product

**HIV** human immunodeficiency virus

IDA International Development Association

IDEAL Intensive District Approach to Education for All (Bangladesh)

IDS Institute of Development Studies (United Kingdom)

ILO International Labour Organization

IMF International Monetary Fund

IRI Interactive Radio Instruction

**MLA** Monitoring Learning Achievement

MLL Minimum Levels of Learning (India)

MONEE Monitoring Social Conditions and Public Policy in Central and Eastern Europe

**MOU** Memorandum of Understanding

NGO non-governmental organization

NSED National School Enrolment Day (Philippines)

**ODA** official development assistance

OFCD Organisation for Economic Co-operation and Development **OREALC** Regional Office for Education in Latin America and the Caribbean (UNESCO)

**ORS** oral rehydration salts

**ORT** oral rehydration therapy

**PAGE** Programme for the Advancement of Girls' Education (Zambia)

**SIDA** Swedish International Development Authority

**TEP** Teaching Emergency Package

**UN** United Nations

UNAIDS Joint United Nations Programme on HIV/AIDS

**UNDP** United Nations Development Programme

**UNESCO** United Nations Educational, Scientific and Cultural Organization

**UNFPA** United Nations Population Fund

**UNHCR** Office of the United Nations High Commissioner for Refugees

**UNICEF** United Nations Children's Fund

**UNIFEM** United Nations Development Fund for Women

WHO World Health Organization

**ZINTEC** Zimbabwe Integrated Teacher Educated Course

Note: All dollars are US dollars.



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Nearly a billion people will enter the 21st century unable to read a book or sign their names and two thirds of them are women. And they will live, as now, in more desperate poverty and poorer health than those who can. They are the world's functional illiterates—and their numbers are growing.

The total includes more than 130 million school age children, 73 million of them girls, who are growing up in the developing world without access to basic education. Millions of others languish in substandard schools where little learning takes place.

The State of the World's Children 1999 report tells the stories of a world community unwilling to accept the consequences of illiteracy or to be denied the human right to a quality education. With the Convention on the Rights of the Child as a guiding framework, governments, policy makers, educators, community leaders, parents and children themselves are advancing an education revolution. Their goal—Education For All.

Theirs is a broad vision of education: as a human right and a force for social change; as the single most vital element in combating poverty, empowering women, safeguarding children from exploitative and hazardous labour and sexual exploitation, promoting human rights and democracy, protecting the environment and controlling population growth. And as a path towards international peace and security.

This report is on their efforts and their progress. The Convention on the Rights of the Child is clear: Education is the foundation of a free and fulfilled life. It is the right of all children and the obligation of all governments.

Girls in a Bangladesh village vowed on World Literacy Day, 7 September 1994, to teach their mothers to read and write. A mother, helped by her daughter, writes her name.



