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Foreword

Human advance is conditioned by our conception of progress. The *Human Development Report* series has been dedicated, since its inception in 1990, to ending the mismeasure of human progress by economic growth alone. The paradigm shift in favour of sustainable human development is still in the making. But more and more policy-makers in many countries are reaching the unavoidable conclusion that, to be valuable and legitimate, development progress—both nationally and internationally—must be people-centred, equitably distributed and environmentally and socially sustainable.

This year's *Human Development Report* explores in detail the complex relationship between economic growth and human development. It provides both a mirror, reflecting present patterns of global imbalance, and a telescope, showing the more positive futures possible. In the past 15 years the world has become more economically polarized—both between countries and within countries. If present trends continue, economic disparities between the industrial and developing nations will move from inequitable to inhuman.

Although in pure economic terms the 1980s were a “lost decade” for nearly 70 countries, remarkably, almost all these countries managed to maintain, and some to improve, their growth in levels of human development. This is good news because it shows that deliberate, well-targeted policies can make a critical difference when implemented with dedication, even in the most difficult circumstances. But there can be little doubt that these improvements will not hold unless soon reinforced by restored economic growth.

Economic growth and human development thus exhibit a degree of indepen-

dence, especially in the short term. But there are longer-term links—human development helping economic growth, and economic growth helping human development. Contrary to earlier theories, new theory and evidence suggest that growth and equity need not be contradictory goals. Nor do growth and participation. And there is strong historical evidence from East Asia that heavy national investment in human development—spreading skills and meeting basic social needs—has been a springboard for sustained economic growth over decades.

The central message of *Human Development Report 1996* is clear: there is no automatic link between economic growth and human development, but when these links are forged with policy and determination, they can be mutually reinforcing and economic growth will effectively and rapidly improve human development. Government policies are vitally important. We now know, for example, the limits of trickle-down economics.

What must now be done? The script for human development in the 21st century is still unwritten. It will begin to be written by the policy choices we make even as this century closes. Ideally, these choices will accept the premise that economies exist for people—not people for economies.

Human Development Report 1996 is principally addressed to what countries can do for themselves. It makes important recommendations. All countries must strive to improve the nature and quality of their economic growth. In many countries the immediate needs also include increase in economic growth. Of course, policies must be tailored to national circumstances. The global community can, and must, also help

countries effect their own strategies of sustainable human development.

This is the International Year of Poverty Eradication, heightening the moral commitment that we at UNDP and the other international development agencies give to helping the poorest of the world's poor. Eliminating poverty requires a holistic approach to human development. Not hand-outs, but empowerment. Not Band-Aids, but the preconditions for self-help.

UNDP remains firmly committed to using its unique worldwide network of resources and country offices to support countries in their efforts to achieve sustainable human development. The goals and commitments of the recent series of global summits—from Rio and Cairo to Copenhagen and Beijing—provide a powerful new framework and many concrete specifics for concerted action. We have both an opportunity and a moral imperative to reverse the negative trends of recent times and to reinforce the positive patterns of sustainable human development. This should be the vision guiding us into the next century.

As with earlier *Human Development Reports*, the views expressed in this year's Report have emerged from the professional analysis of an independent team of eminent consultants working under the guidance of my two Special Advisers and the chief architects of the Report, Mahbub ul Haq and Richard Jolly. Dr. Haq was in charge of the process until the end of 1995, when Dr. Jolly took over. Sakiko Fukuda-Parr, Director of the Human Development Report Office, ensured continuity through the change-over.

The views in this Report do not necessarily reflect the views of UNDP, its Executive Board or member governments of UNDP. The real contribution of the series of *Human Development Reports* lies in their intellectual independence and professional integrity. I am confident that the analysis in this Report will enrich the global dialogue on the issues of human development and economic growth. Certainly this is our intention and wish.

New York
March 1996



James Gustave Speth

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Thankful for all the support that they have received, the authors assume full responsibility for the opinions expressed in the Report.

ABBREVIATIONS

CIS	Commonwealth of Independent States
DAC	Development Assistance Committee
FAO	Food and Agriculture Organization
GDI	Gender-related development index
GEM	Gender empowerment measure
HDI	Human development index
ILO	International Labour Organisation
IMF	International Monetary Fund
LDCs	Least developed countries
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing power parity
SNA	System of National Accounts
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
WHO	World Health Organization

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Growth for human development?

Human development is the end—economic growth a means. So, the purpose of growth should be to enrich people's lives. But far too often it does not. The recent decades show all too clearly that there is no automatic link between growth and human development. And even when links are established, they may gradually be eroded—unless regularly fortified by skilful and intelligent policy management.

This year's *Human Development Report* explores the nature and strength of the links between economic growth and human development. Two disturbing findings. Growth has been failing over much of the past 15 years in about 100 countries, with almost a third of the world's people. And the links between growth and human development are failing for people in the many countries with lopsided development—with either good growth but little human development or good human development but little or no growth.

The Report concludes that more economic growth, not less, will generally be needed as the world enters the 21st century. But more attention must go to the structure and quality of that growth—to ensure that it is directed to supporting human development, reducing poverty, protecting the environment and ensuring sustainability.

Over the past 15 years the world has seen spectacular economic advance for some countries—and unprecedented decline for others.

Since 1980 there has been a dramatic surge in economic growth in some 15 countries, bringing rapidly rising incomes to many of

their 1.5 billion people, more than a quarter of the world's population.

Over much of this period, however, economic decline or stagnation has affected 100 countries, reducing the incomes of 1.6 billion people—again, more than a quarter of the world's population. In 70 of these countries average incomes are less than they were in 1980—and in 43 countries less than they were in 1970. Over 1990–93 alone, average incomes fell by a fifth or more in 21 countries, mostly in Eastern Europe and among the CIS countries.

Although many are aware of this economic stagnation and decline, the full extent and gravity are too often obscured—because of the stunning success of the fast-growing countries, because most of the richer countries have maintained their growth and because of repeated hopes that many of the economies with falling incomes are poised to resume growth. After 15 years of such disappointing performance, international policy-makers need to question whether that optimism is warranted.

The advances have often been at rates exceeding anything seen since the start of the industrial revolution some two centuries ago. The declines have also been unprecedented, far exceeding in duration, and sometimes in depth, the declines of the Great Depression of the 1930s in the industrial countries.

In much of this success and disaster, many of the poor have missed out, and even the better off have often been left vulnerable to unemployment and downsizing—to cutbacks in health and welfare services. Although per capita incomes in the OECD countries now average \$20,000, surveys reveal growing insecurity and considerable dissatisfaction.

Human development is the end—economic growth a means

Policy-makers are often mesmerized by the quantity of growth

Widening disparities in economic performance are creating two worlds—ever more polarized.

The world has become more polarized, and the gulf between the poor and rich of the world has widened even further. Of the \$23 trillion global GDP in 1993, \$18 trillion is in the industrial countries—only \$5 trillion in the developing countries, even though they have nearly 80% of the world's people.

- The poorest 20% of the world's people saw their share of global income decline from 2.3% to 1.4% in the past 30 years. Meanwhile, the share of the richest 20% rose from 70% to 85%. That doubled the ratio of the shares of the richest and the poorest—from 30:1 to 61:1.

- The assets of the world's 358 billionaires exceed the combined annual incomes of countries with 45% of the world's people.

- During the past three decades the proportion of people enjoying per capita income growth of at least 5% a year more than doubled, from 12% to 27%, while the proportion of those experiencing negative growth more than tripled, from 5% to 18%.

- The gap in per capita income between the industrial and developing worlds tripled, from \$5,700 in 1960 to \$15,400 in 1993.

Increasing polarization is reflected in the growing contrasts in regional performance. Most of Asia, with more than half the world's people, experienced accelerating and often spectacular per capita income growth over the 1980s. OECD countries generally maintained slow but steady growth in per capita income. But failed growth was the dominant experience in four groups of countries.

- In Sub-Saharan Africa declines mostly began in the late 1970s. Many reform efforts have been launched, often spurring recoveries, but 20 countries are still below their per capita incomes of 20 years ago.

- Among the Latin American and Caribbean countries, several began to recover slowly in the late 1980s, but 18 of them are still below their per capita incomes of 10 years ago.

- Eastern Europe and the CIS countries maintained at least slow growth over most

of the 1980s, but then suffered steep declines in per capita income—which fell on average by a third from the peaks in the mid-1980s.

- Many Arab states also suffered sharp declines in income in the 1980s, with falling oil prices and other setbacks in the world economy.

Although very rapid population growth explains part of the negative per capita income growth, blaming population growth for all or even most of the decline is too simple. Even with lower fertility and slower population growth, per capita incomes would have fallen in many countries.

Everywhere, the structure and quality of growth demand more attention—to contribute to human development, poverty reduction and long-term sustainability.

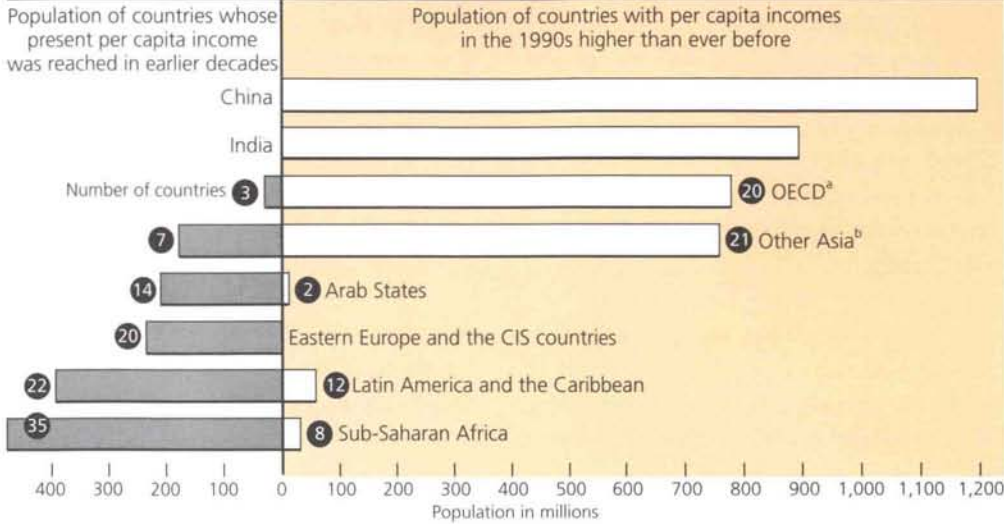
Policy-makers are often mesmerized by the quantity of growth. They need to be more concerned with its structure and quality. Unless governments take timely corrective action, economic growth can become lopsided and flawed. Determined efforts are needed to avoid growth that is jobless, ruthless, voiceless, rootless and futureless.

- *Jobless growth*—where the overall economy grows but does not expand the opportunities for employment. In the OECD countries in 1993 the average unemployment rate was 8%—ranging from 2.5% in Japan to 10% in the United Kingdom, 18% in Finland and 23% in Spain. In the developing countries too, jobless growth has meant long hours and very low incomes for the hundreds of millions of people in low-productivity work in agriculture and the informal sector.

- *Ruthless growth*—where the fruits of economic growth mostly benefit the rich, leaving millions of people struggling in ever-deepening poverty. During 1970–85 global GNP increased by 40%, yet the number of poor increased by 17%. While 200 million people saw their per capita incomes fall during 1965–80, more than one billion people did in 1980–93.

- *Voiceless growth*—where growth in the economy has not been accompanied by an

Growth has failed for more than a quarter of the world's people



When did countries with failed growth first reach their present per capita income?

1960 or before

Armenia
Central African Rep.
Chad
Georgia
Ghana
Haiti
Iraq
Kuwait
Liberia
Madagascar
Nicaragua
Niger
Rwanda
Senegal
Sudan
Tajikistan
Venezuela
Zaire
Zambia

Kiribati
Libyan Arab Jamahiriya
Lithuania
Mauritania
Peru
São Tomé and Príncipe
Saudi Arabia
Sierra Leone
Somalia
South Africa
Togo

Iran, Islamic Rep. of
Jamaica
Kazakhstan
Kyrgyzstan
Latvia
Malawi
Mali
Mexico
Mozambique
Namibia
Nigeria
Poland
Romania
Tanzania
Trinidad and Tobago
Turkmenistan
Ukraine
United Arab Emirates
Uzbekistan
Vanuatu
Zimbabwe

Brazil
Bulgaria
Burkina Faso
Burundi
Canada
Congo
Czech Rep.
Dominican Rep.
Ecuador
Egypt
Ethiopia
Finland
Hungary
Iceland
Jordan
Kenya
Mongolia
Morocco
Myanmar
Panama
Paraguay
Philippines
Slovakia
Suriname
Swaziland
Syrian Arab Rep.

In the 1970s

Albania
Algeria
Argentina
Bahrain
Brunei Darussalam
Cameroon
Comoros
Djibouti
El Salvador
Gabon
Gambia
Guatemala
Guinea-Bissau
Honduras

In the 1980s

Azerbaijan
Barbados
Belarus
Benin

In the 1960s

Bahamas
Bolivia
Côte d'Ivoire
Estonia
Guyana

Countries with per capita incomes in the 1990s higher than ever before

Antigua and Barbuda	Equatorial Guinea	Lesotho	Saint Vincent
Australia	Fiji	Luxembourg	Seychelles
Austria	France	Malaysia	Singapore
Bangladesh	Germany	Maldives	Solomon Islands
Belgium	Greece	Malta	Spain
Belize	Grenada	Mauritius	Sri Lanka
Botswana	Guinea	Nepal	Sweden
Cambodia	Hong Kong	Netherlands	Switzerland
Cape Verde	India	New Zealand	Thailand
Chile	Indonesia	Norway	Tunisia
China	Ireland	Oman	Turkey
Colombia	Israel	Pakistan	Uganda
Costa Rica	Italy	Papua New Guinea	United Kingdom
Cyprus	Japan	Portugal	Uruguay
Denmark	Korea, Rep. of	Saint Kitts and Nevis	USA
Dominica	Lao People's Dem. Rep.	Saint Lucia	Viet Nam

a. Industrial countries only.

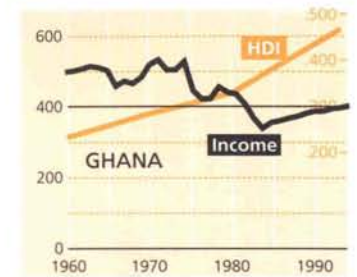
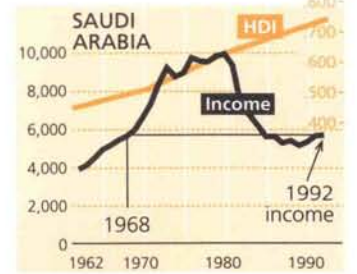
b. Includes Cyprus, Israel, Malta and Turkey.

Note: GDP per capita figures are in constant prices. Data are the latest available, 1995 for OECD countries, 1993 for most others.

Source: For OECD countries, UN 1996; for all others, World Bank 1995e.

30 years of change—income and human development

GDP per capita, 1993 US\$



Development that perpetuates today's inequalities is neither sustainable nor worth sustaining

extension of democracy or empowerment. Political repression and authoritarian controls have silenced alternative voices and stifled demands for greater social and economic participation.

Policy-makers once debated whether they should choose economic growth or extensive participation, assuming that these were mutually exclusive. That debate is dead. People do not want one or the other—they want both. But too many people are still denied even the most basic forms of democracy, and many of the world's people are in the grip of repressive regimes.

Voiceless growth can also be growth that gives women only a minor role in an economy's management and direction. As *Human Development Report 1995* showed, human development, if not engendered, is endangered.

- *Rootless growth*—which causes people's cultural identity to wither. There are thought to be about 10,000 distinct cultures, but many risk being marginalized or eliminated. In some cases minority cultures are being swamped by dominant cultures whose power has been amplified with growth. In other cases governments have deliberately imposed uniformity in the pursuit of nation-building—say, with a national language.

This can be dangerous. The violence in the former Soviet Union and in the Balkan states of former Yugoslavia is a tragic legacy of culturally repressive governance. The nations that have held together best, from Switzerland to Malaysia, are often those that have recognized cultural diversity and decentralized economic and political governance to try to meet the aspirations of all their people.

- *Futureless growth*—where the present generation squanders resources needed by future generations. Rampant and uncontrolled economic growth in many countries is laying waste to forests, polluting rivers, destroying biodiversity and depleting natural resources.

This damage and destruction is increasing, driven overwhelmingly by demand in the rich countries, inadequate conservation in the developing countries and the pres-

sure of poor people pushed onto marginal lands in poor countries. On past trends, global production will triple by about 2030. Unless serious conservation and pollution controls are in place soon, production will be long past the point of sustainability.

In sum: Development that perpetuates today's inequalities is neither sustainable nor worth sustaining.

Progress in human development has mostly continued—but too unevenly.

Despite the economic downturns and difficulties, key indicators of human development have advanced in almost all developing countries. Indeed, developing countries have made much more progress in human development than in income. Between 1960 and 1993 the North-South gap in life expectancy was more than halved, from 23 years to 11 years.

Human progress has nevertheless been very slow in some regions, and in some cases it even deteriorated. In the past 15 years the primary enrolment ratio stagnated in Sub-Saharan Africa as a whole, and in 17 countries it declined by 37–50%. And while the human development index (HDI) of most regions has improved, in Eastern Europe and the CIS countries it has declined sharply.

Overall, countries already in the high human development category (with an HDI of more than 0.800) have been able to reduce their HDI shortfall (the difference between the maximum possible HDI of 1 and the value achieved) by nearly 2.7% a year. For low human development countries (with an HDI of less than 0.500) the reduction was only 0.9% a year. So, there was a clear widening of the gap in human development as well.

Countries with similar levels of income and growth can have very different rates of advance in human development. During the past three decades both Tunisia and Congo enjoyed the same economic growth from similar starting points of income and human development. But Tunisia reduced its HDI shortfall by 60%, Congo by only 16%.

This record contains a warning. Unless economic growth is restored for countries in decline, their gains in human development may be ever more difficult to sustain—and present disparities will grow. At present rates of progress, it will take a century or more for the low human development countries to reach high human development.

There are striking contrasts in today's relationship between human development and per capita income.

- *Rankings by the human development index do not always match income rankings*—For 37 countries in 1993 their ranking by the HDI is more than 20 places higher or lower than their ranking by per capita income, highlighting the far from perfect correlation between income and human development in many countries.
- *Higher human development at lower income*—Some countries fall in the category of high human development despite modest per capita incomes. These include Colombia, with a per capita income of \$1,400, and Thailand, with \$2,100.
- *Lower human development at higher income*—Other countries have remained at medium levels of human development despite the advantage of greater incomes. These include South Africa, with a per capita income of nearly \$3,000, and Gabon, with nearly \$5,000.
- *Striking contrasts within countries*—In Mexico the HDI for indigenous people is only 0.700, compared with 0.890 for the rest of the population.
- *Human development weaknesses in OECD countries*—Despite high per capita incomes (\$20,000), more than 100 million people in OECD countries live below national poverty lines, and more than 5 million are homeless.

These and numerous other indicators in this Report spotlight the dangers of complacency. Many policy-makers assume that a rapidly expanding economy will sweep poverty and deprivation away. They are wrong. The challenge is broader and deeper—and demands close attention to a

range of policy actions. This Report examines these actions in detail and reaches the following main conclusions.

Short-term advances in human development are possible—but they will not be sustainable without further growth. Conversely, economic growth is not sustainable without human development.

Improvements in human development have clearly been possible even in times of economic setback. But such advances can be sustained over a long time only if supported by economic growth. At the same time, for economic growth to be sustained, it must be constantly nourished by human development. Human development and economic growth should move together, strongly linked.

The record of economic growth and human development over the past 30 years shows that no country can follow a course of lopsided development for such a long time—where economic growth is not matched by advances in human development, or vice versa. Lopsided development can last for a decade or so, but it then shifts to rapid rises in both incomes and human development, or falls into slow improvements in both human development and incomes. Countries follow one of four patterns:

- *Slow economic growth and fast human development.* Countries achieving human development with only slow economic growth in one decade either increased economic growth in the next (the Republic of Korea in the 1960s and China and Indonesia in the 1970s) or slipped back into poor economic growth and slow human development (Cameroon, Sierra Leone and others in the 1980s).
- *Fast economic growth and slow human development.* Lopsided development tilted against human development is a dead end, with economic growth petering out after a decade or so of fast growth (such as Brazil and Egypt in the 1980s). No country with fast growth and slow human development maintained fast growth and accelerated human development.

Human development and economic growth should move together, strongly linked

Investing in women's capabilities and empowering them is the surest way to contribute to economic growth and overall development

- *Mutually reinforcing growth and human development.* Some countries enjoyed rapid improvements in both human development and incomes, sustained over three decades, in a mutually reinforcing virtuous circle.
- *Mutually stifling growth and human development.* Other countries suffered slow advances in human development and slow economic growth.

There need be no conflict between growth and equity.

The traditional view that economic growth in the early stages is inevitably associated with deteriorating income distribution has been proved false. The new insight is that an equitable distribution of public and private resources can enhance the prospects for further growth.

The assertion that the benefits of growth in the early stages would inevitably be skewed towards the rich rested on two principal arguments. The first came from Nobel laureate Simon Kuznets, who said that inequality would first rise, as workers left agriculture for industry, and then fall as industrial production became more widespread. The second was advanced by Nicholas Kaldor, who emphasized the importance of savings. He argued that the only way to finance growth would be by channelling the initial benefits into the pockets of rich capitalists. Since they have a higher propensity to save, only they could provide the funds for investment.

These hypotheses have been disproved by recent evidence of a positive correlation between economic growth and income equality (as represented by the share of the poorest 60% of the population). Japan and East Asia pioneered this form of equitable development, and China, Malaysia and Mauritius have been following a similar route more recently.

The discovery of this reinforcing relationship between equity and growth has far-reaching implications for policy-makers. Well-developed human capabilities and well-distributed opportunities can ensure that growth is not lopsided and that its ben-

efits are equitably shared. They can also help in getting the most growth.

For policy-makers everywhere, the focus must be on strengthening the links between economic growth and human development.

To ensure that these links work efficiently and effectively in both directions, policy-makers need to understand how the links connect. Some of the most important issues determining how growth contributes to human development:

- *Equity*—The more equally GNP and economic opportunities are distributed, the more likely that they will be translated into improved human well-being.
- *Job opportunities*—Economic growth is translated into people's lives when they are offered productive and well-paid work. An important way to achieve this is to aim for patterns of growth that are heavily labour-intensive.
- *Access to productive assets*—Many people find their economic opportunities stifled by a lack of access to productive assets—particularly land, physical infrastructure and financial credit. The state can do much in all these areas by stepping in and levelling the playing fields.
- *Social spending*—Governments and communities can greatly influence human development by channelling a major part of public revenue into high-priority social expenditure—particularly by providing basic social services for all.
- *Gender equality*—Fairer opportunities for women and better access to education, child care, credit and employment contribute to their human development. They also contribute to the human development of other family members and to economic growth. Investing in women's capabilities and empowering them to exercise their choices is the surest way to contribute to economic growth and overall development.
- *Population policy*—Education, reproductive health and child survival all help lower fertility, thus creating the conditions for slower population growth and lower

education and health costs in the longer run.

- *Good governance*—When those in power give high priority to the needs of the whole population, and when people participate in decision-making at many levels, the links between economic growth and human well-being are likely to be stronger and more durable.

- *An active civil society*—Non-governmental organizations and community groups also play a vital part in enhancing human development. They not only supplement government services, extending them to people and groups who would otherwise remain unserved. They also play a vital advocacy role, mobilizing public opinion and community action and helping shape human development priorities.

A determined effort to expand human capabilities—through improved education, health and nutrition—can help transform the prospects for economic growth, especially in the low-human-development, low-income countries. A World Bank study of 192 countries concluded that only 16% of growth is explained by physical capital (machinery, buildings and physical infrastructure), while 20% comes from natural capital. But no less than 64% can be attributed to human and social capital. An extensive analysis of earlier experience in the Asian industrializing tigers, including Japan, comes to similar conclusions.

New approaches are needed to expand and improve employment opportunities, so that people can participate in growth—and benefit from it.

Without growth, it is difficult to create jobs and increase wages. With growth, job opportunities normally expand. But again, the process is not automatic. Witness several recent periods of “jobless growth”. And even when jobs have been created, they have not met the aspirations of people in search of job security, remunerative work or creative work. They have also bypassed whole groups of society—including women, young adults, the uneducated, the unskilled and people with disabilities.

To forge a strong link between economic growth and employment requires employment-generating growth strategies. The experience of the fast-growing Asian economies—Hong Kong, the Republic of Korea, Singapore and Taiwan (province of China)—shows how sustained long-term growth can expand employment (by 2–6% a year), reduce unemployment (down to less than 2.5%) and raise productivity and wages. This in turn reduced inequality and poverty. Such growth was led by small-scale agriculture in Taiwan (province of China) and by labour-intensive export-oriented manufacturing in Hong Kong, the Republic of Korea and Singapore.

The Latin American experience stands in stark contrast. During the 1960s and 1970s the average annual growth in per capita income was more than 4% in Brazil, 3.5% in Mexico and 2.5% in Costa Rica. But this growth was not accompanied by the creation of enough jobs to absorb the growing labour force or by increases in productivity. The region’s productivity growth during the past three decades was only 0.5% a year, an eighth that of the Asian tigers’ 4%. Growth was concentrated in capital-intensive activities—mining and import-substitution industries. Employment expanded, but mostly in the service sectors and without a sustained increase in productivity.

A strategy for economic growth that emphasizes people and their productive potential is the only way to open opportunities. Although most of the action must be taken at the country level, it is increasingly clear that new international measures are also needed to encourage and support national strategies for employment creation and human development.

Some of the specifics:

- *A political commitment to full employment*—The countries achieving the greatest success in employment have generally been those that deliberately set out to do so. Rather than assuming that employment would materialize automatically, they have publicly identified it as a central policy objective.
- *Enhancing human capabilities*—High-employment economies have generally

A strategy for economic growth that emphasizes people and their productive potential is the only way to open opportunities

The imbalances in economic growth, if allowed to continue, will produce a world gargantuan in its excesses and grotesque in its human and economic inequalities

invested heavily in the development of human capabilities—particularly education, health and skills. They also have constantly upgraded technical skills to enable workers to adapt to rapidly changing international conditions. The Republic of Korea invests \$160 per person a year in health and education, Malaysia \$150. India, by contrast, invests only \$14, Pakistan \$10 and Bangladesh \$5.

- *Strengthening small-scale and informal sector production*—In many countries such production has demonstrated the potential for generating employment and incomes for millions of people while providing a wide range of the basic goods and services needed in daily life. It needs to be encouraged and supported, not restricted. Some countries have increased opportunities for employment—particularly self-employment—by extending access to credit. There are many encouraging examples among small farmers, microenterprises and poor and marginal communities. And extension services and other mechanisms to enable small-scale producers to get better and quicker access to technology and information can often make a big difference in their productivity.

- *Broader and more egalitarian access to land*—Numerous studies show that small farmers achieve higher output per hectare than large farmers. So, providing greater access to land can increase productivity, employment and growth while reducing poverty and easing the pressure on scarce resources.

- *Research and development*—Another part of successful employment strategies is intensive investment in research and development for labour-intensive technology, including the adaptation of imported capital-intensive technologies to fit local needs.

New patterns of growth will need to be developed and sustained well into the 21st century—to prevent ever more extreme imbalances and inequalities in the world economy.

The imbalances in economic growth over the past 15 years are clear enough. But if

allowed to continue well into the next century, they will produce a world gargantuan in its excesses and grotesque in its human and economic inequalities.

- Poverty in Sub-Saharan African and other least developed countries would deepen, with per capita income falling to \$325 by 2030.

- Meanwhile, per capita income in the OECD countries would rise to nearly \$40,000.

- Although East Asia would catch up to the incomes of the OECD countries in 15–25 years, it would take China about 50 years, and India a century or more.

Such scenarios do not pretend to be a forecast. They simply suggest what could happen if current trends continued, to emphasize the need for purposeful action—both national and international. Much attention is now given to the rapid rates of population growth. Equal attention needs to be given to the much larger and more rapidly growing imbalances in the growth of consumption and resource use.

New mechanisms must be developed to help the weak and the vulnerable seize the opportunities of the new global economy, while protecting them from marginalization.

Globalization is one of the most dramatic developments of recent years. During 1965–90 world merchandise trade tripled, and global trade in services increased more than fourteenfold. Meanwhile, financial flows have reached unimaginable dimensions. More than a trillion dollars roam the world every 24 hours, restlessly seeking the highest return. This flow of capital is not just offering unprecedented opportunities for profit (and loss). It has opened the world to the operation of a global financial market that leaves even the strongest countries with limited autonomy over interest rates, exchange rates or other financial policies.

Many developing countries have seized globalization as an opportunity. Countries that combine low wages with high-technology skills have out-competed more

established countries. In just ten years India has expanded its software development industry, centred on “Silicon Bangalore”, to become the world’s second largest software exporter. Other developing countries need to escape their debilitating dependence on exports of low-value primary products by combining their natural resources with their human capital. In the 21st century rapid strides in technology and communications will open the prospect of “leapfrogging” several decades of development—but only for the poor countries that can master the new skills and compete.

While globalization has often helped growth in the strong countries, it has bypassed the weak. The poorest countries, with 20% of the world’s people, have seen their share of world trade fall between 1960 and 1990—from 4% to less than 1%. And they receive a meagre 0.2% of the world’s commercial lending. Although private investment flows to developing countries increased between 1970 and 1994 from \$5 billion to \$173 billion, three-quarters of this went to just ten countries, mostly in East and South-East Asia and Latin America. Countries elsewhere, particularly in Sub-Saharan Africa, have been left behind.

The agenda to achieve the new patterns of growth for human development would have four priorities:

First, three groups of countries need faster economic growth, especially after the declines of the 1980s.

- *The low human development countries*—With nearly two billion people, these countries must accelerate their human development, backed by rapid economic growth. A massive expansion of education and health must be at the core, especially when half the population often lacks these most basic requirements. Each of these countries has to revamp its domestic social and economic policies, with stronger priorities for human development, economic growth and poverty reduction. And most will also need a new level of long-term international commitment for debt relief, more and better-

focused financial assistance and actions to open export markets and move to sustained economic growth. All the least developed countries need to reach a minimum annual economic growth rate of 3% per capita, with a higher rate in countries still below their per capita incomes of a decade or more ago.

- *The formerly socialist countries, now in transition*—With their per capita incomes having fallen by about a third since 1990, these countries must restart growth and sustain it for several decades. Domestic reforms backed by loans and other international economic and social support can help achieve this and end the free fall of many of these economies.

- *The middle range of developing countries*—Most countries in Latin America, the Middle East, North Africa and South and South-East Asia need an acceleration in growth to support human development.

Second, in two groups of countries the priority is to improve the quality of growth and to sustain—rather than increase—the rate of growth.

- *The fast-growing developing countries*—For China and the countries of East and South-East Asia the challenge is not so much to accelerate growth further. It is to ensure the long-term sustainability of this growth and to give more attention to poverty reduction and human development.

- *The OECD countries*—With very high incomes and growth averaging about 2% per capita during the 1980s, the human development challenge for the OECD countries is to move to new approaches to employment, equity and satisfying life styles in ways consistent with steady growth. Another part of that challenge is to provide support for health care, pensions and other social services—for children, the working poor and the growing numbers in their post-retirement years.

The limits to growth and material consumption will become more obvious as countries reach higher levels of income—but there are no limits to human creativity, human compassion and the human spirit.

All the least developed countries need to reach a minimum annual economic growth rate of 3% per capita

In a fast-changing global economy there are no simple answers, no easy rides

Third, global action is needed to support national efforts to expand employment opportunities.

Both developing and industrial countries need international support if their national efforts towards full employment are to succeed. New forms of international action are required, and the United Nations and the Bretton Woods organizations should work together to devise them. This Report recommends:

- New measures to support countries in reversing downward employment trends, including more effective multilateral and bilateral debt relief, reformed development assistance backed by concessional resources, and access to export markets, often through trade preferences.
- A global commission to study and propose international measures for national policy and action for full employment.

Fourth, a global safety net should be created to move all countries with low levels of human development to medium levels in the next ten years.

National and international efforts for human development may have continued over time—but those supporting it with economic growth and resources have too often failed. A major international priority must be to move all countries to at least medium levels of human development in the next ten years—laying a human foundation for accelerating growth, reducing poverty and achieving more equitable development in the 21st century.

- High-profile monitoring and reporting on the situation of the poorest and least developed countries, at least until rapid growth in human development and incomes is achieved.
- Serious and sustained support for any least developed country that has a plan for

widespread and solid human development.

Often this assistance needs to be accompanied by a radical overhaul of the domestic management of their economies. But not always. A good number of the poorer and weaker economies have already taken far-reaching measures to reform and restructure their economies, but with little growth to show for their efforts.

Richer countries need to provide greater support—with an international safety net, fashioned perhaps through compacts between poor and rich nations. The poor nations can demonstrate their willingness to invest in their people and in their economies. The rich nations can offer a package of resources (through aid, debt relief and trade concessions) sufficient to generate a respectable rate of growth and to provide universal coverage of basic social services. This will strengthen the link between economic growth and human development, both nationally and internationally.

• • •

In a fast-changing global economy there are no simple answers, no easy rides. And as this Report so graphically demonstrates, inertia is not an option. Economic growth should lead to fuller choices for all people—rather than few choices for most people or many choices for a few. But it is never enough to wait for economic growth automatically to trickle down to the poor. Instead, human development and poverty reduction must be moved to the top of the agenda for political and economic policy-making. And even when links between economic growth and human development have been painstakingly established, they must be protected against being blown apart by sudden shifts in political power or market forces.



Trends in growth and human development

The past decade's record of economic growth is unparalleled. It includes spectacular performance in some countries and regions—unprecedented stagnation and decline in others. Nearly 1.5 billion people—more than a fourth of the world's population, mostly in East Asia—enjoyed per capita income growth of more than 7% a year during the 1980s, a record exceeding anything experienced. But nearly a billion people, about a fifth of the global total, saw their incomes shrink as per capita incomes fell in almost 70 countries for a decade or more. Most of these countries were among the least developed countries (LDCs) and in Sub-Saharan Africa. Two worlds.

The level of human achievement is rising in all countries. Because of this rise during the past three decades, the number of people in high human development countries rose from 429 million to 1.2 billion, and the number of those living in low human development countries fell from 1.9 billion to 1.7 billion. East Asia has a life expectancy of nearly 70 years, and Latin America an adult literacy rate of nearly 87%. Meanwhile, most LDCs remain in the low human development category as classified by the human development index (see the definition of the HDI on page 28). Their HDI is only slightly more than a third of that for high human development countries. Again, two worlds.

From a human development perspective, economic growth is not an end in itself. It is a means to an end—enlarging people's choices. So, it should be evaluated for its impact on people. How many people have their income expand? Is the income disparity among groups of people narrowing? What does growth mean for the poor?

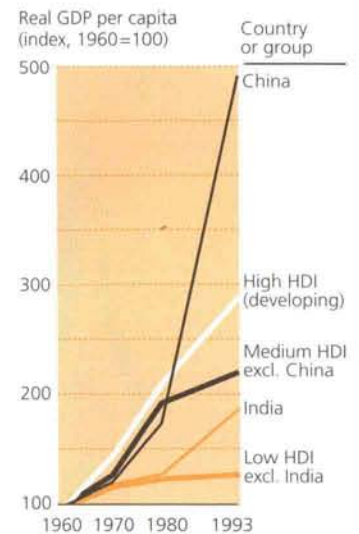
Growth's spectacular records—and disasters

During the past three decades countries with high human development, as measured by the HDI, have experienced rapid economic growth and expanding incomes (figure 1.1 and tables and figures on pages 14 and 15). But growth in this group as a whole slowed in the 1980s, mainly because faster growth in some developing countries was offset by a slowdown in industrial countries, which dominate the high human development category. Despite starting with modest growth in the 1960s, medium human development countries too have maintained strong economic growth, largely because of China's spectacular growth.

By contrast, low human development countries (excluding India) have not raised the annual growth in their per capita income above 1.5% in the past 33 years. And without India, whose strong performance accounts for the 2.3% peak in the 1980s, their growth rate for the decade becomes 0.4% a year. Of the 48 countries in the low human development category in 1993, 30 had their per capita incomes fall in the 1980s.

The association between economic growth and human development becomes clear in a longer view (box 1.1). The growth–human development nexus raises two fundamental questions for policy-makers: Does a close association between economic growth and human development imply an automatic link between the two? Do the benefits of economic growth automatically trickle down into people's lives? The answer to both questions, explored in detail in chapter 3, is no.

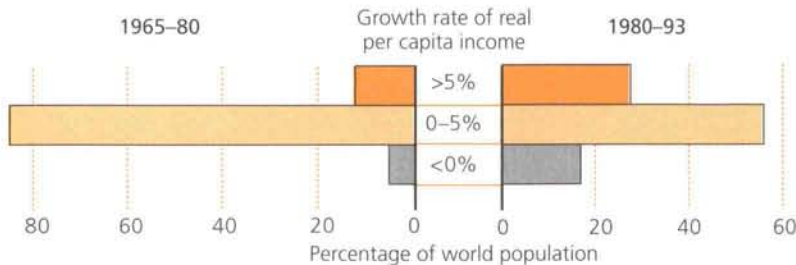
FIGURE 1.1
Income growth and human development



Source: Human Development Report Office.

FIGURE 1.2

How many people, how much income growth—a polarized world



Source: Human Development Report Office.

Per capita income growth—a regional picture

Between 1960 and 1993 global income increased from \$4 trillion to \$23 trillion, and per capita income more than tripled. And developing countries as a group enjoyed per capita income growth of 3.5% a year. But among developing regions East and South-East Asia remain far out in front, with South Asia struggling to catch up. At the other end of the scale is Sub-Saharan Africa, where per capita income has fallen since the early 1980s.

How many people lived in countries with satisfactory growth in per capita income? At 3% a year, which doubles per capita income in a generation, the proportion of the world's people enjoying satisfactory growth fell from 54% to 37% between 1965-80 and 1980-93. The proportion enjoying growth of more than 5% a year more than doubled, from 12% to 27%, while that experiencing negative growth more than tripled, from 5% to 18%—a clear polarization (figure 1.2).

The polarization is even greater for countries with shrinking income. Between 1965-80 and 1980-93 the number of people in countries with negative growth increased from 200 million to almost one billion. Of these nearly 70 countries, 27 are LDCs.

Three-fourths of the LDCs—with more than 400 million of the 550 million people in this group of countries—suffered negative growth in the 1980s. Their average per capita income declined from \$229 (in 1993 dollars) in 1980 to \$210 in 1993. Of the 48 LDCs, 39 are in the low human development category. Their average HDI of 0.331 is less than three-fifths of that for the developing world (0.563).

Nor is all well in the OECD countries, despite their average per capita income of \$20,000. More than 100 million people live below the official poverty line, and the numbers are rising in the United Kingdom and the United States, among others. Nearly 30 million people are unemployed, and more than 5 million are homeless. More than 200 drug crimes are committed for every 100,000 people. And with ageing populations, the health and welfare systems of the

BOX 1.1

Economic growth and human development: a larger canvas

Global output increased more than elevenfold between 1850 and 1960, from \$611 billion to \$6,936 billion, in 1993 dollars. The world population more than doubled, rising from 1.2 billion in 1850 to 3 billion in 1960. The net outcome: a nearly fivefold increase in per capita income.

- The goods and services produced in the industrial countries, mostly in Europe and North America, expanded nearly thirtyfold—from \$212 billion to \$6,103 billion. And population in these countries grew from 300 million to 850 million.
- For non-industrial countries in this period, population increased by 2.5 times—from 870 million to 2.2 billion. But their total income only doubled—from \$399 billion to \$833 billion, in 1993 dollars. Their share of world output—65% in 1850—was down 12% by 1960.

Long-term growth rates in industrial countries ranged widely (box table 1.1). For a long period both Japan and Sweden enjoyed per capita income

growth rates higher than that of any other industrial country. These two countries also invested significantly in human capital and achieved high literacy rates and enrolment ratios before 1900.

Economic growth in developing countries in the past three decades has been more spectacular. The more than 7% average annual per capita income growth rate of East Asia in the 1970s and 1980s is the most sustained and widespread development miracle of the 20th century, perhaps all history.

The developing countries have in 30 years achieved progress in human development that took industrial countries more than 100 years. Living standards for hundreds of millions have risen. Basic education and literacy have spread significantly, along with mass communication. Mortality rates for infants, children and women have fallen. Access to safe water and sanitation has greatly increased. And the gender gap in basic human capabilities has narrowed considerably, even though significant gaps in opportunities remain.

Source: Patel, Ahuja-Patel and Patel 1995.

BOX TABLE 1.1

Long-term growth in industrial countries (annual percentage growth)

Country	Period	Income	Population	Per capita income
Britain	1785-1965	2.2	1.0	1.2
France	1835-1965	2.0	0.3	1.7
USA	1838-1965	3.6	2.0	1.6
Germany	1854-1965	2.7	1.1	1.7
Sweden	1865-1965	3.2	0.6	2.6
Denmark	1867-1965	2.9	1.0	1.9
Norway	1867-1965	2.8	0.8	2.0
Canada	1872-1965	3.5	1.8	1.7
Japan	1876-1965	4.0	1.1	2.9

Source: Ito 1992.

OECD countries are under great financial—and political—pressure.

Growth has turned sour in most of the countries in Eastern Europe and the CIS, which as a group enjoyed per capita income growth of more than 5% a year during 1960–80. In the 1980s their per capita income growth slipped to 1.3% a year. Then, with the political and economic changes in the late 1980s, their per capita income declined by more than 11% a year during 1990–93, and their total GDP by a third. This deep erosion of the purchasing power of people in Eastern Europe and the CIS countries has undercut many of their past human development achievements.

International income distribution

The largest share of global production is in the industrial countries. Of the \$23 trillion of global GDP in 1993, \$18 trillion is in the industrial countries—only \$5 trillion in the developing countries, even though they have nearly 80% of the world's population.

Over the past 30 years the global growth in income has been spread very unequally—and the inequality is increasing. Consider the relative income shares of the richest and poorest 20% of the world's people. Between 1960 and 1991 the share of the richest 20% rose from 70% of global income to 85%—while that of the poorest declined from 2.3% to 1.4%. So, the ratio of the shares of the richest and the poorest increased from 30:1 to 61:1. All but the richest quintile saw their income share fall, so that by 1991 more than 85% of the world's population received only 15% of its income—yet another indication of an even more polarized world.

One useful way of comparing incomes internationally is to look at the poorest 20% in each country. The average income of Japan is 36 times that of Tanzania, but the per capita income of the poorest 20% in Japan is 130 times more than that in Tanzania.

This imbalance can also be viewed in more personal terms. Today, the net worth of the 358 richest people, the dollar billionaires, is equal to the combined income of the poorest 45% of the world's popula-

tion—2.3 billion people. This of course is a comparison of wealth and income. But a contrast of wealth alone, if it were possible, would be even starker, since the wealth of the poorest people is generally much less than their income.

Whether international or national, increasing income inequality is a major constraint to sustaining both economic growth and human development. Intragenerational equity is as important as intergenerational equity (see the special contribution on page 16 by Nobel laureate Robert M. Solow).

Income distribution within countries

How the average per capita income of the poorest compares with the national average shows just how marginal they are (table 1.1). The poor are more marginal in Brazil, Guatemala, Guinea-Bissau and the United States—less in Bangladesh, Hungary, Indonesia, Japan and Nepal.

The per capita income of the poorest 20% in the United States is less than a fourth of the country's average per capita income—in Japan it is nearly half. In Guatemala the per capita income of the poorest 20% is only a tenth of the average per capita income, while in Bangladesh it is nearly half. Interestingly, the marginalization of the poorest bears little relation to national income. In Bangladesh the smaller

The global growth in income has been spread very unequally—and the inequality is increasing

TABLE 1.1
Per capita income of the poorest 20%, 1993
(PPP\$)

Country	Average per capita income	Per capita income of the poorest 20%
USA	24,240	5,814
Japan	20,850	9,070
Netherlands	17,330	7,105
United Kingdom	17,210	3,958
Korea, Rep. of	9,630	3,563
Chile	8,400	1,386
Hungary	6,050	3,297
Brazil	5,370	564
Guatemala	3,350	352
Indonesia	3,150	1,370
Nigeria	1,400	357
India	1,220	537
Bangladesh	1,290	613
Nepal	1,020	464
Guinea-Bissau	840	88
Tanzania	580	70

Source: Basu 1995.

TABLE 1.2
Average annual growth in real per capita income by human development category, 1960–93 (percent)

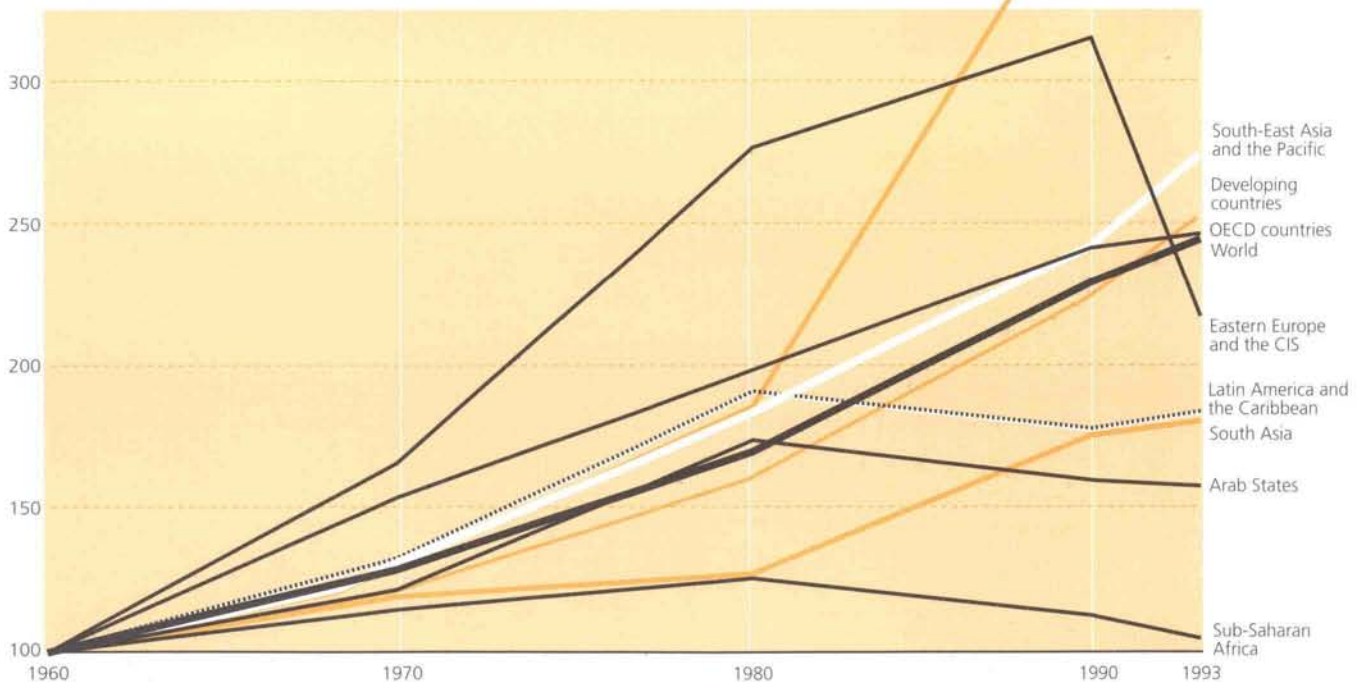
Country or group	1960–70	1970–80	1980–93
High human development	4.3	2.8	1.5
Excluding industrial countries	3.9	3.7	2.5
Medium human development (excluding China)	2.5	4.1	1.1
China	1.8	9.1	8.1
Low human development (excluding India)	1.5	0.7	0.2
India	1.6	0.8	3.1
World	2.6	2.8	2.9

TABLE 1.3
Average annual growth in real per capita income by region, 1960–93 (percent)

Region or country group	1960–70	1970–80	1980–90	1990–93
World	2.6	2.8	3.0	2.4
Industrial countries	4.6	2.9	1.9	-3.1
OECD	4.3	2.6	2.0	1.0
Eastern Europe and the CIS	5.2	5.2	1.3	-11.5
Developing countries	2.0	2.8	3.5	4.3
Arab States	2.0	3.6	-0.8	-1.3
East Asia	2.0	4.3	7.2	10.6
Latin America and the Caribbean	2.9	3.7	-0.7	1.0
South Asia	1.8	0.7	3.3	1.2
South-East Asia and the Pacific	2.1	4.1	2.8	4.1
Sub-Saharan Africa	1.4	0.9	-1.0	-1.2
Least developed countries	0.8	-0.1	-0.1	-1.0

FIGURE 1.3
Growth in regional incomes—stunning advance and dismal decline

Real GDP per capita (index, 1960=100)



Source: Calculated by the Human Development Report Office on the basis of data from World Bank 1995c, 1995f and 1995g.

TABLE 1.4
Improvements in global and regional HDI, 1960–93

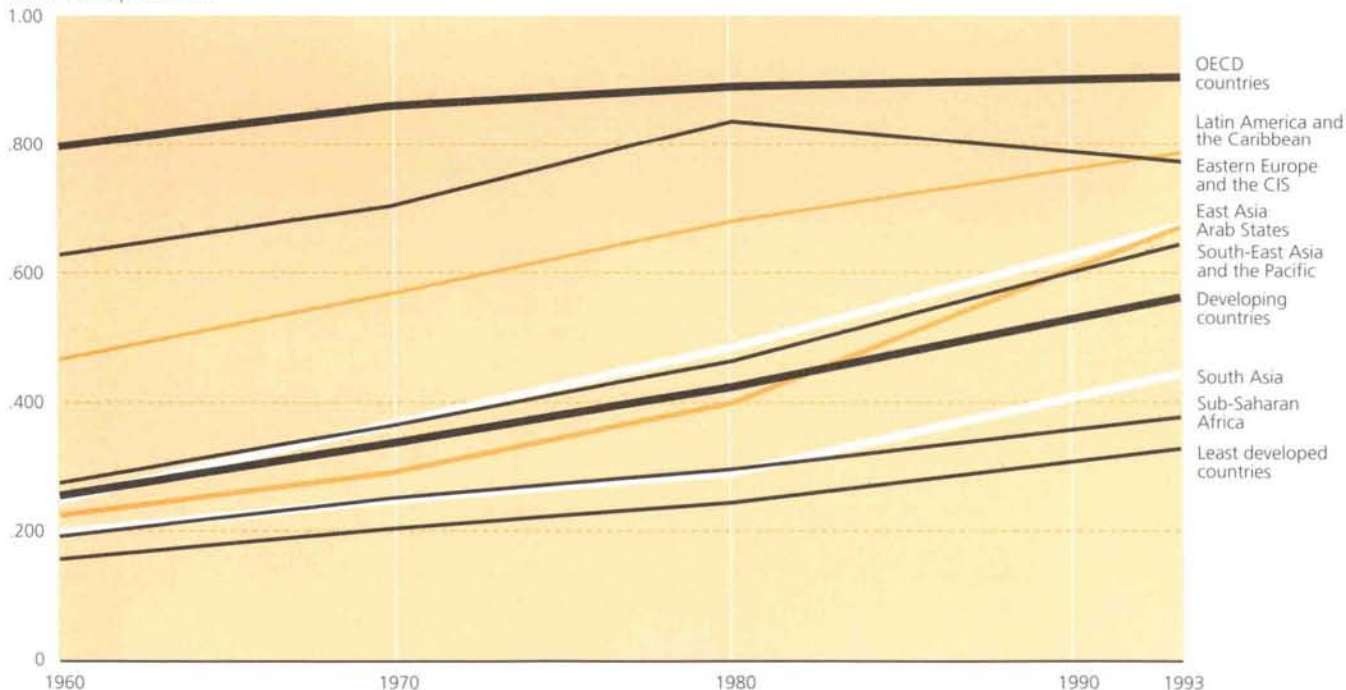
Region or country group	HDI 1960	HDI 1970	HDI 1980	HDI 1993
World	0.392	0.459	0.518	0.746
Industrial countries	0.798	0.859	0.889	0.909
OECD	0.802	0.862	0.890	0.910
Eastern Europe and the CIS	0.625	0.705	0.838	0.773
Developing countries	0.260	0.347	0.428	0.563
Arab States	0.228	0.295	0.410	0.633
East Asia	0.255	0.379	0.484	0.633
Latin America and the Caribbean	0.465	0.566	0.679	0.824
South Asia	0.206	0.254	0.298	0.444
South-East Asia and the Pacific	0.284	0.372	0.469	0.646
Sub-Saharan Africa	0.201	0.257	0.312	0.379
Least developed countries	0.161	0.205	0.245	0.331

TABLE 1.5
Changes in HDI by human development category, 1960–93

Country group	HDI 1960	HDI 1970	HDI 1980	HDI 1993
High human development	0.856	0.867	0.890	0.901
Medium human development	0.659	0.589	0.653	0.647
Low human development	0.247	0.313	0.375	0.396

FIGURE 1.4
Human development has improved steadily in most regions—but faster in some than in others

Human development index



Source: Human Development Report Office.

marginalization can be seen as the distribution of poverty—in Japan as the distribution of wealth.

Countries with a smaller ratio between their average income and the income of the poorest 20% also had faster than average growth in the per capita income of the poorest 20%—Bangladesh, India, Indonesia, Japan, the Netherlands and the Republic of Korea. Where the ratio was larger—Brazil, Chile, Guatemala, the United Kingdom and the United States—per capita income growth was below average for the poorest 20%.

In Sri Lanka the richest 20% earn only four times more than the poorest 20%, in Indonesia five times more and in Morocco seven times more. But the disparities can also be sky-high—in Guatemala and Panama the richest earn 30 times more, and in Brazil 32 times more. In the developing world as a whole the poorest 20% of the people on average get nearly 7% of total income, but in Latin America they tend to do poorest, with only 3%.

Are these disparities shrinking or growing? Changes in the distribution of income in some developing and industrial regions

SPECIAL CONTRIBUTION

Robert M Solow

Intergenerational equity, yes—but what about inequity today?

Everyone now seems to agree on the desirability of sustainable development. Even pure technological optimists accept the importance of sustainability—they just believe that human ingenuity will naturally find a way to achieve it (a risky position, but not nonsensical). I have the uncomfortable feeling, however, that most of this talk about sustainability is so vague as to be meaningless, or just warm and fuzzy, or perhaps a cover to validate pet projects.

One source of my discomfort is the fact that sustainability, when you begin to analyse it carefully, turns out to be a very difficult concept. Our understanding cannot support nearly as much conversation as we hear. The second source is more directly connected to the specific concerns of this Report, and that is what I want to write about here.

If “we”—the people making economic decisions now—have any sort of obligation to steer economic growth in a sustainable direction, it must be because we think it would be unfair or unsound to use limited resources for current benefit, in ways that will impoverish future generations. A decision to seek sustainability is thus a decision to avoid a certain kind of inequality. It is not a good thing that “we” should be well off, or get better off, if that entails that our (distant) descendants will be much poorer than we are. If “human development” is the underlying goal of economic growth, human development should be equitably shared between the present and future.

That sounds nice, and probably it is nice. But there is something strange about focusing on the goal of sustainability, defined and justified in that way. The odds are very good that, a thousand years from now, the inhabitants of Europe and North America will be enjoying an average standard of living very much higher than that achieved today by most of the people of Africa and Latin America. Not everyone would agree with that statement, but I think it is plausible and I will hold to it for the sake of argument. (Notice that I have not bothered to guess whether “our” descendants will be better or worse off than “we” are today.)

But now you can see the paradox connected with the popularity of sustainability. If the underlying reason has to do with dislike for inequality, there is at least as strong a case for reducing contemporary inequality (and probably stronger) as for worrying about the uncertain status of future generations. Those who are so urgent about not inflicting poverty on the future have to explain why they do not attach even higher priority to reducing poverty today.

The analogy between intertemporal inequality and interregional inequality comes easily to mind, but it is not the only one. Even within the rich regions of Europe and North America there are, of course, extremes of wealth and poverty. In the United States, and to a lesser but significant extent in some nations of the European Union, the inequality of income and wealth seems to be increasing.

Why is it so important that we protect the distant future from a fate that arouses so little concern and action when experienced by contemporaries? If we agree that human development is the goal and economic growth is the means, current productive capacity is just as eligible a means. But the governments—and people—of the advanced economies of the world do not seem at all anxious to think about equity when it comes to the use of current resources. It would be easy to provide a cynical interpretation of this observation, but no doubt there are others.

I hope no one will think that I mean to downgrade sustainable development as a social goal and as a guiding concept for economic growth. It is important that we find ways to advance human development with less strain on the limited resources and environmental amenities that we must share with future generations. But sustainability—intertemporal equity—is one goal among several. It is subject to trade-offs against other goals, just as those other goals are.

To the extent that we can manage to do so, economic policy should be made all of a piece, taking all the goals and all the constraints into account, balancing intertemporal, interregional and intraregional objectives against one another. It would be too bad if sustainability were fashionable not despite its vagueness—but because of its vagueness.

Robert M. Solow

Nobel laureate, economics, 1989

with data for 1960–90 reveal a mixed picture.

- *Asia.* In Hong Kong, India, Malaysia, Singapore and Taiwan (province of China) income became more equitably distributed. In Indonesia and the Philippines the distribution remained unchanged. In Bangladesh and Thailand it deteriorated.

- *Latin America.* Income distribution improved only in Colombia, Costa Rica and Uruguay. It deteriorated in Argentina, Bolivia, Brazil, Peru and Venezuela.

- *Eastern Europe and the CIS countries.* In many countries in this region—including Bulgaria, the Czech Republic, Russia and the Baltic states—the Gini coefficient increased from about 0.25 to more than 0.30 in only five years, from 1989 to 1994. (A Gini coefficient of 0 means that everybody has the same income—a figure of 1 that one person has all the income.)

- *Industrial countries.* Income distributions are also skewed in industrial countries—though generally less so. Among the largest disparities are those in Australia and the United Kingdom, where the richest 20% earn ten times more than the poorest 20%. In Switzerland and the United States the richest 20% earn nine times more.

Has the distribution of income been worsening in the industrial countries? Again, the picture is mixed. Between the 1960s and the 1990s the Gini coefficient of income improved in Canada and stayed the same in Japan. In the United Kingdom, however, the income distribution has become more unequal—with the Gini coefficient rising from 0.25 to 0.32.

Assets are also distributed unequally. In Sweden 1% of households own about 20% of assets. And in some countries the disparity in ownership is widening. In the United States between 1975 and 1990 the richest 1% of the population increased its share of assets from 20% to 36%.

Human progress and misery

Human development embraces a broad range of choices in economic, social and political arenas. It covers more than knowledge, a long and healthy life and a decent standard of living. Issues like freedom,

democracy and human security are also important.

But even from a narrow view, human development over the past 30 years is a mixed picture of unprecedented human progress and unspeakable human misery—of human advances on several fronts and retreats on several others. Every region made progress in human development as measured by the HDI over the past three decades—though the extent of improvement varied.

Indeed, the developing countries have in many respects covered as much distance in their human development during the

BOX 1.2

The “lost decade”—totally lost?

The decade of the 1980s is often referred to as the “lost decade” for Latin America and Sub-Saharan Africa. Several indicators register the decline. Per capita income in Latin America was 7% lower in 1990 than in 1980. Consumption fell by 6%, and investment by 4%. Inflation reached an average of 1,500% in 1990. By 1987 the region’s total external debt was three times more than its exports.

In Sub-Saharan Africa per capita GNP fell by nearly 10% between 1980 and 1990. The real world prices for major exports—tea, cocoa, coffee and cotton—fell by 50%. Capital investment fell by more than 50% in real per capita terms, and by 1989 the region’s debt-GNP ratio reached 97%, by far the highest in the world. Many countries attempted to deal with the situation through structural adjustment, which in many cases meant trying to balance the economy at the cost of unbalancing people’s lives.

But was the lost decade totally lost? Both Latin America and Sub-Saharan Africa faced severe problems on the economic front. But what was happening on the human development front? In Latin America there were considerable improvements, in part as a result of deliberately accelerated efforts. Between 1980 and 1990 life expectancy increased from 63 to 67 years, adult literacy improved from 80% to 86%, and infant mortality declined by a third, from 69 per thousand live births to 45.

Although the situation was worse in Sub-Saharan Africa, conscious efforts on some human development fronts brought continuing improvements despite economic problems. Between 1980 and 1990 life expectancy increased by five years, from 46 to 51, and infant mortality decreased by a fifth, from 121 per thousand live births to 97. Thus, even under seriously adverse conditions, some improvement in human development was possible in Sub-Saharan Africa—though its progress lags behind that in other regions.

On the economic front too, not all was bleak. Merchandise exports in Latin America grew at an average annual rate of 3% in the 1980s, and by the end of the decade the region was attracting nearly a third of the private capital flows to developing countries. In Sub-Saharan Africa such countries as Botswana, Cape Verde, Lesotho, Mauritius and Swaziland were able to generate yearly GDP growth during the 1980s.

On the political front, in Latin America more than 125 parliamentary elections were held, and since 1980, 18 countries have made the transition from a military to a democratic government. The Esquipulas Declaration of August 1987 marked a milestone for peace and development in Central America. In Sub-Saharan Africa since 1990, nearly 30 multiparty presidential elections have been held—in 21 cases for the first time. In 31 countries opposition parties have been legalized.

Source: ILO 1992, UNDP 1995c and Human Development Report Office.

past 30 years as the industrial world managed over one century. The infant mortality rate has been more than halved. Combined primary and secondary school enrolment has more than doubled. And people on average now live 17 years longer. In our preoccupation with trends in pure economic indicators, we sometimes lose sight of the achievements in human lives (box 1.2).

BOX 1.3

Social costs of transition

The collapse of communism has provided new possibilities for freedom and for participation. But it has been accompanied by high social costs.

In all but a few of the Eastern European and CIS countries production has been disrupted, and since 1990 average annual growth has been negative for most. Georgia has the worst record (-28% a year), followed by Armenia and Azerbaijan (-16%). A few of the CIS countries have managed to bring inflation rates down to double digits (mostly the Baltic states), but others still suffer from hyperinflation. In 1994 inflation was 7,380% in Georgia, 2,000% in Armenia and Azerbaijan and 1,875% in Belarus.

Unemployment and underemployment continue to increase, although official statistics still show relatively low unemployment rates. In Lithuania, as in most other CIS countries, many people are registered by enterprises as employed, even though they do not work full-time or are on forced unpaid leave. In 1993 unemployment reached 23% in Albania, 17% in Bulgaria and 13% in Hungary.

No less evident is the inequality in income distribution. In Kyrgyzstan in early 1994 the income of the richest 10% of the population was 1.5 times as large as that of the poorest 10%. By the end of 1994 it was 10 times higher. In Russia the nominal incomes of the richest 10% of households increased by 30%, while those of the poorest 10% rose by only 5%.

Most of the Eastern European and CIS countries face serious social distress. In Latvia the number of violent crimes more than doubled between

1990 and 1994, from around 1,060 to 2,360. In Bulgaria during the 1980s the number of reported crimes averaged 50,000 a year—but it grew to 223,000 by 1994.

The widespread decline in income and rising unemployment have pushed many people into poverty—its incidence has risen from 6% to 32% in Romania.

The transition has also meant worsening health and mortality indicators. Both adult and infant mortality rates have risen. Although estimates vary, more than 450,000 adult deaths can be attributed to suicides, alcoholism and increased incidence of coronary disease and strokes.

Malnutrition and undernutrition are also on the rise. In Ukraine the average daily intake has declined from 3,517 calories per capita in 1989 to 2,860 in 1993.

Women have been adversely affected by the changes in these economies. They used to play prominent roles in work and in professional, social and cultural spheres. But now the unemployment rate among women is 14%, compared with 9% among men. In Bulgaria women under 30 make up 70% of all unemployed women.

Children have also been severely affected. New cases of diphtheria among Russian children increased from 500 in 1989 to more than 15,000 in 1993.

A major challenge for Eastern Europe and the CIS countries is to turn these social trends around. Doing this requires the right kind and level of economic growth coupled with fast human development.

Source: UNICEF 1993a and 1994a and data from national human development reports for Eastern Europe and the CIS countries.

But there is still a long way to go. Today, more than one billion people in developing countries lack access to basic health and education, safe drinking water and adequate nutrition. And one person in three lives in poverty. As global communication grows, people expect more—and the ethical contradiction of closing one's eyes to world poverty also grows.

Even the industrial countries still have major human development concerns: millions of people live in constant insecurity—menaced by crime, drugs, pollution, unemployment and homelessness.

The overall progress and deprivation during the past 30 years in industrial and developing countries are summarized in two balance sheets (pages 20–21).

To highlight the major regional variations in human progress and human deprivation over the past three decades, five regional balance sheets have been prepared for the same period (pages 38–42). These balance sheets are, of course, just snapshots—no substitute for more elaborate analysis of regional human development. Because Eastern Europe and the CIS countries are still in a transition that is causing sharp and sudden changes, it is difficult to prepare a similar balance sheet of human development for them, but it is still possible to indicate the magnitude of the social costs that these countries have had to bear (box 1.3).

Life expectancy

Between 1960 and 1993 life expectancy in developing countries increased by more than a third—from 46 to 62 years. Indeed, more than 30 developing countries now have life expectancies of 70 years or more.

In East Asia and Latin America the regional average is nearly 70 years, while in Sub-Saharan Africa the average life expectancy is only 51 years. In the industrial world 24 countries have a life expectancy of 75 years or more.

Much of the progress in life expectancy reflects improvement in the longevity of women. Between 1970 and 1990 women's life expectancy increased by nine years—20% more than the increase for men. All things being equal, women have a biologi-

cal advantage, and should live longer than men. But as a result of neglect of girls, it is women who have the shorter life expectancy in three countries—Bangladesh, the Maldives and Nepal. In some countries of Asia and North Africa the natural sex ratio is defied, and more than 100 million women are estimated to be “missing”.

In Eastern Europe and the CIS countries one of the most striking symptoms of social and economic upheaval is a fall in life expectancy. Male life expectancy in several countries has declined in the past five years—by five years in Russia by some estimates.

In the industrial countries life expectancy has continued to increase, so much so that there has been a significant ageing of the population. Today, around 150 million people—13% of the population—are over 65 years of age. And of these, more than 30 million are 80 years or older.

While the rising life expectancy represents remarkable success for human development, it also creates two major challenges. The first is providing enough health and other care for people who become less self-reliant as they grow older. The second is generating enough revenue from the working population to pay for the social protection of a growing proportion of retired people. But societies have to recognize that older people still have much more to contribute—by making better use of their experience and skills to enrich society. Thus, people’s perception of ageing needs to change.

Health

Health standards in developing countries have greatly improved in the past 30 years. Between 1960 and 1993 the average infant mortality rate fell by more than half—from 150 per thousand live births to 70. But in South Asia the rate is 84, and in Sub-Saharan Africa 97—more than five times the rate for East Asia (excluding China).

Progress has been similar in under-five mortality, which in developing countries fell from 243 deaths per thousand live births to less than 100 during 1960–94. But again, some countries are lagging behind. In Sub-

Saharan Africa the rate is 174—while in the Arab States it is 73.

Broader access to health services, safe water and sanitation and the mobilization of private services, such as for immunization, have made the difference. During 1960–93 public spending on health in developing countries increased from 0.9% of GDP to 2.0%. Eighty percent of people in developing countries now have access to health services—70% to safe water.

Alongside all this progress, however, is much deprivation. Many people still lack health services or safe water, and more than half of them live in South Asia and Sub-Saharan Africa. And for many people the chances of seeing a doctor can be quite low. In Latin America there is one doctor for every 1,000 people—in Sub-Saharan Africa one for every 18,000. And almost all these services tend to be much worse in rural than in urban areas.

Deprivation in health is on the rise in Eastern Europe and the CIS countries. In Russia and Ukraine the infant mortality rate has risen by more than 13%. Indeed, health standards in these economies are now sometimes lower than in some developing countries. In Georgia 30% of pregnant women now suffer from anaemia—twice the level in El Salvador.

The very young remain most vulnerable. True, more than three-quarters of one-year-olds in developing countries are now immunized against the most common childhood diseases—with coverage ranging from 60% in Africa to more than 90% in East Asia. But even so, more than 12 million children under five still die each year, and in most cases their deaths can be linked to malnutrition. More than half the malnourished children are in South Asia.

Women are another vulnerable group, and for them the most critical period is pregnancy and childbirth. In 1990 more than half the pregnant women in developing countries were anaemic, and about half a million women die every year from causes related to childbirth. The average maternal mortality rate for developing countries is 384 per 100,000 live births, with the rates varying considerably—from 95 in East Asia to nearly 1,000 in Sub-Saharan Africa.

Deprivation in health is on the rise in Eastern Europe and the CIS countries

Balance sheet of human development—developing countries

PROGRESS

DEPRIVATION

HEALTH

- In 1960–93 average life expectancy increased by more than a third. Life expectancy is now more than 70 years in 30 countries.
- Over the past three decades the population with access to safe water almost doubled—from 36% to nearly 70%.

- Around 17 million people die each year from curable infectious and parasitic diseases such as diarrhoea, malaria and tuberculosis.
- Of the world's 18 million HIV-infected people, more than 90% live in developing countries.

EDUCATION

- Between 1960 and 1991 net enrolment at the primary level increased by nearly two-thirds—from 48% to 77%.

- Millions of children are still out of school—130 million at the primary level and 275 million at the secondary level.

FOOD AND NUTRITION

- Despite rapid population growth, food production per capita increased by about 20% in the past decade.

- Nearly 800 million people do not get enough food, and about 500 million people are chronically malnourished.

INCOME AND POVERTY

- During 1960–93 real per capita income in the developing world increased by an average 3.5% a year.

- Almost a third of the population—1.3 billion people—lives in poverty.

WOMEN

- During the past two decades the combined primary and secondary enrolment ratio for girls increased from 38% to 78%.
- During the past two decades fertility rates declined by more than a third.

- At 384 per 100,000 live births, maternal mortality is still nearly 12 times as high as in OECD countries.
- Women hold only 10% of parliamentary seats.

CHILDREN

- Between 1960 and 1993 the infant mortality rate fell by more than half—from 150 per thousand live births to 70.
- The extension of basic immunization over the past two decades has saved the lives of about three million children a year.

- More than a third of children are malnourished.
- The under-five mortality rate, at 97 per thousand live births, is still nearly six times as high as in industrial countries.

ENVIRONMENT

- Developing countries' contribution to global emissions is still less than a fourth that of industrial countries, though their population is four times the industrial world's.

- About 200 million people are severely affected by desertification.
- Every year some 20 million hectares of tropical forests are grossly degraded or completely cleared.

POLITICS AND CONFLICTS

- Between two-thirds and three-quarters of the people in developing countries live under relatively pluralistic and democratic regimes.

- At the end of 1994 there were more than 11 million refugees in the developing world.

Source: See bibliographic note on page 116.

Balance sheet of human development—industrial countries

PROGRESS

DEPRIVATION

HEALTH

- By 1992 life expectancy was more than 75 years in 24 of 25 industrial countries.

- Nearly two million people are infected with HIV.

EDUCATION

- Between 1960 and 1990 the tertiary enrolment ratio more than doubled—from 15% to 40%.

- More than a third of adults have less than an upper-secondary education.

INCOME AND EMPLOYMENT

- Between 1960 and 1993 real per capita GNP grew by more than 3% a year.
- The average annual rate of inflation during the 1980s was less than 5%.

- The total unemployment rate is more than 8%, and the rate among youths nearly 15%. More than 30 million people are seeking work.
- The poorest 40% of households get only 18% of total income.

WOMEN

- Between 1970 and 1990 the number of female tertiary students per 100 male tertiary students studying science and technology more than doubled—from 25 to 67.
- Women now account for more than 40% of the labour force and about a quarter of administrators and managers.

- The wage rate for women is still only two-thirds that for men.
- Women hold only 12% of parliamentary seats.

SOCIAL SECURITY

- Social security expenditures account for about 15% of GDP.

- More than 100 million people live below the official poverty line, and more than 5 million are homeless.

SOCIAL FABRIC

- There are more than five library books and one radio for every person, one TV set for every two people. One person in three reads a newspaper.

- Nearly 130,000 rapes are reported annually in the age group 15–59.

ENVIRONMENT

- Aggressive conservation measures and more appropriate pricing policies dramatically reduced energy use per \$100 of GDP between 1965 and 1991—from 166 kilograms of oil equivalent to 26 kilograms.

- Each year damage to forests due to air pollution leads to economic losses of about \$35 billion—equivalent to the GDP of Hungary.
- People in industrial countries consume nearly nine times as much commercial energy per capita as people in developing countries, though they constitute only a fifth of the world's population.

Note: In the balance sheets *industrial countries* excludes countries in Eastern Europe and the Commonwealth of Independent States (CIS).

Source: See bibliographic note on page 116.

The spread of HIV/AIDS

HIV/AIDS has become one of the world's leading public health problems and for many countries a major setback in human development. So far, 18 million people worldwide have been infected with HIV, and 2.5 million have died of AIDS. Every day 6,000 new infections occur, one every 15 seconds. Although 90% of all new infections are in developing countries, the industrial countries have no cause for complacency. In both Europe and North America AIDS is now the leading cause of death for adults under 45.

HIV/AIDS presents difficult health problems. There is as yet no cure or vaccine. AIDS is assumed to be almost always fatal. And there is a long incubation period between infection and illness.

The most obvious and direct impact of HIV/AIDS on human development is

through sickness and death. In some countries it is causing a sharp drop in life expectancy. Without HIV/AIDS the average life expectancy in Africa in 2000 would have been 62 years. Instead, it is likely to fall to 47 years. This drastic effect is beginning to show up in declining human development indices for many countries (box 1.4).

Statistics on the rapid spread of the epidemic and its impact may cause alarm. But numbers and predictions should not hide the fact that HIV/AIDS is a personal tragedy for many individuals and families. People living with HIV and AIDS have to deal not only with a lethal disease, but also with the stigma and discrimination often associated with being infected. A humane approach to helping people who are living with HIV and AIDS and involving them in education and prevention programmes is essential for creating an environment in which open dialogue can limit the further spread of the epidemic. Inhumane and discriminatory treatment of those infected will create an atmosphere of fear and ignorance, fuelling the AIDS epidemic.

BOX 1.4

HIV/AIDS stunts progress in human development

The scale of the setback to human development from HIV/AIDS has been confirmed by a recent UNDP study carried out by researchers at Columbia University and the Harvard Institute for International Development. This study concludes that between 1980 and 1992 a sample of 56 countries from all regions of the world lost on average 1.3 years of human development progress. And in some countries the setback was particularly severe—for Zambia more than ten years, Tanzania eight years, Rwanda seven years and the Central African Republic more than six years. Burundi, Kenya, Malawi, Uganda and Zimbabwe lost between three and five years.

The method used compares the actual 1980 and 1992 human development index (HDI) with the estimated 1992 HDI that would have occurred in the absence of AIDS. The losses will continue to mount, especially in such countries as India, Myanmar and Thailand, where the AIDS crisis is becoming increasingly visible. The impact of HIV/AIDS on the HDI operates mainly through the dramatic reduction of life expectancy. More than 85% of HIV/AIDS deaths worldwide occur

among people between 20 and 45 years old. The study found only a marginal impact on the other components of the HDI. But because HDI is only a partial measurement of human development, the impact of HIV/AIDS goes far beyond what this study shows.

The study used the same method to measure the impact of tuberculosis. Even though this disease has claimed far more lives since 1980, AIDS has had a greater impact on human development precisely because AIDS deaths are concentrated in the age group 20–45. This finding is significant. It shows that it is now out of date to argue that HIV/AIDS is an exaggerated health crisis diverting attention and funding from more important, though less spectacular, health problems of developing countries.

Governments that do not take the AIDS threat seriously now, or shy away from action because of cultural or religious sensitivities, will pay the price later. More resources, political commitment and innovation need to be brought to bear against this pandemic, while still maintaining adequate attention to other health challenges.

Source: Bloom, Bennet, Mahal and Noor 1996.

Educational attainment

Investment in social services in developing countries shows up in higher literacy rates and greater numbers of children enrolled in school.

Between 1970 and 1993 the literacy rate in developing countries increased by nearly half—from 43% of those over 15 to 61%. Indeed, 25 countries now have literacy rates of 90% or more. Latin America has a rate of 86%, while Sub-Saharan Africa has one of 55% and South Asia 49%.

There have also been significant improvements in school enrolment. Between 1960 and 1991 in developing countries, the net enrolment ratio increased from 48% to 77% at the primary level and from 35% to 47% at the secondary level. Tertiary enrolment remains low at 16%.

Different regions are at different stages. In South Asia the increases in enrolment ratios were more at the primary and secondary levels—in Latin America and East Asia more at the secondary and tertiary levels. In Sub-Saharan Africa primary enrol-

ment ratios fell over the 1980s, declining by 37–50% in 17 countries.

Some of the biggest advances have been for women. Between 1970 and 1992 the female primary and secondary enrolment ratio increased from 38% to 68%. And in some regions it is approaching that of the industrial countries, notably in East Asia (83%) and in Latin America (87%). But South Asia (55%) still has a long way to travel.

There have been similar improvements in female literacy—which during the past two decades increased by more than two-thirds in developing countries. Even regions less advanced in female education have made progress. In the Arab States between 1970 and 1990, the female literacy rate increased from 20% to 40%.

Eastern Europe and the CIS countries have always prided themselves on high standards of education. But it seems that standards are slipping. Over the past five years the primary and secondary enrolment ratios fell by 4% in Russia and by 6% in Bulgaria.

The industrial countries have much higher enrolment ratios and literacy rates. But some of them worry about declining standards, fearing that they may start falling behind the faster-growing developing countries. One major concern is technical education. In the industrial countries fewer than a third of students now enrol for applied or natural science. For students in Argentina, Chile and Mexico the proportion is above 40%.

Political participation

Today, between two-thirds and three-quarters of the world's people live under relatively pluralistic and democratic regimes. In East Asia and South-East Asia more than 30 general elections have been held since 1980, and in South Asia 34 parliamentary elections. In Africa more than half the states are now undertaking democratic reforms and renewing civil society. Since 1990, 27 multiparty presidential elections have been held—21 for the first time. In 31 countries opposition parties have been legalized. In Latin America 18 countries have made the transition from a military to a democratic

government since 1980. Several Arab states have undertaken political reforms to strengthen their multiparty systems. All these opened opportunities for people to influence the process that shapes their lives.

People are also exerting influence by increasingly taking part in institutions of civil society—such as non-governmental organizations. In developing countries such organizations are not only increasing in number, they are also taking on a bigger role in voicing people's aspirations and working as pressure groups.

Trade unions have always been strong institutions of civil society. But except in such Scandinavian countries as Denmark, Finland and Sweden, where union membership has risen significantly in the past two decades, union membership among workers has been falling in most industrial countries in recent years (the Netherlands, Portugal and the United States). In developing countries a smaller proportion of the workforce tends to be unionized than in most industrial countries because there are fewer workers in the formal sector.

Political space has always been monopolized by men. Although women constitute half the electorate, they hold only 12% of the seats in parliaments and 6% in national cabinets. Women are relatively better represented at local levels. In 46 countries women's representation in local governments surpasses their representation in national parliaments. In 1994 India reserved a third of Panchayat (local council) seats for women. As a result, at least 800,000 women entered the local political pipeline from which national leaders emerge.

Human security

Human security represents safety from such chronic threats as hunger, disease and repression and protection from sudden and hurtful disruptions in the patterns of daily life—in homes, workplaces and the community.

In poor nations and rich, human life is increasingly threatened by crime, accidents and violence. During the mid-1970s and the mid-1980s reported crimes worldwide increased by 5% a year—faster than the

Political space has always been monopolized by men

Children, who should be most protected in any society, are subject to many abuses

growth in population. Many countries report disturbing trends in crime. In the United States there are two million victims of violent crimes every year. Four children are murdered every day in Brazil, where the killings of minors increased by 40% in 1992.

Industrial and traffic accidents also present great risks. In industrial countries traffic accidents are the leading cause of death for people aged 15–30. In developing countries they account for at least 50% of accidental deaths.

Among the worst personal threats are those to women. It is estimated that a third of married women in developing countries are battered by their husbands. In Germany up to four million women suffer from domestic violence every year. And nearly 130,000 rapes are reported annually in industrial countries in the age group 15–59.

Children, who should be most protected in any society, are subject to many abuses. In the United States nearly three million children are reported to be victims of abuse and neglect every year. More than 200,000 children live on the streets in Brazil. Each year an estimated one million children, mostly girls in Asia, are forced into prostitution. An estimated 100 million girls, mostly in Africa, have suffered genital mutilation.

Over the years the survival of indigenous people in different countries has been threatened in one way or another. The lives of 300 million aboriginal people in 70 countries are subject to continuing vulnerability. In Canada nearly half the indigenous people living on reservations now rely on transfer payments for their basic needs. Among all households in Guatemala, two of three are poor—but among indigenous families, nine of ten are poor. During the drought of the 1970s, 125,000 Tuareg nomads in the Sahara starved to death. And violence, depression and despair are all too common among indigenous people, further threatening their survival.

Housing

More than one billion people live in inadequate shelter—without piped water, electricity, roads or, in most cases, security of

tenure. Between 30% and 60% of the people in developing countries live in illegal or irregular settlements. And there are thought to be around 100 million homeless—sleeping in the streets or in public buildings or moving in and out of night shelters.

Conditions like these inevitably undermine progress in human development—and leave people constantly exposed both to chronic diseases and to sudden new threats. The 1994 outbreak of plague in the relatively wealthy Indian city of Surat was an unnerving reminder of the dangers of poor water supply, sanitation and drainage.

Inadequate and overcrowded shelter is the most visible manifestation of poverty, and improved housing conditions have an immediate and direct impact on human development (box 1.5). Adequate housing is strongly correlated with progress in health, literacy and longevity and with the social stability of communities. Improvements in housing boost material and psychological well-being and health—and thus work productivity and school performance. And appropriate location of settlements can expand job opportunities.

Housing means much more than shelter from the elements. It can be a source of security and stability, especially for the urban poor. It can also be a centre of informal employment—everything from vegetable gardening to dressmaking to radio repair.

Conflict

Since the Second World War the number of conflicts in the world has increased more than fivefold, more than 90% of them internal. Bombs, bullets and land-mines might be thought the greatest risks in conflict, but many more people die from indirect causes—such as the disruption of food or water supplies or the destruction of health services. In today's conflict zones more than 100 million people are chronically malnourished. In the Horn of Africa in the early 1990s, mortality and disease rates were more than 20 times as high as normal. This takes a terrible toll on children. While under-five mortality is 120 deaths per thousand live births in South Asia and 175 in

Human development, Habitat II and human settlements

The goal of the second United Nations Conference on Human Settlements (Habitat II), to be held in Istanbul in June 1996, is to make the world's cities, towns and villages healthy, safe, equitable and sustainable. Its two main themes: adequate shelter for all, and sustainable human settlements in an urbanizing world.

An urbanizing world: bane or opportunity for human development?

The world is becoming urban. Between 1950 and 1995 the proportion of the global population living in towns and cities increased from 29% to 43%, and by the year 2005 it will be well over 50%.

Almost all this urbanization is taking place in developing countries. In the industrial countries city populations are stabilizing and in some cases declining. But urban areas in the South are growing by one million inhabitants a week—the equivalent of a whole new city the size of Brussels or Harare. And there are no signs that the pace is slackening.

Policy-makers have realized that the urban boom is inevitable, although some measures can slow it down. And while cities are centres of deprivation, they are also centres of opportunity. Rural arrivals may not find the streets paved with gold, but cities offer a chance of better-paid employment. A high density of people and resources offers economies of scale and a concentration of creative energy, and opportunities for both economic and non-economic dimensions of human development (box figure 1.1). Cities have less than half the world's population, but contribute nearly two-thirds of the world's wealth.

Since cities will continue to grow, the task now is to make them function better as centres of human development. Key issues for the future include improving the quality of informal sector employment, providing adequate housing and delivering services on a more equitable basis to rich and poor neighbourhoods.

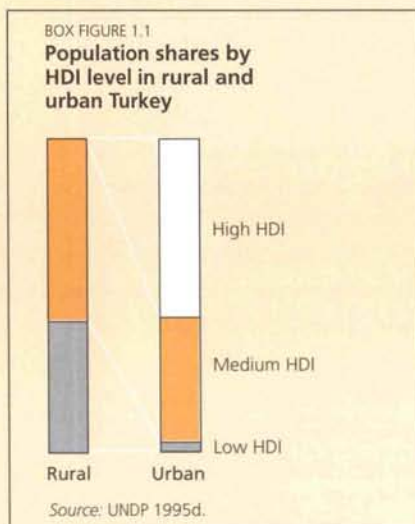
Enabling environment for better housing

Governments have tried to bolster security for city dwellers and improve their living conditions by building low-cost public housing. But this has rarely achieved much—even the lowest-cost houses may be beyond the reach of the poorest and have often been seized by the middle classes in “downward raiding”.

Source: ADB 1994, Cheema, Rabinovitch and Work 1995, UNCHS 1987, 1991 and 1996, UNDP 1991a and UN 1995g.

The best people to generate affordable housing are the poor themselves—whose energy and enterprise have created homes and thriving communities in the most difficult circumstances. And the best contribution that governments can make is to offer support when needed and to create an enabling environment for community-based settlement and shelter improvement.

This means, for example, ensuring a competitive but regulated market in land—



people will not develop housing on illegally occupied land if they can afford legal plots of their own. Governments can also ensure a free market in building materials and housing finance. And they can remove bureaucratic barriers that set unrealistic building standards.

Yet too few municipal governments have fully implemented an “enabling” strategy, leaving a gap between policy rhetoric and action. Special interest groups that profit from monopoly control over land or construction—and bureaucratic unwillingness or inability to cope with local communities—get in the way. The issue of municipal governance—in accountability and incompetence—needs to be addressed.

Adequate housing as a human right?

The right to adequate shelter is one of many development-related rights set out in international instruments of human rights law. The Universal Declaration of Human Rights, universally accepted as binding “customary” international law, states that “everyone has the right to a

standard of living adequate for the health and well-being of himself and of his family, including . . . housing . . .” (Article 26). This right is reiterated in a number of subsequent conventions, in particular the Covenant on Economic, Social and Cultural Rights and the Convention on the Rights of the Child.

The central issue, however, is not the definition of “rights” or “obligations”. It is the certainty that by agreeing to declarations and ratifying treaties, countries have firmly committed themselves to improving housing conditions as part of their commitment to people-centred and equitable development. The key challenge is not for legal experts to interpret legal texts, but for policy-makers to take the necessary action to honour their commitment to the people and to the community of nations. If international law can be one way of focusing attention on the need for action, then so much the better.

Priorities for the follow-up to Istanbul

Five follow-up actions will determine whether Habitat II has a lasting impact. Each country needs to:

1. Adopt the globally agreed goals and adapt them to its own situation.
2. Prepare a national plan of action with the main municipalities preparing local plans.
3. Set in motion a range of local activities to meet these goals, organized locally in ways that provide full opportunities for social mobilization and participation and control by local communities.
4. Explore with community leaders how existing resources can be better used, with some resources from central budgets for catalytic support.
5. Set up a process of monitoring, both to assess progress towards the goals and to provide feedback, accountability and encouragement to communities.

Mayors and community leaders in many cities have demonstrated remarkable capacity for creative leadership and community mobilization, transforming the lives of millions of urban people, including many of the poor. Such leadership is most effective when it is anchored in a participatory approach, tackling problems in ways that draw on the energy and creativity of men, women, children and community groups to improve their lives and situations.

The connection between conflict and human development runs both ways

Sub-Saharan Africa, it is more than 250 in Afghanistan, Angola, Mozambique and Sierra Leone.

The connection between conflict and human development runs both ways. Years of internal warfare undermine standards of human development. And long periods of neglect of human development, especially for particular racial or ethnic groups, can eventually provoke violent conflicts.

One way of looking at the association between violent conflict and human development is through the number of refugees. At the end of 1994 conflicts around the globe had left nearly 27 million refugees and displaced persons (an elevenfold increase since 1970). Today, one of every 200 people in the world is either a refugee or displaced within his or her own country. Almost all countries in which conflict has produced a significant number of refugees and internally displaced people have a low human development index (table 1.6).

Peace opens opportunities for human development—in the West Bank and Gaza the beginnings of peace improve the prospects for more trade, more external assistance and more effective public action for accelerating human development.

Environment

The environmental threats that people around the world face stem from a combination of the degradation of local ecosystems and that of the global system.

Developing countries are confronting increasing problems of water scarcity, deforestation, desertification, pollution and natural disasters. Today in developing countries, the water supply per capita is only a third of what it was in 1970. Some eight million to ten million acres of forest land are lost each year. In Sub-Saharan Africa alone in the past 50 years, 65 million hectares of productive land turned into desert. Air pollution is also a serious problem. About 700 million people, primarily women and children in poor rural areas, are affected by indoor smoke from the use of biomass fuel. And during 1967–93 natural disasters affected three billion people in developing countries—with more than seven million deaths and two million injuries.

In industrial countries one of the major environmental threats is air pollution. The deterioration of Europe's forests from air pollution causes economic losses of \$35 billion a year. The estimated annual loss of agricultural production due to air pollution is \$1.5 billion in Sweden, \$1.8 billion in Italy, \$2.7 billion in Poland and \$4.7 billion in Germany.

Some forms of environmental degradation migrate across borders. Polluted air drifts inexorably across national frontiers, with sulphur dioxide emissions in one country falling as acid rain in another. About 60% of Europe's commercial forests suffer damaging levels of sulphur deposition. The production of greenhouse gases also has a global effect. Although the United States and the former Soviet Union account for nearly a third of global emissions of greenhouse gases, sometimes the greatest impact could be on poorer countries. Bangladesh, which produces only 0.3% of global greenhouse emissions, could see its land area shrink by 17% with a one-metre rise in sea level partly due to global warming.

Biological diversity is more threatened now than at any time in the past. It has been estimated that at current rates of loss, up to

TABLE 1.6
Conflict and human development
(as of December 1994)

Country or group	Refugees	HDI value
High human development countries	None	0.901
Medium human development countries	—	0.647
Iraq	702,000	0.599
Azerbaijan	299,000	0.665
Armenia	202,000	0.680
Low human development countries	—	0.396
Afghanistan	2,744,000	0.229
Rwanda	2,257,000	0.332
Liberia	795,000	0.311
Somalia	536,000	0.221
Sudan	397,000	0.359
Burundi	389,000	0.282
Angola	284,000	0.283
Sierra Leone	275,000	0.219
Mozambique	234,000	0.261
Chad	211,000	0.291
Myanmar	204,000	0.451
Subtotal	9,259,000	—
Others (countries in which conflict had created fewer than 200,000 refugees)	5,229,000	—
Total	14,488,000	—

Source: UNHCR 1995.

15% of the earth's species could disappear over the next 25 years.

Income poverty—and capability poverty

The foregoing discussion shows considerable progress in human development, alongside deep human deprivation and poverty.

Poverty is usually thought of as a lack of income—because it is income that is largely assumed to determine one's material standard of well-being. Thus, if \$1 a day is taken as the poverty line, 33% of the developing world's population, or 1.3 billion people, is poor. Nearly half, more than 550 million, live in South Asia, 215 million in Sub-Saharan Africa and 150 million in Latin America.

But "income poverty" is only part of the picture. Just as human development encompasses aspects of life much broader than income, so poverty should be seen as having many dimensions.

This year's Report thus introduces a new, multidimensional measure of human deprivation, the capability poverty measure (CPM). Intended to complement income measures of poverty, it focuses on human capabilities, as the human development index does. But rather than examining the average state of people's capabilities, it reflects the percentage of people who lack basic, or minimally essential, human capabilities.

The CPM considers the lack of three basic capabilities. The first is the capability to be well nourished and healthy—represented by the proportion of children under five who are underweight. The second is the capability for healthy reproduction—proxied by the proportion of births unattended by trained health personnel. The third is the capability to be educated and knowledgeable—represented by female illiteracy. The index is noteworthy for its emphasis on the deprivation of women, which is severe in some countries. It is now well known that deprivation of women adversely affects the human development of families and of society.

For each country these measures are added together and divided by three to give

a simple arithmetic mean. The lower this mean, the less the capability poverty. (The analytical framework of the CPM, the full method and the complete results are in technical note 3.) The CPM could also incorporate other variables, but for international comparisons, keeping it simple increases its usefulness.

Table 1.7 presents the results of the CPM for a selection of countries—along with the "headcount poverty index" from the World Bank's *Trends in Developing Economies 1995*, which uses a high national poverty line that reflects both moderate and extreme poverty. The headcount index is estimated as the proportion of people under the poverty line.

According to the national income poverty lines, 21% of the people in developing countries live below the poverty line. The corresponding figure for capability poverty is 37%. In other words, 900 million people in developing countries are income poor, but 1.6 billion people are capability poor.

- *South Asia*—In most countries capability poverty is more widespread than income poverty. In Pakistan only a third of the population is income poor, but more than three-fifths are capability poor. And in

The capability poverty measure complements income measures of poverty

TABLE 1.7
Capability poverty and income poverty
(percent)

Country	People who are capability poor (CPM) 1993	People who are income poor (headcount index) ^a
Bangladesh	76.9	47.5
India	61.5	25.4
Pakistan	60.8	34.0
Guinea-Bissau	56.6	49.0
Morocco	49.7	13.1
Uganda	45.9	55.0
Indonesia	42.3	16.7
Ghana	39.3	35.9
Kenya	33.8	37.0
Tunisia	29.9	14.1
Peru	25.7	32.0
Zimbabwe	22.3	25.5
Thailand	21.1	21.8
Sri Lanka	19.3	22.4
China	17.5	10.9
Venezuela	15.2	31.3

a. Most recent year available.

Source: Human Development Report Office and World Bank 1995c.

FIGURE 1.5
Human development varies among regions



Source: Human Development Report Office.

Bangladesh 55 million people are income poor, but 89 million are capability poor. In Sri Lanka, by contrast, capability poverty is less than income poverty.

- *South-East Asia*—Thailand has built up the capabilities of its people over time, so capability poverty there is lower than income poverty. But Indonesia, while successful at reducing income poverty, still has much more to do in developing people's basic capabilities. This disparity is reflected in the human development index: Thailand is ranked 52, Indonesia 102.

- *Arab States*—Capability poverty often exceeds income poverty, though the difference varies. It is greater in Morocco, for example, than in Tunisia.

- *Sub-Saharan Africa*—Here the story is different. Income poverty is so extensive that in Kenya, Uganda and Zimbabwe it exceeds capability poverty—though the gap between the two is generally small. And deprivation is so severe that in Guinea-Bissau almost three-fifths of the people are capability poor.

- *Latin America*—Many countries have built up their people's capabilities quite effectively—as reflected in their HDI values—but they have been less successful in alleviating income poverty. In Peru and Venezuela income poverty is higher than capability poverty.

So, poverty cannot be eradicated merely by boosting income. It will also take a broad expansion of basic human capabilities and the productive use of those capabilities.

What the 1996 HDI reveals

Since 1990 the *Human Development Report* has presented the human development index to capture as many aspects of human development as possible in one simple composite index and to produce a ranking of human development achievements—a ranking that reveals considerable regional variation (figure 1.5 and tables 1.8 and 1.9).

The concept of human development is much deeper and richer than what can be captured in any composite index or even by a detailed set of statistical indicators. Yet it is useful to simplify a complex reality—and that is what the HDI sets out to do. It is a

composite index of achievements in basic human capabilities in three fundamental dimensions—a long and healthy life, knowledge and a decent standard of living. Three variables have been chosen to represent

TABLE 1.8
HDI ranking for industrial countries, 1993

Country	HDI value	HDI rank	Real GDP per capita (PPP\$) rank	Real GDP per capita (PPP\$) rank minus HDI rank ^a
Canada	0.951	1	7	6
USA	0.940	2	2	0
Japan	0.938	3	9	6
Netherlands	0.938	4	22	18
Norway	0.937	5	10	5
Finland	0.935	6	25	19
France	0.935	7	14	7
Iceland	0.934	8	17	9
Sweden	0.933	9	21	12
Spain	0.933	10	31	21
Australia	0.929	11	18	7
Belgium	0.929	12	12	0
Austria	0.928	13	15	2
New Zealand	0.927	14	24	10
Switzerland	0.926	15	4	-11
United Kingdom	0.924	16	23	7
Denmark	0.924	17	11	-6
Germany	0.920	18	16	-2
Ireland	0.919	19	29	10
Italy	0.914	20	20	0
Greece	0.909	21	41	19
Israel	0.908	24	28	4
Luxembourg	0.895	27	1	-26
Malta	0.886	28	34	6
Portugal	0.878	35	35	0
Czech Rep.	0.872	37	44	6
Slovakia	0.864	41	55	14
Hungary	0.855	46	51	5
Latvia	0.820	55	61	7
Poland	0.819	56	65	10
Russian Fed.	0.804	57	64	8
Belarus	0.787	61	71	10
Bulgaria	0.773	62	70	8
Estonia	0.749	68	83	15
Kazakhstan	0.740	72	79	7
Romania	0.738	74	78	4
Ukraine	0.719	80	90	11
Lithuania	0.719	81	95	15
Turkmenistan	0.695	90	92	3
Armenia	0.680	93	123	31
Uzbekistan	0.679	94	104	11
Azerbaijan	0.665	96	117	22
Moldova, Rep. of	0.663	98	108	11
Kyrgyzstan	0.663	99	111	13
Georgia	0.645	101	128	28
Albania	0.633	104	115	12
Tajikistan	0.616	105	137	33

a. A positive figure indicates that the HDI rank is better than the real GDP per capita (PPP\$) rank, a negative the opposite.

TABLE 1.9
HDI ranking for developing countries, 1993

Country	HDI value	HDI rank	Real GDP per capita (PPP\$) rank	Real GDP per capita (PPP\$) rank minus HDI rank ^a	Country	HDI value	HDI rank	Real GDP per capita (PPP\$) rank	Real GDP per capita (PPP\$) rank minus HDI rank ^a
Hong Kong	0.909	22	6	-16	Guatemala	0.580	112	85	-26
Cyprus	0.909	23	30	7	Mongolia	0.578	113	122	10
Barbados	0.906	25	36	11	Honduras	0.577	114	120	7
Bahamas	0.895	26	26	0	El Salvador	0.576	115	109	-5
Korea, Rep. of	0.886	29	39	9	Namibia	0.573	116	79	-37
Argentina	0.885	30	47	16	Nicaragua	0.569	117	112	-4
Costa Rica	0.884	31	54	23	Solomon Islands	0.563	118	113	-4
Uruguay	0.883	32	49	16	Vanuatu	0.562	119	106	-12
Chile	0.882	33	42	8	Gabon	0.557	120	74	-46
Singapore	0.881	34	13	-21	Viet Nam	0.540	121	147	27
Brunei Darussalam	0.872	36	19	-17	Cape Verde	0.539	122	125	4
Trinidad and Tobago	0.872	38	43	4	Morocco	0.534	123	88	-34
Bahrain	0.866	39	27	-12	Zimbabwe	0.534	124	120	-3
Antigua and Barbuda	0.866	40	67	20	Congo	0.517	125	101	-23
United Arab Emirates	0.864	42	8	-34	Papua New Guinea	0.504	126	103	-22
Panama	0.859	43	52	9	Cameroon	0.482	127	114	-12
Venezuela	0.859	44	45	0	Kenya	0.473	128	136	9
Saint Kitts and Nevis	0.858	45	40	-6	Ghana	0.467	129	124	-4
Fiji	0.853	47	57	10	Lesotho	0.464	130	150	21
Mexico	0.845	48	48	-1	Equatorial Guinea	0.461	131	126	-4
Colombia	0.840	49	53	4	São Tomé and Príncipe	0.459	132	171	39
Qatar	0.839	50	3	-47	Myanmar	0.451	133	168	35
Kuwait	0.836	51	5	-46	Pakistan	0.442	134	118	-15
Thailand	0.832	52	50	-3	India	0.436	135	141	7
Malaysia	0.826	53	45	-9	Zambia	0.411	136	144	9
Mauritius	0.825	54	33	-21	Nigeria	0.401	137	134	-2
Brazil	0.796	58	58	0	Lao People's Dem. Rep.	0.340	138	135	-2
Libyan Arab Jamahiriya	0.792	59	38	-9	Comoros	0.399	139	143	5
Seychelles	0.792	60	62	3	Togo	0.385	140	148	9
Saudi Arabia	0.772	63	32	-31	Zaire	0.371	141	174	33
Ecuador	0.764	64	68	4	Yemen	0.366	142	133	-8
Dominica	0.764	65	75	10	Bangladesh	0.365	143	139	-3
Iran, Islamic Rep. of	0.755	66	59	-7	Tanzania, U. Rep. of	0.364	144	170	26
Belize	0.754	67	66	0	Haiti	0.360	145	145	1
Algeria	0.746	69	56	-13	Sudan	0.359	146	138	-7
Jordan	0.741	70	69	-1	Côte d'Ivoire	0.357	147	131	-15
Botswana	0.741	71	60	-10	Central African Rep.	0.355	148	145	-2
Saint Vincent	0.738	73	84	11	Mauritania	0.353	149	132	-16
Suriname	0.737	75	82	7	Madagascar	0.349	150	164	14
Saint Lucia	0.733	76	77	1	Nepal	0.332	151	149	-1
Grenada	0.729	77	94	18	Rwanda	0.332	152	161	9
Tunisia	0.727	78	63	-14	Senegal	0.331	153	129	-23
Cuba	0.726	79	97	19	Benin	0.327	154	130	-23
Oman	0.716	82	37	-45	Uganda	0.327	155	151	-3
Korea, Dem. People's Rep. of	0.714	83	97	15	Cambodia	0.325	156	140	-15
Turkey	0.711	84	72	-12	Malawi	0.321	157	163	6
Paraguay	0.704	85	86	2	Liberia	0.311	158	154	-3
Jamaica	0.702	86	91	6	Bhutan	0.307	159	157	-2
Dominican Rep.	0.701	87	81	-6	Guinea	0.307	160	126	-33
Samoa (Western)	0.700	88	97	10	Guinea-Bissau	0.297	161	152	-8
Sri Lanka	0.698	89	96	8	Gambia	0.292	162	142	-19
Peru	0.694	91	87	-3	Chad	0.291	163	165	2
Syrian Arab Rep.	0.690	92	73	-19	Djibouti	0.287	164	160	-4
Philippines	0.666	95	102	8	Angola	0.283	165	166	1
Lebanon	0.664	97	106	10	Burundi	0.282	166	167	1
South Africa	0.649	100	93	-6	Mozambique	0.261	167	169	2
Indonesia	0.641	102	88	-13	Ethiopia	0.237	168	173	5
Guyana	0.634	103	119	17	Afghanistan	0.229	169	156	-13
Egypt	0.611	106	76	-30	Burkina Faso	0.225	170	159	-11
Maldives	0.610	107	115	9	Mali	0.223	171	172	1
China	0.609	108	110	3	Somalia	0.221	172	162	-10
Iraq	0.599	109	155	-24	Sierra Leone	0.219	173	152	-20
Swaziland	0.586	110	100	-9	Niger	0.204	174	157	-17
Bolivia	0.584	111	104	-6					

a. A positive figure indicates that the HDI rank is better than the real GDP per capita (PPP\$) rank, a negative the opposite.

these three dimensions—life expectancy, educational attainment and income.

The HDI value for each country indicates how far it has to go to attain certain defined goals: an average life span of 85 years, access to education for all and a decent standard of living. The HDI reduces all three basic indicators to a common measuring rod by measuring achievement in

each indicator as the relative distance from the desirable goal. The maximum and minimum values for each variable, which are fixed, are reduced to a scale between 0 and 1, with each country at some point on the scale.

The HDI is constructed by measuring a country's relative achievement in each of the three basic variables and taking a simple average of the three indicators. (The detailed method for constructing the HDI is explained in technical note 1.) The HDI shows the distance the country has to travel to reach the maximum possible value of 1 and also allows intercountry comparisons. The difference between the maximum possible value of the HDI and the HDI value achieved by a country shows the country's shortfall in HDI. A challenge for every country is to find ways of reducing this shortfall.

The ranking of countries by their HDI values leads to the following observations, the highlights of this year's exercise:

- Of the 174 countries for which the HDI was calculated, 57 are in the high human development category, 69 in the medium category and 48 in the low category.
- Canada, the United States and Japan lead the HDI rankings. Among developing countries and areas, Hong Kong, Cyprus and Barbados lead the rankings.
- The HDI ranking of countries differs significantly from their ranking by real GDP per capita (see the last column of tables 1.8 and 1.9). Sixteen countries have an HDI

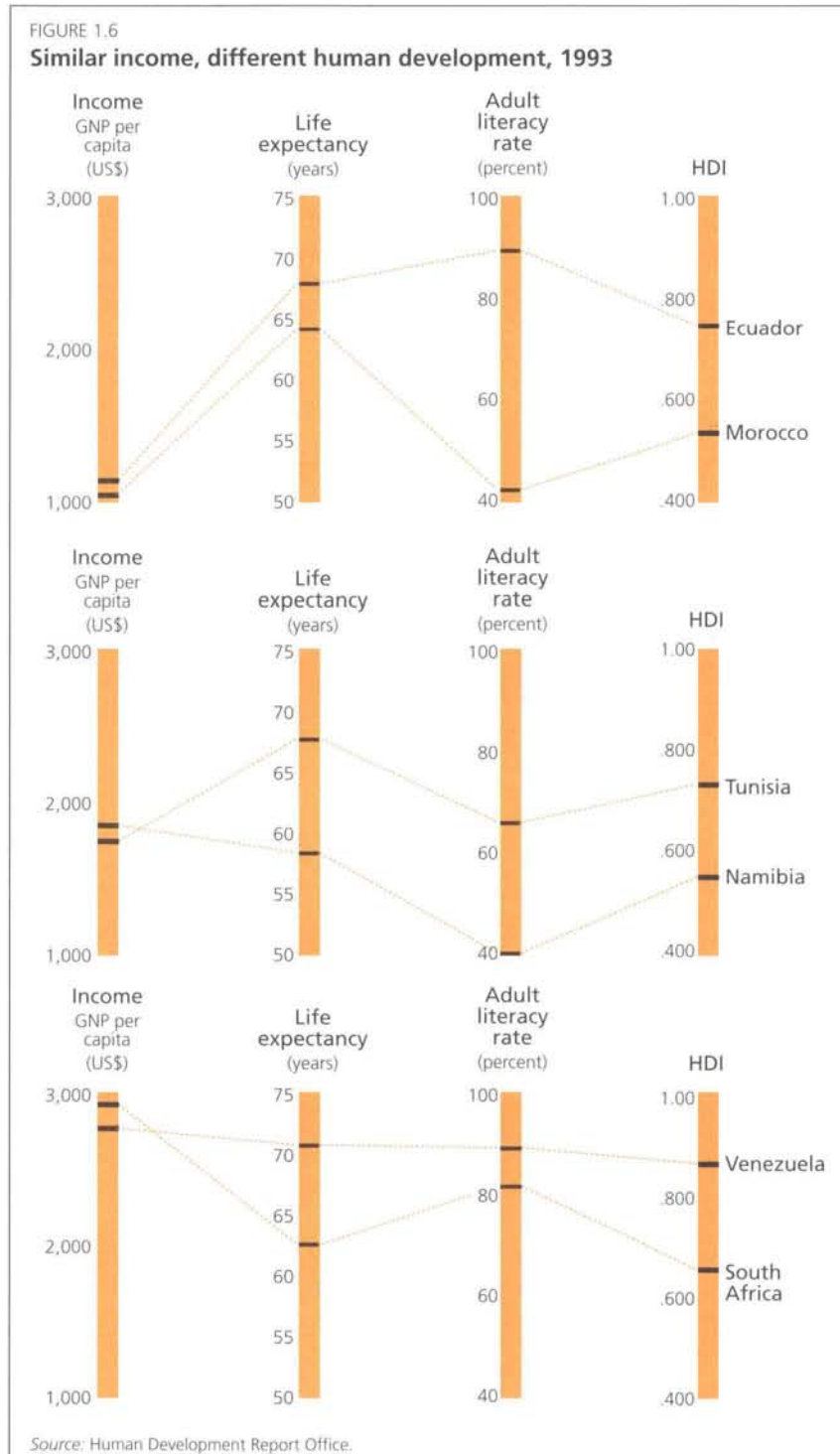


TABLE 1.10
Similar HDI, different income, 1993

Country	HDI value	GNP per capita (US\$)
New Zealand	0.927	12,600
Switzerland	0.926	35,760
Argentina	0.885	7,220
Costa Rica	0.884	2,150
Bulgaria	0.773	7,780
Ecuador	0.764	1,200
South Africa	0.649	2,980
Indonesia	0.641	740
Solomon Islands	0.582	740
Gabon	0.557	4,960
Viet Nam	0.523	170
Congo	0.517	950
Nepal	0.332	190
Senegal	0.331	750

Source: Human Development Report Office.

rank 20 places higher than their GDP rank. Among them are Costa Rica and Viet Nam, which effectively translated the benefits of economic growth into the lives of their people. For 21 countries the GDP rank is 20 places higher than their HDI rank, implying considerable scope for distributing the benefits of economic growth more equitably. Thus, countries can have similar incomes but different human development achievements—or similar HDIs but very different incomes (figure 1.6 and table 1.10).

Disaggregation of the HDI

A disadvantage of national HDIs is that they are averages—and can thus give a misleading picture of life where human development levels differ greatly for different groups, distinguished by gender, perhaps, or by race, ethnic group or region. The solution is to draw up HDIs disaggregated by region, race or ethnic group. Earlier *Human Development Reports* have done this for Brazil, China, Egypt, India, Malaysia, Mexico, Nigeria, South Africa, Turkey and the United States.

In recent years there have been other disaggregation exercises. Some are part of national human development reports (the Philippines). Others have been undertaken as part of academic work (Mexico and South Africa). There have also been attempts to disaggregate the HDI at a level below regions or provinces, as for districts in Madhya Pradesh, the largest state in India. The results show enormous variation

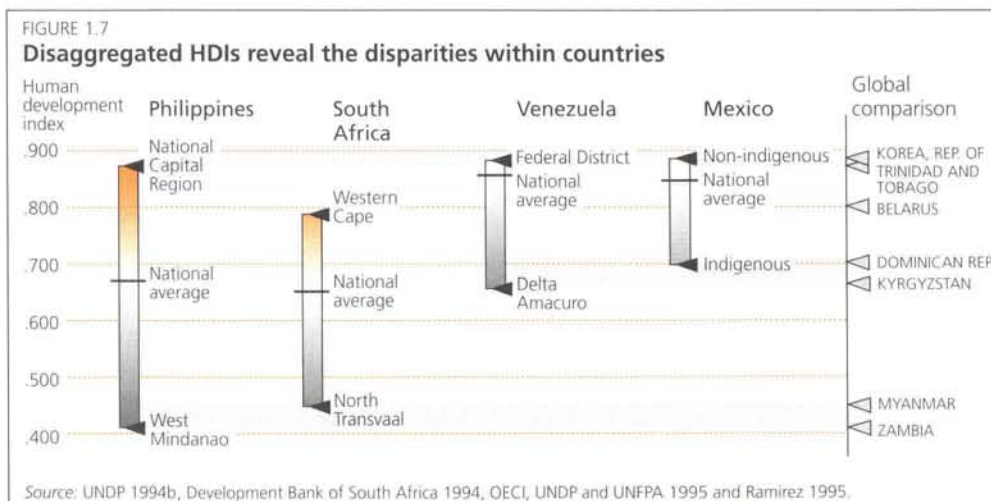
in the level of human development among the 95 districts in the state. Indore (0.619) and Bhopal (0.609), which are more developed, have HDIs four times as high as those of backward districts, such as Tikamgarh (0.156).

Disaggregation results are discussed for the Philippines, Mexico, South Africa and Venezuela to identify possible flashpoints (figure 1.7).

- *The Philippines*—A disaggregation of the HDI for 13 regions of the Philippines ranks the National Capital Region at the top with an HDI value of 0.871, next to Trinidad and Tobago (38). It puts West Mindanao at the bottom with an HDI value of 0.410, next to Zambia (136). West Mindanao has the lowest life expectancy (55 years) and adult literacy rate (81%), and more than 55% of its people live in poverty, compared with only 15% in the National Capital Region.

- *Mexico*—*Human Development Report 1994* disaggregated Mexico's HDI by region. Last year an attempt was made to disaggregate its HDI by indigenous and non-indigenous populations. The results show that the HDI of the non-indigenous people is 0.887, 1.3 times as high as that for indigenous people, placing them ahead of the Republic of Korea (29). The HDI of indigenous people places them next to the Dominican Republic (87). Their human development is lower mainly because they have less access to social services and basic infrastructure, leading to lower literacy rates, higher infant mortality and a higher

HDI's disaggregated by region, race or ethnic group give a clearer picture of life where human development levels differ greatly



Gender equality is not necessarily associated with high economic growth

incidence of poverty. For example, the incidence of poverty among indigenous people is 81%, compared with 18% among non-indigenous people.

- *South Africa*—When the HDI is disaggregated for nine South African provinces, the strong correlation between regional disadvantage and ethnic origin becomes obvious. In North Transvaal, whose HDI value of 0.450 ranks it next to Myanmar (133), more than 90% of the population is black. In Western Cape, the province with the highest HDI value—0.791, ranking it next to Belarus (61)—only 17% of the population is black. The difference in HDI values between the two provinces is due mostly to income disparity. Western Cape's per capita income of \$6,000 (PPP\$) is five times as high as North Transvaal's \$1,190. This income disparity can be traced mainly to the absence of economic opportunities for the blacks in North Transvaal.

- *Venezuela*—Venezuela is in the lower half of the high human development category, but it has significant regional disparities. Disaggregating its HDI by province puts Delta Amacuro at the bottom with the lowest life expectancy (63 years) and the lowest adult literacy rate (77%) in the country. Its HDI value of 0.659 ranks it next to Kyrgyzstan (99). As in so many countries, the province that contains the capital city, the Federal District, tops the list with an HDI value of 0.887, ahead of the Republic of Korea (29). This ranking reflects a resource flow bias towards the capital city, Caracas.

These disaggregation results signal the need for timely, appropriate measures to address disparity—whether provincial or regional, between ecological zones or between ethnic groups—to avoid explosions down the road. The measures could include multiparty dialogue, better resource allocation, reduction of inequality in income distribution, antipoverty programmes, and improved regional planning, monitoring and implementation.

The gender-related development index

The gender-related development index (GDI), introduced in *Human Development*

Report 1995, attempts to capture achievement through the same set of basic capabilities included in the HDI—life expectancy, educational attainment and income—but adjusts the HDI for gender inequality. For this Report the GDI has been calculated for 137 countries, seven more than last year (table 1.11). (The method for constructing the GDI is described in technical note 2, and the full results of the exercise are in indicator table 2.)

Of the five top-ranking countries in the GDI, three are from the Nordic belt—Sweden (rank of 1), Norway (3) and Finland (5). The other two are Canada (2) and the United States (4). Compared with last year, Canada has moved from ninth position to second, mainly because more reliable data now available on female and male income shares indicate a higher female share than was reflected last year.

Several developing countries and areas also do quite well in the GDI ranking: Barbados (16), Bahamas (18), Hong Kong (25), Uruguay (26), Singapore (29), the Republic of Korea (31), Costa Rica (32) and Thailand (33). These countries have succeeded in building the basic human capabilities of both women and men, without substantial gender disparities.

The bottom five places are occupied by Niger, Sierra Leone, Afghanistan, Burkina Faso and Mali, in ascending order. Women in these countries face a double deprivation: overall human development achievement is low in these societies, and women's achievement is lower than men's.

Several conclusions can be drawn from the GDI rankings.

First, no society treats its women as well as its men. This is obvious from the GDI values. A value of 1 reflects a maximum achievement in basic capabilities with perfect gender equality. But no society achieves such a value. As many as 43 countries have a GDI value of less than 0.500, showing that women suffer the double deprivation of gender disparity and low achievement. And only 37 countries have a GDI value above 0.800, underscoring the point that substantial progress in gender equality has been made in only a few societies.

Second, comparing the GDI ranks of countries with their income levels confirms that removing gender inequalities is not dependent on having a high income. In the GDI Uruguay (26) outranks Qatar (58) by 32 places, but its per capita income (PPP\$) is slightly more than a fourth of Qatar's. Romania (53) is 60 ranks ahead of the Central African Republic (113), even though their per capita incomes (PPP\$) are similar. So, gender equality can be pursued—and has been—at all levels of income.

Third, gender equality is not necessarily associated with high economic growth. During the past two decades Botswana and Thailand enjoyed high per capita income growth and also maintained GDI ranks higher than their HDI ranks. But the Republic of Korea and Syria, despite good growth rates, had GDI ranks lower than their HDI ranks. Denmark, Spain and Sri Lanka experienced moderate economic growth during the past two decades, but had good achievements in the GDI relative

TABLE 1.11
Gender disparity—GDI and HDI ranks

GDI rank	HDI rank	HDI rank minus GDI rank	GDI rank	HDI rank	HDI rank minus GDI rank	GDI rank	HDI rank	HDI rank minus GDI rank			
1	Sweden	9	8	47	Mauritius	48	1	93	Cape Verde	94	1
2	Canada	1	-1	48	Estonia	58	10	94	Guatemala	88	-6
3	Norway	5	2	49	Brazil	52	3	95	Papua New Guinea	97	2
4	USA	2	-2	50	Fiji	41	-9	96	Iraq	85	-11
5	Finland	6	1	51	Kazakhstan	61	10	97	Morocco	95	-2
6	Iceland	8	2	52	Bahrain	35	-17	98	Kenya	99	1
7	Denmark	17	10	53	Romania	62	9	99	Ghana	100	1
8	France	7	-1	54	Botswana	60	6	100	Cameroon	98	-2
9	Australia	11	2	55	Kuwait	45	-10	101	Lesotho	101	0
10	New Zealand	14	4	56	United Arab Emirates	37	-19	102	Myanmar	102	0
11	Netherlands	4	-7	57	Lithuania	65	8	103	India	104	1
12	Japan	3	-9	58	Qatar	44	-14	104	Zambia	105	1
13	Austria	13	0	59	Cuba	64	5	105	Comoros	108	3
14	United Kingdom	16	2	60	Jamaica	68	8	106	Lao People's Dem. Rep.	107	1
15	Belgium	12	-3	61	Turkey	66	5	107	Pakistan	103	-4
16	Barbados	23	7	62	Sri Lanka	70	8	108	Nigeria	106	-2
17	Germany	18	1	63	Armenia	73	10	109	Zaire	110	1
18	Bahamas	24	6	64	Kyrgyzstan	77	13	110	Togo	109	-1
19	Switzerland	15	-4	65	Azerbaijan	75	10	111	Tanzania, U. Rep. of	113	2
20	Spain	10	-10	66	Ecuador	56	-10	112	Haiti	114	2
21	Italy	20	-1	67	Paraguay	67	0	113	Central African Rep.	117	4
22	Greece	21	-1	68	Tunisia	63	-5	114	Madagascar	119	5
23	Czech Rep.	33	10	69	Georgia	79	10	115	Mauritania	118	3
24	Slovakia	36	12	70	Philippines	74	4	116	Bangladesh	112	-4
25	Hong Kong	22	-3	71	Dominican Rep.	69	-2	117	Côte d'Ivoire	116	-1
26	Uruguay	28	2	72	Peru	71	-1	118	Sudan	115	-3
27	Ireland	19	-8	73	Libyan Arab Jamahiriya	53	-20	119	Uganda	123	4
28	Hungary	40	12	74	South Africa	78	4	120	Senegal	121	1
29	Singapore	30	1	75	Iran, Islamic Rep. of	57	-18	121	Malawi	124	3
30	Portugal	31	1	76	Indonesia	80	4	122	Yemen	111	-11
31	Korea, Rep. of	25	-6	77	Lebanon	76	-1	123	Benin	122	-1
32	Costa Rica	27	-5	78	Guyana	81	3	124	Nepal	120	-4
33	Thailand	46	13	79	China	84	5	125	Guinea	125	0
34	Trinidad and Tobago	34	0	80	Maldives	83	3	126	Guinea-Bissau	126	0
35	Brunei Darussalam	32	-3	81	Algeria	59	-22	127	Gambia	127	0
36	Latvia	49	13	82	Syrian Arab Rep.	72	-10	128	Chad	128	0
37	Poland	50	13	83	Mongolia	89	6	129	Burundi	130	1
38	Colombia	43	5	84	Swaziland	86	2	130	Angola	129	-1
39	Panama	38	-1	85	Saudi Arabia	55	-30	131	Mozambique	131	0
40	Russian Federation	51	11	86	Bolivia	87	1	132	Ethiopia	132	0
41	Venezuela	39	-2	87	Egypt	82	-5	133	Mali	135	2
42	Belarus	54	12	88	El Salvador	91	3	134	Burkina Faso	134	0
43	Malaysia	47	4	89	Nicaragua	92	3	135	Afghanistan	133	-2
44	Chile	29	-15	90	Honduras	90	0	136	Sierra Leone	136	0
45	Argentina	26	-19	91	Viet Nam	93	2	137	Niger	137	0
46	Mexico	42	-4	92	Zimbabwe	96	4				

Note: HDI ranks have been recalculated for the universe of 137 countries. A positive difference between a country's HDI and GDI ranks indicates that it performs relatively better on gender equality than on average achievements alone.

to the HDI. And slower per capita income growth did not prevent Jamaica from building the capabilities of both its women and its men.

Fourth, the countries showing a marked improvement in their GDI ranks relative to their HDI ranks are fairly diverse. They include industrial countries, such as Denmark and Sweden; Eastern European and CIS countries, such as Latvia, Poland and Kyrgyzstan; and developing countries, such as Thailand, Jamaica, the Dominican Republic and Barbados. Thus, gender equality can be achieved across different income levels, political ideologies, cultures and stages of development.

The countries with sharply reduced GDI ranks compared with their HDI ranks include Argentina and a number of the Arab States. Over the past two decades the Arab

States have made significant progress in female education. But much investment in basic human capabilities, particularly female capabilities, is needed before women can catch up with men.

Just as disaggregating the HDI for a country by region or ethnic group can reveal interesting insights about inequality within that country, so can disaggregating the GDI. A recent disaggregation of the GDI for 16 provinces of India shows the female achievements in human development, taking gender inequality into account across regions, in addition to the overall inequality in male and female capability formation (box 1.6).

The gender empowerment measure

The gender empowerment measure (GEM), also introduced in *Human Development Report 1995*, concentrates on participation, measuring gender inequality in key areas of economic and political participation and decision-making. It thus differs from the GDI, an indicator of gender inequality in basic capabilities.

The GEM is estimated for 104 countries (table 1.12). (The method for constructing the GEM is described in technical note 2, and the full results of the exercise are in indicator table 3.)

No country has a GEM equal to or exceeding 0.800. Only 10 countries have a GEM higher than 0.600. And 29 countries have a GEM of less than 0.300. The low values make it clear that many countries have much further to travel in extending broad economic and political opportunities to women than the distance they have already travelled in building their basic capabilities.

In the GEM ranking Norway and Sweden are at the top, followed at a distance by Denmark and Finland. The Nordic countries are not only good at strengthening the basic capabilities of women. They have also opened many opportunities for women to participate in economic and political fields.

The ranking shows that some developing countries outperform much richer industrial countries in gender equality in political, economic and professional activi-

BOX 1.6

Disaggregated GDI for India

In no country is the GDI value greater than the HDI value, confirming that in every country there is gender inequality in capabilities. But such inequality may not be only between men and women. There may also be disparities in female capabilities among regions or ethnic groups in a country, or between urban and rural areas. A disaggregated GDI, like a disaggregated HDI, may reflect this phenomenon. It is not possible, however, to measure how much of the difference in GDI values among regions is due to disparity in female capabilities and how much to gender inequality.

India, with a GDI value of 0.410, ranks 103 among the 137 countries for which the GDI has been constructed. A disaggregated GDI recently constructed for 16 Indian states indicates significant disparities among these states in basic female capabilities. At the top of the list is Kerala with a GDI value of 0.597, which puts it next to the Maldives in the global ranking—at 80 of 137 countries. But Uttar Pradesh, at the bottom with a GDI value of 0.310, is next to Benin, with a global ranking of 123. Looked at from another angle, the GDI value of Uttar Pradesh is only half that of Kerala.

An in-depth look at the components of the GDI shows some interesting

results. Women's share of earned income in Kerala is only 12%, while their share in Himachal Pradesh is 38% and in Maharashtra 30%. In Andhra Pradesh, Madhya Pradesh, Gujarat and Karnataka their share is more than 25%. Yet Kerala ranks at the top because the disparity between its female and male adult literacy rates is the lowest among the 16 states. The female literacy rate in Kerala is 81%, only 11 percentage points lower than for males, while in most of the 16 states the gender disparity in adult literacy is more than 30 percentage points. Thus, a higher share in income for women may be a necessary—but not a sufficient—condition for gender equality. Equality in other basic capabilities is also needed.

Such states as Orissa, Madhya Pradesh, Rajasthan, Bihar and Uttar Pradesh have GDI values so low that they can be compared only with those in such impoverished countries as Haiti, Nepal and Yemen—indicating the extremely low level of female human development in a large part of India. Women in India suffer on two counts—first, because the society as a whole is impoverished, and second, because they are women.

Source: Shiva Kumar 1996.

ties. Barbados is ahead of Switzerland, Australia and Belgium. Trinidad and Tobago is ahead of the United Kingdom. And the Bahamas is ahead of Ireland, Portugal and Spain. Industrial countries such as Japan and France are behind China, Costa Rica, Botswana and Colombia. Greece has a GEM of 0.370, only 60% that of Barbados (0.597).

The creation of opportunities for women does not necessarily depend on a country's income level or economic growth rate. The absence of a link between per

capita income and opportunities for women becomes evident if one looks at some of the Arab States. China, Indonesia and Malaysia have enjoyed good economic growth rates during the past two decades, and they also have relatively high GEM values. The Republic of Korea and Singapore have also experienced good economic growth, but they have relatively low GEM values. And Nordic countries—Denmark, Finland and Sweden—have maintained good opportunities for women despite moderate growth. But France failed to translate its moderate

The creation of opportunities for women does not depend on a country's income level or economic growth rate

TABLE 1.12
Gender disparity—GEM, GDI and HDI ranks

GEM rank	GDI rank	HDI rank	GEM rank	GDI rank	HDI rank
1 Norway	3	5	53 Thailand	29	41
2 Sweden	1	8	54 Ecuador	47	47
3 Denmark	6	16	55 Iraq	69	67
4 Finland	5	6	56 Brazil	39	45
5 New Zealand	9	13	57 Cape Verde	66	75
6 Canada	2	1	58 Bolivia	61	69
7 Germany	16	17	59 Chile	36	29
8 Netherlands	10	4	60 Greece	21	20
9 USA	4	2	61 Indonesia	55	62
10 Austria	12	12	62 Swaziland	60	68
11 Barbados	15	23	63 Burundi	88	99
12 Switzerland	18	14	65 Mauritius	38	43
13 Italy	20	19	66 Haiti	81	92
15 Australia	8	10	68 Paraguay	48	56
16 Belgium	14	11	69 Cameroon	72	80
17 Trinidad and Tobago	30	32	70 Fiji	40	37
18 United Kingdom	13	15	71 Maldives	58	65
19 Bahamas	17	24	72 Ghana	71	81
20 South Africa	53	61	73 Gambia	87	98
21 Cuba	44	54	74 Kuwait	42	40
22 Hungary	24	36	75 Sri Lanka	46	58
23 Ireland	23	18	76 Morocco	70	76
24 Portugal	26	31	77 Bangladesh	84	91
25 Spain	19	9	78 Korea, Rep. of	27	26
29 China	57	66	79 Algeria	59	50
30 Costa Rica	28	27	80 Egypt	62	64
31 Mexico	37	38	81 Zambia	75	86
32 Guyana	56	63	82 Sudan	85	93
33 Botswana	41	51	83 Burkina Faso	92	102
35 Lesotho	73	82	84 Tunisia	49	53
36 Colombia	32	39	85 Malawi	86	97
37 Japan	11	3	86 Ethiopia	90	101
38 Panama	33	34	88 United Arab Emirates	43	33
39 Philippines	50	60	90 Iran, Islamic Rep. of	54	48
40 France	7	7	91 Mali	91	103
41 Poland	31	44	92 Turkey	45	55
42 El Salvador	63	72	93 India	74	85
43 Mozambique	89	100	94 Papua New Guinea	68	79
44 Singapore	25	30	96 Zaire	79	90
45 Zimbabwe	65	77	97 Central African Rep.	82	94
46 Malaysia	35	42	98 Nigeria	78	87
47 Guatemala	67	70	100 Togo	80	89
48 Dominican Rep.	51	57	101 Pakistan	77	84
49 Uruguay	22	28	102 Mauritania	83	95
50 Honduras	64	71	103 Comoros	76	88
51 Peru	52	59	104 Niger	93	104
52 Venezuela	34	35			

Note: GDI and HDI ranks have been recalculated for the universe of 104 countries.

growth into expanding opportunities for women, as is apparent in its relatively low GEM value. New Zealand and the Philippines have achieved relatively good GEM values despite slow per capita income growth during the past two decades.

In the GDI and GEM rankings there have been shifts in the ranks of some countries. For the GEM these are partly due to the nature of the variables included. As flow variables, such as the percentage of parliamentary seats held by women, they are subject to short-term fluctuations. But overall the shifts in ranks in both the GDI and the GEM are due more to changes in data series (box 1.7).

Growth and human development —the future scenario

The future is never a continuation of the past. But even simple projections can identify possible problems—and stimulate thinking about what might happen and what policy-makers might do in response.

To highlight the extreme imbalances in the growth patterns of the past 15 years, a simple exercise was undertaken to show what the world would look like if the growth

trends of the past 15 years continued until 2030.

If the trends continue, global GDP would more than double—from \$23 trillion (in 1993 dollars) in 1993 to \$56 trillion in 2030. But the share of developing countries in world GDP would change dramatically. From a meagre 16% in 1993, their share would increase to nearly 33% in 2030, when their share of world population would be more than 85%.

Global imbalances would increase even more. If Sub-Saharan Africa's negative growth rate of the past 15 years continues, its share in world GDP would decline to 0.4% at the end of 2030—from 1.2% in 1993. If the region recovers to grow at its rate for 1960–80, its share in world GDP would still be less than 2% in 2030. And even if it manages to grow at 6%, its share of world GDP would be less than 5% in 2030.

If the least developed countries maintain their growth of the past 15 years, their share in 2030 would be a mere 0.3%. Projecting a longer trend (1960–90) does not change the picture much: their share would be only 0.7%.

For Eastern Europe and the CIS countries, continuation of the trend of the past 15 years would mean that their share in global GDP would be no more than 3% in 2030. But this region is expected to recover.

Trends in the OECD countries and East Asia (excluding China) might suggest that their per capita incomes could continue rising indefinitely. But experience shows that this does not happen. Between 1960 and 1970 Japan increased its per capita income by 2.5 times through annual per capita income growth of more than 9%. But then it moved to a “soft landing”, when growth in per capita income slowed. Malaysia and the Republic of Korea—and no doubt some other countries—have also looked ahead to a time when their rapid growth will slow and they will begin to move into a more mature pattern of growth. Their economies will grow at a slower rate, and the focus will need to be on the quality of life. Malaysia's perspective plan for 2020 projects that it will by

BOX 1.7

Rank changes in the GDI and the GEM

This year's Report includes GDI estimates for ten new countries, primarily in Eastern Europe and the CIS. It excludes three countries that were in the 1995 exercise because of outdated estimates. Comparing the GDI ranks for 1996 with those for 1995 shows that the ranks of 42 countries have either improved or worsened by more than five places since the 1995 Report.

The GEM exercise has been reduced by a tenth in its coverage since 1995 and now includes 104 countries. Of these, 35 have ranks that have improved or worsened by more than five places since 1995.

The rank changes in the GDI and the GEM reflect changes in the basic information and sources in the underlying data sets. (The rank changes in the

GEM are also partly due to the volatility of the indicators used—for example, women's shares of parliamentary seats.) These rank changes are largely due to new estimates of labour force participation (for 21 cases in the GDI and 7 cases in the GEM), refined real GDP per capita data (9 cases in the GDI and 1 in the GEM) and revised wage data (6 in the GDI and 4 in the GEM). The need to refine the methodology for constructing the GDI and the GEM is recognized, as is the need to improve the data set and expand the coverage of countries.

With improved methods and the greater availability and accuracy of data, policy-makers will be in a better position to identify, analyse and address the needs of their people.

Source: Human Development Report Office.

then be an industrial country, with growth continuing but slower.

From a human development perspective, it is interesting to project how long it would take for medium and low human development countries to graduate to high human development. What if both the medium and the low human development countries continue to reduce their HDI shortfall (defined as the difference between the maximum value of 1 and the actual HDI value achieved) following the trends of the past 15 years? Medium human development countries would take 17 years to reach the high human development category (figure 1.8). But low human development countries would take more than 200 years. China would graduate to high human development within 25 years, but India would take more than a century.

These projections show the urgent need for action to change the trends of recent years. Unless the poorest and least developed countries greatly accelerate their rates of human development and economic growth, the global economy of the 21st century will be marked by ever more grotesque imbalances—with a small group of industrial and formerly developing countries reaching average incomes in the range of \$30,000 to \$50,000 or more, while the least developed countries, including most of Sub-Saharan Africa, languish at levels of a few hundred dollars. Global human development requires a decisive rejection of such an inhuman outcome.

What problems will slower growth pose for employment, for income distribution

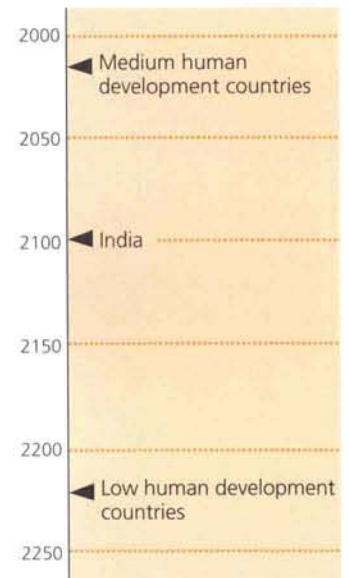
and for support for the younger and older members of society, especially in industrial countries? These issues need to become the subject of international debate, not merely of discussion on the sidelines in a few countries. The United Nations first raised the issue of a growing world population in the late 1940s, almost 50 years ago. It took three decades before it became a mainstream focus of international debate and international policy action. Today, rising consumption, especially in the richer countries, needs to become a matter for frank and creative discussion—while there is still time to consider how the priorities of human development, poverty eradication and continuing growth in poor areas can be pursued without exceeding the planet's carrying capacity.

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The next three chapters explore the links between economic growth and human development—along with the implications for public policy. Chapter 2 examines changes in economic thought—from growth as the end of development to growth as a means to human development. Chapter 3 discusses, both analytically and empirically, how the links between economic growth and human development can be strengthened. And chapter 4 focuses on one critical link—employment—showing how people can use their capabilities to translate the benefits of economic growth into greater human development.

FIGURE 1.8
When will the developing countries reach high human development?

Year in which high human development is attained at present rate of progress



Source: Human Development Report Office.

Balance sheet of human development—Arab States

PROGRESS

DEPRIVATION

HEALTH

- In 12 of the 19 countries in the region life expectancy is more than 65 years, compared with an average of 45 years in 1960.

- Only half the people in rural areas have access to safe water, and only a third have access to basic sanitation.

EDUCATION

- During the past two decades the adult literacy rate almost doubled—from 30% in 1970 to 54% in 1992.
- Between 1960 and 1990 the primary enrolment ratio more than doubled, from 38% to 77%, and the secondary enrolment ratio nearly tripled, from 18% to 51%.

- About 60 million of the region's 240 million people are illiterate.
- Nine million children are out of primary school, and 15 million are out of secondary school.

INCOME AND POVERTY

- Between 1960 and 1993 real per capita income grew by nearly 3% a year.
- In 1980–90 the agricultural growth rate was nearly 5% a year—the highest among the developing regions.

- About 73 million people still live below the poverty line, and more than 10 million are underfed.

WOMEN

- At the secondary level the number of girls per 100 boys rose from 47 to 77 between 1970 and 1990, and at the tertiary level it rose from 34 to 65.
- Of women enrolled at the tertiary level, about 30% are in natural or applied sciences.

- Only 25% of Arab women participate in the formal labour force, compared with 39% in the developing countries as a group.
- Women hold only 4% of parliamentary seats, well below the 10% average for the developing world.

CHILDREN

- Between 1960 and 1993 the infant mortality rate declined by more than three-fifths—from 167 per thousand live births to 66.
- More than three-quarters of one-year-olds are immunized.

- At 73 per thousand live births, the under-five mortality rate is still more than four times as high as that in industrial countries.

ENVIRONMENT

- Between 1965 and 1991 energy use per \$100 of GDP declined by two-thirds, from 228 kilograms of oil equivalent to 76.

- With less than 1,000 cubic metres of water per capita available each year, about 55% of the population suffer from serious water scarcity.

POLITICS AND CONFLICTS

- During the past two decades six countries have held multiparty parliamentary elections, and since 1990 there have been 18 general elections.
- In 1994, 250,000 refugees in the region returned to their country of origin.

- At the end of 1994 more than one million people were refugees.

Source: See bibliographic note on page 116.

Balance sheet of human development—East Asia and South-East Asia and the Pacific

PROGRESS

DEPRIVATION

HEALTH

- By 1993 life expectancy in the region as a whole was more than 85% of that in the industrial countries. And in East Asia (excluding China) it was 71 years—only four years less than that in the industrial countries.

- More than two million people are infected with HIV.
- In the rural areas of South-East Asia and the Pacific only 55% of the people have access to safe water, and only 41% access to basic sanitation.

EDUCATION

- Between 1960 and 1991 the tertiary enrolment ratio in South-East Asia and the Pacific rose from 4% to 16%.

- In East Asia more than 100 million boys and girls are out of school at the secondary level.

INCOME AND POVERTY

- During 1960–93 per capita income in East Asia grew more than 5% a year—the highest rate in the world.

- In East Asia in 1990 nearly 170 million people were living below the poverty line.

WOMEN

- Women are 19% of parliamentary representatives in East Asia—1.6 times the proportion in the industrial countries.
- The female tertiary enrolment ratio doubled between 1970 and 1990 in South-East Asia and the Pacific.

- In East Asia (excluding China) one million women are illiterate.
- Maternal mortality is 442 per 100,000 live births in South-East Asia and the Pacific, but only 95 in East Asia.

CHILDREN

- In East Asia between 1960 and 1993 infant mortality declined from 146 per thousand live births to 42.
- Nearly 95% of one-year-olds in South-East Asia and the Pacific are immunized.

- In South-East Asia and the Pacific more than a third of children under five are malnourished.
- Nearly one million children in East Asia die before age five.

POPULATION AND URBANIZATION

- During 1960–92 the fertility rate declined more in East Asia and South-East Asia and the Pacific than in the industrial countries.

- In East Asia (excluding China) the population will be 79% urban by the year 2000—up from 36% in 1960—increasing the pressure on urban infrastructure.

ENVIRONMENT

- In South-East Asia and the Pacific between 1965 and 1991 energy use per \$100 of GDP declined from 137 kilograms of oil equivalent to 37.

- In South-East Asia and the Pacific between 1981 and 1990 more than three million hectares of tropical forest were lost.

POLITICS AND CONFLICTS

- Since 1990 there have been 24 national general elections.

- At the end of 1994 more than 400,000 people were refugees.

Source: See bibliographic note on page 116.

Balance sheet of human development—Latin America and the Caribbean

PROGRESS

DEPRIVATION

HEALTH

- By 1993 life expectancy had reached an average of 69 years, about 90% of that in the industrial countries.
- There is one doctor for every 1,000 people—compared with one doctor for every 6,000 in the developing world as a whole.

- In urban areas 90% of the people have access to safe water, but in rural areas only 56% do.
- Two million people are infected with HIV.

EDUCATION

- Between 1960 and 1990 secondary and tertiary enrolment increased nearly eightfold.
- At the tertiary level the net enrolment ratio increased more than fourfold over the past three decades—from 6% to 27%.

- Less than half the entrants to grade 1 reach grade 5.
- At the secondary level nearly 20 million boys and girls are out of school.

INCOME AND POVERTY

- During the past two decades real GDP increased by more than four-fifths.
- Of the \$585 billion in private resource flows to developing countries in 1989–94, 30% went to Latin America.

- In 1990 about 110 million people were below the poverty line.
- The Gini coefficient of land distribution is more than 0.75, and in many countries the income share of the richest 20% of the population is 15 or more times as much as that of the poorest 20%.

WOMEN

- Women make up a third of the formal labour force.
- At the secondary level the ratio of girls to boys is 97%, and at the tertiary level there are as many female students as male.

- Women occupy only 7% of parliamentary seats, compared with the global average of 10%.
- At 180 per 100,000 live births, the maternal mortality rate is still five times as high as that in the industrial countries.

CHILDREN

- Between 1960 and 1993 the infant mortality rate fell by more than half—from 107 per thousand live births to 45.
- At 10%, the proportion of underweight children is the lowest in the developing world.

- In some Latin American metropolises more than 100,000 children live on the streets.
- There are still nearly six million malnourished children in the region.

ENVIRONMENT

- At nearly 7% of total land area, the share of nationally protected natural areas is the highest in the developing world.

- Only 10% of forest land is designated for soil and water conservation and only 35% for wildlife protection.

POLITICS AND CONFLICTS

- Between 1974 and 1995 there were 144 parliamentary elections. And since 1980, 18 countries have switched from military to democratic governments.

- At the end of 1994 more than 100,000 people were refugees.

Source: See bibliographic note on page 116.

Balance sheet of human development—South Asia

PROGRESS

DEPRIVATION

HEALTH

- Between 1960 and 1993 life expectancy increased from 44 to 60 years.
- Public expenditure on health more than doubled as a share of GDP between 1960 and 1990—from 0.6% to 1.4%.

- There are nearly two million HIV-infected people, and the number may reach four million by 2000.
- About 250 million people lack access to safe water, and 850 million lack access to even basic sanitation.

EDUCATION

- Net enrolment at the primary level increased from 48% to 79% between 1960 and 1991, and at the secondary level from 19% to 44%.

- About 420 million people are still illiterate.
- Only half the entrants to grade 1 reach grade 5.

FOOD AND NUTRITION

- Between 1965 and 1992 per capita calorie intake increased from 88% to 103% of daily requirements.

- About 600 million people suffer from chronic malnutrition.

INCOME AND POVERTY

- During 1980–93 GDP grew at an average annual rate of more than 5%, and per capita GDP by 3%.
- Merchandise exports grew at an annual rate of nearly 7% in 1980–92.

- The region is home to more than 560 million poor people, nearly half the world's poor population.
- Nearly 85 million children under five are malnourished.

WOMEN

- During the past two decades female illiteracy was reduced from 81% to 67%.

- About 80% of pregnant women suffer from anaemia—the highest rate in the world.

CHILDREN

- The infant mortality rate declined from 164 per thousand live births to 84 between 1960 and 1993.
- About 85% of one-year-olds are immunized.

- About 48 million children are out of primary school, and 94 million are out of secondary school.
- About a third of newborn babies are underweight.

POPULATION AND ENVIRONMENT

- Over the past three decades the fertility rate declined from more than six live births per woman to four.

- Every year about four million hectares of land are deforested.
- Between 1960 and 2000 the urban population is expected to nearly double as a share of the total population, from 17% to 30%, putting mounting pressure on urban infrastructure.

POLITICS AND CONFLICTS

- Since 1980 there have been more than 34 general parliamentary elections.

- At the end of 1994 nearly four million people were refugees.

Source: See bibliographic note on page 116.

Balance sheet of human development—Sub-Saharan Africa

PROGRESS

DEPRIVATION

HEALTH

- Between 1960 and 1993 life expectancy at birth increased from 40 to 51 years.
- In the past decade the proportion of the population with access to safe water nearly doubled—from 25% to 43%.

- There is only one doctor for every 18,000 people, compared with 6,000 in the developing world as a whole and 390 in the industrial countries.
- More than ten million people are infected with HIV, two-thirds of all those infected in the world.

EDUCATION

- During the past two decades adult literacy more than doubled—from 27% to 55%.
- Between 1960 and 1991 the net enrolment ratio at the primary level increased from 25% to 50%, and at the secondary level from 13% to 38%.

- Only about half the entrants to grade 1 finish grade 5.
- At the primary and secondary levels more than 80 million boys and girls are still out of school.

INCOME AND POVERTY

- Over the period 1980–92 five countries—Botswana, Cape Verde, Lesotho, Mauritius and Swaziland—had an annual GDP growth rate of more than 5%.

- About 170 million people (nearly a third of the region's population) do not get enough to eat.
- During the past three decades the ratio of military to social spending increased, from 27% in 1960 to 43% in 1991.

WOMEN

- Between 1960 and 1991 the female enrolment ratio at the secondary level quadrupled—from 8% to 32%.
- Women hold 8% of parliamentary seats, nearly double their 5% share in South Asia.

- The region has the world's highest maternal mortality rate—929 per 100,000 live births (compared with 33 in the OECD countries).
- There are six HIV-infected women for every four infected men.

CHILDREN

- Over the past three decades the infant mortality rate dropped from 167 per thousand live births to 97.

- About 23 million children in the region are malnourished, and 16% of babies are underweight.

ENVIRONMENT

- At less than 1,000 hectares a year, combined logging in primary and secondary forests is the lowest in the developing world, far lower than the 2,500 hectares a year in Asia and Latin America.

- During the past 50 years desertification has claimed an average 1.3 million hectares of productive land a year.

POLITICS AND CONFLICTS

- Since 1990, 27 multiparty presidential elections have been held—in 21 cases for the first time.
- Since 1980 opposition parties have been legalized in 31 countries.

- In 1994 there were still 16 governments representing a single-party system or a military regime.
- At the end of 1994 nearly six million people—1% of the population—were refugees.

Source: See bibliographic note on page 116.



Growth as a means to human development

Is economic growth a meaningful goal? Or is human development the real objective? If it is human development, growth should be judged not by the abundance of commodities it produces, but by how it enriches people's lives.

For many years growth has been a major economic goal of policy-makers—and political leaders—based on the deeply ingrained view that delivering a larger and larger quantity of goods and services is the best way to improve people's standard of living. And growth is often seen as a solution to other problems, such as building military strength, increasing employment and reducing budgetary deficits.

But the questioning of such assumptions has become more insistent, and criticisms of the fixation on the quantity of growth more vocal. The critics are not just environmental groups, but also a broad range of people who recognize from the deteriorating quality of their lives that growth is not the answer to everything. The quality of people's lives can be poor even in the midst of plenty.

In low-income countries economic growth is not an option. It is imperative—for reducing poverty and generating the resources required for basic human development. But even in these countries the critical question remains, what kind of growth? What are the benefits to human development, and what are the costs? Who benefits, and who pays? These countries have to find the most efficient ways of converting income gains into advances in human development.

Policies that are merely “pro-growth” ignore the real purpose of growth. By the same token, to criticize the nature of growth in a country and to question whether it

serves human development is not to be “antigrowth”. It is to place growth in its proper perspective and to measure it on a human scale.

This Report moves beyond the debate on whether economic policies are “pro-growth” or “antigrowth” by addressing the central issue of the quality of growth—whether it is genuinely serving human development in a country, in a region or in the world.

Is the character of growth advancing people's human security, freedom and empowerment? Is it promoting equity—today and between generations? Does it respect nature and its life-supporting functions? And is it leading to greater social cohesion and cooperation among people—not greater conflict and social disintegration? These are the important questions (see the special contribution by President Fernando Henrique Cardoso of Brazil).

Growth is not the end

The doubts about economic growth may seem new, but they have persisted for two centuries or more—since the birth of industrial capitalism. The revolutionary methods of production used by this system did generate fabulous new wealth. And the priesthood of accumulation—the industrialists, the bankers, the politicians and the economists—saw this increase in wealth as a way, for the first time in human history, to eliminate scarcity.

But from the outset the benefits were concentrated in the hands of small, elite groups in a few rich countries. For many other people the reality was a form of enslavement. In the industrializing countries during the 19th century the develop-

The quality of people's lives can be poor even in the midst of plenty

ment of technology, from the steam engine onwards, turned men, women and children into instruments of accumulation—toiling in the “dark satanic mills”. And those work-

ing in the colonies on the periphery of the world economy saw their countries and their lives harnessed to the supply of raw materials to the rich nations.

SPECIAL CONTRIBUTION



Humanizing growth—through equity

When we juxtapose the current debate on economic growth with the notion of human development, the first impression is that the two concepts belong to different worlds—that they don't connect. It is as if the demise of real socialism coincided with some kind of Marx's “revenge”. The economy reigns supreme, determining political choices and the limits of social action. And the free market emerges as a leading ideology, fostering competition and an exaggerated, narcissistic individualism that equate the realm of values with the dictates of efficiency.

Realism obliges us not to ignore efficiency. But for any development to be human, we must go beyond the logic of economics. If growth is an indispensable prerequisite, particularly in poor countries, human development will have to be sustained by values that show how economic gain acquires social meaning.

The problem is that growth based on modern technology does not always generate employment, and adopting social safety nets of a corporatist nature may jeopardize competitiveness. These difficulties are compounded by the need to reform the state, which is traditionally responsible for welfare policies and actions. Although the economic environment can change the size and management of the state, the purpose of modern governance—the well-being of citizens—must never be forsaken. Despite the criticisms and despite the weakening of social solidarity, constructing a “state that cares for the well-being of citizens” is a necessity. True for developed countries, this is even more true for developing countries, which are far from a welfare state.

Another significant issue is that solutions to social problems are no longer only national. Globalization limits state action and has ambivalent consequences for the development of national societies. For example, the easy transfer of capital flows can enable better resource allocation at the global level, but their volatility can provoke speculative runs on currencies, threatening the stability of entire countries.

So, we face a paradox: the demand for equity is on the increase, partly as a result of the globalization of information, yet it is directed to a state that is reducing its functions and has less control over its economic policy options.

This demand for equity—a key concept in the transition from the imperatives of economic efficiency to the realm of values—is not new. As a result of the Enlightenment, which propagated the very idea of human progress, one of the traits of Western civilization has been its permanent dissatisfaction with its social conditions.

Inherent in the ideal of progress is equity, seen as the convergence of standards of equality of opportunities—or social justice. This idea of equality has nurtured all modern utopias—from the liberal, centred on political equity, to the socialist, concerned with socio-economic equality.

Today's demand for equity—denser, more powerful—is searching for new institutional vehicles. It is no longer the monopoly of one group or class. It is now a collective task—to give a human sense to development. It is a dispersed, fragmented exercise—a composite of partial utopias.

The development concept has to be amplified to include the protection of human, ecological and social rights. Such complexity must be sustained by a wide participation, enabling a variety of social groups to be heard. The multiplication of non-governmental organizations, the contribution of social movements, the renewal of the meaning of political representation—all should contribute to society's redefinition of development as a way of truly humanizing growth.

Democracy and freedom, the keys for a balanced transition from growth to human development, have broadened the demand for equity—which is no longer the province of a few privileged owners. Equity is a wide-ranging social construct, and to respond to it is fundamental for building modern legitimacy.

In the 1960s the Third World countries searched for a new international economic order to correct the roots of international inequality, with limited success. Today, global North-South negotiations have lost force exactly when the economy is being globalized, and a homogenizing superstructure more concerned with the freedom of flows than with the reduction of inequalities is emerging. At the international level, must we accept that the economic reality pre-determines the realm of values? Globalization is an economic given. But it is essential to ensure that it attains a human dimension and responds to the demand for equity.

Obviously we cannot return to the ideas of the 1960s. The world has changed. The possibilities for mobilization have shifted, particularly because the Third World's own ability for action has weakened. And yet inequalities have not been reduced.

The role of states in the international community and the way they manage multilateral institutions remain fundamental. Consider the UN global conferences, which to some extent offered hope to the poorer countries. Their ideals are almost always impeccable. Their great challenge is implementing them to transform reality—by reducing inequalities in a world where paths are chosen through uncountable, fragmented decisions, proposed by numerous actors, both public and private, both national and international.

The biggest challenge for multilateral organizations is to reinvent the sense of community and to give room for international solidarity. We need a real democratization of international relations. It will not be easy, given the individualism of our time. But it is the only way to ensure that history's greatest transformations will be ethical. It is the only way development will again have a human face.

Fernando Henrique Cardoso
President of Brazil

The classical economists helped to justify this process. They identified labour as just another commodity alongside capital and manufactured goods. It had value only to the extent that it produced profits, reducing people to means, serving the objective of greater production.

Even from the earliest years, however, critics—in the North and in the South—argued that human beings should be the ends of development rather than mere means. Such ideas can be traced back through the writings of most major philosophers. Aristotle provides one example: “Wealth is evidently not the good we are seeking, for it is merely useful and for the sake of something else.” And Immanuel Kant another: “So act as to treat humanity . . . in every case as an end, never as a means only.” These same concerns were the focus of such political economists as Adam Smith, Karl Marx, John Stuart Mill and Alfred Marshall.

The great Bengali writer and Nobel laureate Rabindranath Tagore sounded a similar warning: “We have for over a century been dragged by the prosperous West behind its chariot, choked by the dust, deafened by the noise, humbled by our own helplessness and overwhelmed by the speed. We agreed to acknowledge that this chariot-drive was progress, and the progress was civilization. If we ever ventured to ask, ‘progress towards what, and progress for whom’, it was considered to be peculiarly and ridiculously oriental to entertain such ideas about the absoluteness of progress. Of late, a voice has come to us to take count not only of the scientific perfection of the chariot but of the depth of the ditches lying in its path.”

The early socialists were also vociferous critics of capitalist exploitation. But while they despised the capitalist system, they were still enamoured of the machinery of accumulation. Despite rhetoric about workers becoming the masters of production, ownership of the machinery was merely transferred from capitalists to the state.

Other critics saw the problem as rooted in industrialization itself. In Europe Thomas Carlyle, John Ruskin and Leo Tolstoy rejected the modernizing move-

ment as dehumanizing. Mahatma Gandhi also penned a powerful critique of modern machine technology. In 1907, in *Hind Swaraj*, he distilled the experience of indentured Indians in South Africa, as well as that of Indians under British rule in India. Rejecting both industrialization and capitalism as exploitative, he argued that “the earth provides enough to satisfy every man’s need but not every man’s greed.”

The altar of production

Such views were largely set aside in the pursuit of increased production. Capitalism often treated people as little more than cogs in a huge machine, and when the machine started to sputter in the 1930s, it readily cast them aside onto the scrap heap of unemployment. While socialism in the Soviet Union aspired to higher ideals, in practice it too sacrificed people, often brutally, on the altar of increased accumulation.

The aftermath of the Second World War was a period of taking stock and of new approaches. The world community adopted the Universal Declaration of Human Rights, celebrating the victory of human freedom and reasserting strongly and clearly that the principal objective of development was human well-being. In subsequent years there followed a series of UN conventions and conferences establishing the principles of people-centred development.

The postwar period was also the time that many developing countries fought for independence. These struggles were not just for political freedom but also to improve human welfare. To accomplish this, many of the new countries took up variants of socialism. Some took their inspiration from the orthodox Soviet model. Others looked to China as an alternative. Mao Zedong rejected the idea that development was determined by the level of “productive forces” and argued instead that “the people, and the people alone, are the motive force in the making of world history”.

Later Cuba offered another socialist path. And in Africa countries from Tanzania to Guinea and Algeria opted for socialism as a way of ensuring that the benefits of

“The earth provides enough to satisfy every man’s need but not every man’s greed.”

—Mahatma Gandhi

The faith in growth was based on the assumption that its benefits would eventually be widely spread

growth were equitably distributed. All these models aspired to treating people as ends. As President Julius Nyerere of Tanzania put it: "Every proposal must be judged by the criterion of whether it serves the purpose of development—and the purpose of development is the people."

Countries with more mixed economies, such as India, still assumed that the state would take a dominant role in harnessing growth for the benefit of people—as had been assumed in many countries in Latin America, from Argentina to Mexico. In these cases, however, the motive force for development was seen to be the state rather than the people.

A faith in growth

Elsewhere, countries developed along more overtly capitalist lines, as in Brazil, Côte d'Ivoire, Gambia and Liberia. But for both socialist and capitalist countries the key to development benefiting people and eradicating poverty was assumed to be faster economic growth. Even at that stage, however, many economists and development planners knew that economic growth was not an end in itself, but a performance test to see whether the means for development were being achieved. In 1955 the Nobel Prize-winning West Indian economist Arthur Lewis defined the purpose of development as widening the "range of human choice"—as did the first *Human Development Report* in 1990. The difference was that Lewis tended to equate wider choice merely with greater income—and had more faith that economic growth would inevitably lead to human development.

The faith in growth was based on the assumption that its benefits would eventually be widely spread. In the early stages policy-makers in the more liberal economies accepted that the rich might get richer and the poor might have to tighten their belts. But they hoped that rewarding the rich in this way would give them the incentive to innovate, to save, and to accumulate capital—and that this would ultimately benefit the poor.

Giving theoretical support to this view of the likely path for capitalist developing

countries was the "Kuznets curve", named after Nobel laureate Simon Kuznets. The statistical association creating that curve showed inequality rising during the early stages of growth, as labour begins to leave agriculture for industry. Then inequality reaches a peak and finally falls as labour becomes more concentrated in industry.

Beyond the presumption that inequality would eventually fall, there was also a presumption that, during the period of rising inequality, governments would step in to mitigate the suffering of the poorest. They would create temporary social safety nets or, in more liberal systems, use progressive taxation and subsidized social services to distribute the benefits more fairly.

Misplaced optimism

Neither of these optimistic assumptions matched reality. First, economic growth alone did not distribute resources more equally. That happened in only a few countries (and not just socialist ones) whose governments took deliberate steps to increase equality, such as radical programmes of land reform, and committed themselves to mass education and health care. Second, few governments took adequate steps to cushion the impact on the poor. Many were dominated by people with close social, economic and political links to the rich, who benefited from growth and had no desire to see their wealth transferred to the poor.

Why would inequality and poverty remain high in many countries despite economic growth? One reason was the initially very unequal access to land and education. Another was the diversion of resources to the cities, which caused rural development to be slower than expected. The rise in agricultural productivity that was a precondition for widespread progress in industry never occurred. And millions of desperate people in the expanding rural population left their villages in the hope of a better life in the cities. But they found few new jobs there. To some extent the lack of urban employment was due to slow growth, but it was also due to labour-displacing technology from the industrial countries.

The employment option

Faced in the 1960s with ever-larger numbers of poor people—and the apparent increase in open or disguised unemployment in the midst of growth—many development theorists and practitioners grew disillusioned with economic growth as a panacea. They turned their attention to “jobs and justice”. Even so, many people quickly concluded that the main problem in developing countries was not unemployment but a lack of productive and remunerative jobs.

In practice, the concept of unemployment pertains only to industrial countries, where a worker, supported by social security benefits, can afford to spend time unemployed. Many workers in poorer countries do not have that option. They must work at anything they can, no matter how unproductive, no matter how badly paid. Many work long hours for low rewards in the “informal sector”—a broad spectrum of generally unregistered workers (street traders, garbage pickers, casual workers) as well as small-scale producers (blacksmiths, carpenters, weavers).

The problem was thus redefined as the “working poor”. Among them, women were found to be even harder pressed than men, often working in agriculture or the informal sector while also working long hours in the home—managing the household, caring for children, cooking, cleaning and performing other household duties.

Low-productivity work predominates in developing countries partly because workers are hampered by poor nutrition, health and education. But workers can also be held back by an unsupportive environment. They usually lack adequate access to credit facilities, marketing organizations and labour exchanges—and in rural areas they often face an unequal system of land ownership or tenancy that provides neither the means nor the incentives for efficient production.

Government policies may also be biased against maximizing employment. In the organized sector, policies may overprice labour and underprice capital, while sustaining an overvalued exchange rate that discourages labour-intensive exports. To

placate the urban populace, governments often try to keep food prices low—thus discouraging small-scale, labour-intensive food production.

Under these conditions even creating a few formal sector jobs can cause more problems than it solves. People in the rural areas hear about these well-paid jobs and are even more tempted to migrate in search of them, further swelling the ranks of the urban poor.

From redistribution to Basic Needs

Given these difficulties, the focus of the development debate shifted from formal employment towards income distribution. One of the landmarks was a 1974 book, *Redistribution with Growth*, which suggested ways in which the increments of growth could be used for investment in services and assets for the poor, thereby improving distribution without reducing the incomes and assets of the rich.

A more direct approach was developed in the mid-1970s. Known as Basic Needs, it emphasized ensuring for all people the basic means of well-being: food, health, education. In many ways this was a return to fundamentals. Such pioneers as Pitambar Pant in India said in the 1950s that development must be concerned with meeting minimum, or basic, needs. But in the following decades the debate sometimes got lost in technical discussions of growth rates, savings ratios, capital-output ratios and so on—concentrating on the means, losing sight of the end. Basic Needs returned to the central purpose of development—promoting human well-being, especially that of the poor.

Basic Needs had three main parts. First, it emphasized the importance of increasing incomes through efficient, labour-intensive production—for countries with a labour surplus. Second, it assigned a key role in reducing poverty to public services—mass education, safe water, family planning and health services. Third, it started to shift people’s attention to participation—public services were to be financed by the government, often through international aid, but their planning and delivery should take

The Basic Needs strategy emphasized ensuring for all people the basic means of well-being: food, health, education

Adjustment policies often balanced budgets by unbalancing people's lives

place with the participation of the beneficiaries. The shorthand description of Basic Needs was Incomes + Public Services + Participation.

In practice, however, many governments and agencies focused only on the middle item—the delivery of basic public services. As a result, Basic Needs came to be criticized as a prescription to “count, cost, and deliver”—count the poor, cost the bundle and deliver it to them. It thus became strongly identified with top-down state action. It was also criticized for leaving out the less material dimensions of human well-being and for not empowering the poor economically, since it did not stress their access to productive assets and credit.

The Basic Needs strategy became controversial for a second reason. Some developing countries regarded industrial countries' support for Basic Needs as a means to divert attention from discussion of international policy and the need for a new international economic order. In fact, international reform had always been seen as part of the strategy for ensuring basic needs, though the measures that should constitute that reform were inevitably a matter of lively debate.

The era of “structural” adjustment

Whether or not these criticisms were valid, the Basic Needs strategy was soon overtaken by events. In the late 1970s and early 1980s the slowdown of growth, the debt crisis and worsening terms of trade overwhelmed many countries—and most thoughts of human-centred development were pushed into the background as programmes of stabilization and later of structural adjustment took centre stage.

Initially, the aim of these programmes of the World Bank and the International Monetary Fund (IMF) was to help developing countries respond to external shocks—the rise in oil prices, the decline in growth in the industrial countries, the rise in interest rates and the drop in capital inflows. The “stabilization” measures of the IMF and the World Bank aimed at reducing both budget deficits and trade deficits and usually involved cutting public spend-

ing, reducing wages and raising interest rates. Restoring growth, an objective on paper, was rarely achieved in practice. Although these policies reduced deficits in some countries, they often did so at the cost of inducing recession. In short, they often balanced budgets by unbalancing people's lives.

Soon, however, the emphasis switched to longer-term “adjustment”, a fundamental realignment of developing country economies along free-market lines. This involved reducing the role of the state, removing subsidies, liberalizing prices and opening economies to flows of international trade and finance. Whether this was actually “structural” was another matter. It excluded many measures previously identified as critical for changing social and economic structures—such as land reform or a radical redistribution of power.

For many countries the age of adjustment brought other external pressures and changes in economic philosophy. Countries came under strong outside pressure to privatize state-owned industry and to end central planning. State control of industry and centralized planning, after some initial successes, proved increasingly inefficient—imposing substantial burdens on government budgets. And attempts at radical egalitarianism often bore little fruit. Despite laudable ideals, managed communal living experiments—such as *autogestion* (self-management) in Algeria and *ujamaa* (freedom) villages in Tanzania—proved less popular than expected.

Experiments in workers' self-management in the former Yugoslavia did not provide a viable alternative. Even China, one of the more successful socialist experiments, started to break up its 50,000 agricultural communes after 1979 and link rewards more directly to individual effort. And Viet Nam, which had fought a long and bitter war to defend a socialist system, started to transform itself into more of a market socialist economy—with a mix of socialism and capitalism.

In many countries more limited forms of social democracy are still flourishing, combining bottom-up cooperative organizations with public provision of basic social

services. Forms of central planning that are indicative rather than directive also continue to be used with great success, notably in the high-growth countries. The model of development followed by Indonesia, Japan, Malaysia and the Republic of Korea, for example, has used industrial policy to channel resources into the sectors of the economy with the most growth potential.

The human factor

During this whole process of liberalization, adjustment and privatization, concern for the poor was pushed into the background. Policy-makers assumed that even if poverty increased in the short term, this was a price that had to be paid for long-term stability and growth.

Many voices were raised in protest, including those of trade unions, churches, non-governmental organizations, the International Labour Organisation and UNICEF, which published *Adjustment with a Human Face*. While not questioning the need for some kind of adjustment, UNICEF called on the IMF and the World Bank to give more attention to poverty and to human concerns. Among a wide range of proposals, it argued for maintaining basic minimum services, especially for the most vulnerable, and for sharing the burden of adjustment more fairly. But the underlying principle was that human concerns should not be “added on” to an otherwise unchanged package of adjustment policies. Instead, they should be incorporated into a new, integrated framework of long-term, people-centred development.

Some of the calls for new approaches to adjustment came from the women’s movement. Women often had to bear the brunt of adjustment, yet their needs and concerns were rarely considered in making adjustment policy. Single-parent families, usually headed by women, were among the hardest hit. All this emphasized the need for “engendering adjustment policies”.

Throughout this period the cause of the poor and the need to focus on human concerns was aided tremendously by the theoretical work of Amartya Sen and his central concept of promoting human “capabili-

ties”. In his view a society’s standard of living should be judged not by the average level of income, but by people’s capabilities to lead the lives they value. Nor should commodities be valued in their own right—they should instead be seen as ways of enhancing such capabilities as health, knowledge, self-respect and the ability to participate actively in community life.

Sen also emphasized that at the core of human well-being is freedom of choice. Both the fasting monk and the starving pauper may be hungry—the difference is that one exercises a free choice, and the other does not. The expansion of human capabilities implies greater freedom of choice—so that people can explore a wider range of options that they find worthwhile.

Enter human development

In 1990 UNDP took up the challenge of incorporating these and other ideas in a new development vision when it published the first *Human Development Report*. The times were ripe for a broader approach to improving the human condition—an approach that would cover all aspects of human development, for industrial and developing countries, for men and women, for current and future generations. Human development went far beyond income and growth to cover the full flourishing of all human capabilities. It emphasized the importance of putting people—their needs, their aspirations, their choices—at the centre of the development effort.

Human development can be expressed as a process of enlarging people’s choices. Obtaining income is certainly one of the main means of expanding choices and well-being. But too often the expansion of income is confused with the enhancement of human capabilities.

Investigations of the priorities of poor people have often discovered that they put a high value on many things besides higher income—including adequate nutrition, accessible safe water, better medical services, more and better schooling for their children, affordable transport, adequate shelter, secure livelihoods and productive and satisfying jobs. Generating private

Human development went far beyond income and growth to cover the full flourishing of all human capabilities

The new growth theories confirm the human development position that the driving force of all economic growth is people

income helps meet some of these needs, but it certainly does not guarantee all of them.

Beyond these needs, people also value benefits that are less material. These include, for example, freedom of movement and speech and freedom from oppression, violence and exploitation. People also want a sense of purpose in life, along with a sense of empowerment. And as members of families and communities, people value social cohesion and the right to assert their own traditions and culture. Money alone cannot buy these choices.

The choices cannot, however, be unlimited, since one person's freedom can constrain that of many others. The acceptance of this principle is evident from the recent reaction in many countries against the extreme individualism of the free market and the desire for a more socially responsible and communitarian form of development. Choices without limits and constraints can become mindless and destructive. Choices must be combined with obligations—rights with duties.

One of the concerns of the first *Human Development Report* was to define the relationship between human development and economic growth. It countered the conventional wisdom by asserting that there is no automatic link between the two. Economic growth might be essential for human development, but specific policy measures are

needed to translate economic progress into human progress. This Report builds on that beginning analysis.

The 1990 Report also presented a new way of measuring human progress—the human development index (box 2.1). Ranking countries by this index produced very different results from ranking them by per capita GNP. Relative to their income rankings, some countries—such as Brazil, Nigeria and Pakistan—slipped down the list when it came to human development. And some countries with more modest incomes—such as Costa Rica, Cuba and Sri Lanka—climbed up the rankings when evaluated by the HDI.

New growth theories and human development

During the late 1980s and early 1990s new theories of economic growth underpinned the human development position that the real motive force of economic progress is people. Developed by such economists as Paul Romer and Robert Lucas, these theories tested the effect of human capital on countries' long-term growth rates. The theories did not consider the full range of human capabilities, merely people's productive capacities.

The earlier, conventional "neoclassical" theory of growth had held that economic growth was a result of the accumulation of physical capital and an expansion of the labour force—combined with an "exogenous" factor, technological progress, that makes capital and labour more productive. But it could not explain how to accelerate technological progress.

In the new theories what increases productivity is not an exogenous factor, but "endogenous" ones—related to the behaviour of people responsible for the accumulation of productive factors and knowledge. Significantly, this behaviour can be changed by policy.

Some of the new models argue that one of the crucial factors is an across-the-board increase in human capital. Others argue that the key source of productivity growth is research and development (R & D)—though this too depends on human capital.

BOX 2.1

Why is income part of the human development index?

If income is only a means to human development, why is it part of the human development index? Average per capita income is meant to register "the command over resources to enjoy a decent standard of living".

Longevity and education are clearly valuable aspects of a good life, but "command over resources" is more a means to a good life. Many important capabilities, such as being well nourished or enjoying a comfortable life, depend crucially on a person's economic circumstances. The income that people receive, especially close to the

poverty line, can tell something about these circumstances.

Longevity and education cannot serve as proxies for all basic capabilities. Going hungry, for example, is a deprivation serious not only because of its tendency to reduce longevity, but also because of the suffering it directly causes. Similarly, resources needed for shelter and for travel may be quite important in generating the corresponding capabilities. Thus, the income component of the HDI is used as an indirect indicator of capabilities not reflected in the other two components of the index.

Source: Anand and Sen 1996.

The human capital models show how education allows the whole production process to benefit from “positive externalities”. Educated people use capital more efficiently, so it becomes more productive. They are also more likely to innovate—to devise new and better forms of production. Moreover, they spread the benefits to their co-workers, who learn from them and also become more productive. Thus, the rising level of education causes a rise in the efficiency of all factors of production.

This helps explain part of the disparity in income between rich and poor countries. It also partly explains why poor countries are not catching up, or are even slipping back. They are failing to make investments in human capital that can raise productivity and enable the workforce to adopt new technology. In many cases they lack resources—either domestic savings or external finance. And some have been deprived of resources by onerous debt repayments or capital flight.

The spillover benefits of education also help account for important aspects of the relationship between growth and physical capital. Past growth theories assumed that capital has diminishing marginal returns—that as more capital is accumulated, overall efficiency declines and growth rates slow. But many countries that have accumulated capital have achieved high growth rates and sustained them. The human capital models help explain this by showing how decreasing marginal returns to capital are offset to some extent by increased efficiency from education.

The growth theories that emphasize R & D also underline the importance of human capital—but suggest that its effects are more indirect. These R & D models argue that the long-term rate of growth is better explained by investment in research and development. R & D can clearly increase the productivity of the firms making the investments. But here too there can be positive externalities. Many innovations are difficult to keep secret, so other firms learn of these advances, and total factor productivity rises.

Both types of models depend heavily on expanding human capabilities. Even if

innovations come from R & D, they require an educated workforce—both people with higher skills to carry out the research and those with more basic skills to put the results into practice. The new growth theories thus confirm the human development position that the driving force of all economic growth is people.

Both sets of new growth theories have important policy implications, since they suggest ways that growth might be stimulated—by altering private incentives, for example, or by undertaking certain public investments.

But the new growth theories examine only a limited set of easily quantifiable factors. Other factors—such as people’s habits, their social groups and networks, and the nature of institutions and government policies—are more difficult to measure but nonetheless vitally important in explaining differences in growth rates across countries. The family and the formal education system, for example, help impart many skills beyond literacy and numeracy. Such skills—they could be called “operacy”—include self-discipline, taking pride in one’s work and being flexible, open-minded and willing to cooperate.

Social reproduction and growth

A limitation of the new growth theories is that they treat workers as though they appear magically each day, ready-made for their jobs. Nor can they account for how the next generation of workers is prepared for productive employment. Preparing workers, both present and future, is part of “social reproduction”, which encompasses a broad range of activities. It includes bringing forth a new generation—from giving birth to caring for and raising children. Most of this work is done by women, who also undertake the bulk of other caring work—managing the household and looking after those who cannot work, such as the sick or the elderly (box 2.2).

The contribution of women to social reproduction is not confined to the home. They are also responsible for certain kinds of community work. A recent study in the United States found that, even though men

Preparing workers, both present and future, is part of “social reproduction”

and women do an equal amount of socially valuable voluntary work in the community, there are clear differences in the kind of work they do. Men are more active in civic, political and professional groups—women in social support activities in charitable, health and education organizations. In the United Kingdom the community care schemes that have appeared since the 1980s rely mostly on women. And in Lebanon it is women who have formed the networks of street organizations that provide many vital social services.

The social importance of household and community labour transcends its economic impact. This work “reproduces” society, not just workers. And in this sense it has an intrinsic human value that cannot be reduced to units of money or of time. Thanks to these activities, family and community relations are enriched, cultural traditions are maintained, and human development is enhanced. This is social reproduction in the broad sense.

The new growth theories can deal with these activities only as inputs into produc-

tion—as some kind of “social capital” or a broad form of “human capital”. The human development approach, by contrast, is vitally concerned with them as crucially important social activities.

Growth and equity

In addition to an expanded view of the relationship between economic growth and human capital, there now is a deeper understanding of the relationship between growth and equity. Human capital has more impact on growth, for example, if it is equitably distributed.

It previously was thought that a trade-off existed between growth and equity—that distributing income too equally would undermine incentives and thus lower everyone’s income. The assumption was that the rich needed special encouragement to save and invest more.

Recent evidence suggests that this conventional wisdom is wrong. Many economies in Asia—Hong Kong, Indonesia, Malaysia, the Republic of Korea, Singapore, Taiwan (province of China) and Thailand—have had both rapid growth and relatively low inequality. Between 1960 and 1993 the East Asian economies, excluding China, had annual per capita growth of 7.6%, while income inequality remained stable or declined. Japan and Sweden have also combined rapid growth with low inequality (boxes 2.3 and 2.4).

These are important findings, since they contradict the conventional view that it is better to channel income to the rich, who tend to save and invest more.

The key to East Asia’s success was a relatively equal distribution of private and public assets—countries there concentrated on redistributing not income but wealth. What generates income is productive wealth—including human capital. Some new growth theories claim that redistributing income more equitably takes income away from people with capital, lowering their profits and thus supposedly reducing growth. In fact, a progressive redistribution of assets tends to boost growth because it has a broad, positive effect on people’s incentives. One study

BOX 2.2

Accounting for unpaid work

Much work in society goes unrecognized and unvalued—work in the household and in the community. And most of it is done by women. In industrial countries roughly two-thirds of women’s total work time—but only a third of men’s—is unrecorded. In developing countries the proportion is similar for women, but for men it declines to less than a quarter.

Human Development Report 1995 estimated that, in addition to the \$23 trillion in recorded world output in 1993, household and community work accounts for another \$16 trillion. And women contribute \$11 trillion of this invisible output.

In most countries women do more work than men. In Japan women’s work burden is about 7% higher than men’s, in Austria 11% higher and in Italy 28% higher. Women in developing countries tend to carry an even larger share of the workload than those in industrial countries—on average about 13% higher

than men’s share, and in rural areas 20% higher. In rural Kenya women do 35% more work than men.

In some countries women’s work burden is extreme. Indian women work 69 hours a week, while men work 59. Nepalese women work 77 hours, men 56. In Moldova women work about 74 hours a week, and in Kyrgyzstan more than 76 hours.

Efforts are under way to begin incorporating household work into the United Nations System of National Accounts. The 1993 revision of the accounts includes as economic output all goods produced in households for their own consumption. This revision proposes setting up satellite accounts to record the full extent of non-market work, including household services.

Only when household and community work is fully quantified and its monetary equivalent value estimated will women’s work receive the full recognition it deserves.

Source: UNDP 1995c and UN 1995f.

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concluded that if in 1960 the Republic of Korea had had Brazil's inequality, its GDP in 1985 would have been 15% lower.

Some countries in East Asia, such as the Republic of Korea, initiated growth through large-scale land reforms that broke up feudal class structures and through the building of rural infrastructure. But all stressed broadly based investment in education—particularly in primary and secondary education. In 1985 the Republic of Korea, which has enjoyed fairly equitable growth, devoted only 10% of its education budget to tertiary education, while Venezuela, where growth has been more inequitable, devoted 40% to the tertiary level.

Besides increasing the pace of growth, mass education can ensure that its benefits are more equitably distributed. When a small elite of workers loses its education monopoly, it can no longer command a high premium for its skills—so wage inequality is reduced. In the Republic of Korea between 1976 and 1985 the premium that those with higher education could enjoy over those with only primary education fell from an additional 100% to 66%. This helped reduce wage inequality over this period. In Brazil, by contrast, where education expenditures tend to favour the rich, the premium for higher education scarcely changed, and wage inequality rose over the same period.

But education will not ensure equitable growth on its own. People also need the opportunity to use their skills. Otherwise, society loses valuable resources, and people will not invest in education in the first place. East Asian economies have established this connection between the supply of skilled labour and the demand for it by first promoting such labour-intensive sectors as manufactured exports and agriculture. This provided widespread employment and raised everyone's wages.

The role of agriculture in East Asia's success is often ignored. In Taiwan (province of China) in the 1950s and early 1960s it was not exports but agriculture that took the lead in generating domestic demand and employment. The income generated in agriculture creates more demand for agricultural inputs and basic consumer goods—both of which require labour-

intensive production. So, employment multiplies throughout the economy. Indeed, in East Asia a 1 percentage point increase in agricultural growth tended to generate a 1.5 percentage point increase in the growth rate of the non-agricultural sector.

Discussions that link equity with growth have frequently neglected the demand side of the economy. A more equal

BOX 2.3

Japan—a century of growth and equity in opportunities

Japan's postwar recovery combined record and sustained economic growth with leaps forward in human development. In 1955–70 real GDP per capita was rising at around 10% a year. At the same time there was a big reduction in poverty and a narrowing of income gaps. Between the early 1960s and the mid-1980s the share of national income received by the wealthiest 20% of households fell from 50% to around 45%, while that of the poorest 20% rose from 5% to 10%. One crucial reason for this double success in growth and human development was a commitment to equity in opportunities.

The base for this egalitarian development was built in the postwar period, when radical reforms were introduced to ensure that fascism did not resurge and to transform Japan into a more democratic society. Reforms included the abolition of the aristocracy, a new constitution based on democratic government, land reform, a wealth tax and equal rights for women.

The postwar government based its macroeconomic policy on low interest rates, mild inflation and a disciplined policy of budget surpluses, along with protective tariffs and preferential credit for selected industries. It also aimed at low unemployment, promoting vigorous job creation by fostering countless small enterprises. Throughout the period of very rapid growth, at least 55% of non-agricultural workers belonged to enterprises with fewer than 100 employees. And wage levels rose steadily with productivity.

Through a virtuous circle, progress in human development has both been stimulated by economic growth and contributed to it. In many respects human development was already high.

Beginning with the Meiji reform in 1868, primary school enrolment was raised from 28% of school-age children in 1873 to 96% in 1905, providing a solid foundation for rapid modernization.

After the Second World War the government continued to invest in the social sectors, helped by keeping defence spending to a minimum (below 1% of GDP). This produced dividends in education and health. Between 1960 and 1990 the proportion of the working-age population completing secondary or higher education doubled. Since the late 1950s infant mortality has fallen almost tenfold, from around 40 per thousand live births to 4.3, one of the lowest rates in the world. Life expectancy increased from less than 70 years in 1958 to 80 years in 1993. And today, those who need social safety nets tend to be disabled rather than poor.

In 1990 Japan's public expenditure on education and health was among the highest on a per capita basis—about \$2,208, while the world average was only \$336. The emphasis on education extends to a strong emphasis on research and development and on training workers in industry.

Japan's record is not perfect, however, and challenges lie ahead. Growth has slowed, and unemployment is now rising above 3%. Inequality is also on the rise—with a growing number of elderly poor. Japan lags behind in gender equality, and women's participation in decision-making outside the home remains low. Environmental concerns also challenge policy-makers, though more progressive measures are now being pursued. And the Japanese people may choose more leisure rather than long hours of work.

Source: Ishikawa 1995.

distribution of income changes the composition of demand towards more labour-intensive products—and this stimulates both growth and employment. Public policy must therefore be directed not only at building up people's capabilities, but also at matching these capabilities with opportunities—linking the supply of human capital with the demand for it. Jamaica, the Philippines and Sri Lanka have enhanced basic capabilities but still had low growth,

in part because of insufficient demand for people's skills.

When the supply of human capital and the demand for it are in balance—when capabilities match opportunities—a dynamic process of cumulative causation is set in motion that can raise growth and lower inequality.

Confusion with human resource development

Many people often confuse the human development concept with human resource development. The phrases may appear similar, but there is a world of difference. While the new growth theories focus on human capital, the human capabilities that are the focus of human development are broader than productive abilities.

The key distinction is between means and ends. Human resource development considers human beings merely as a means to a greater output of commodities. Human development, by contrast, identifies people as ends—seeing their well-being as the ultimate and only purpose of development.

Human resource theory treats people as “human capital”—merely another productive input on a par with physical capital or natural resources. Thus, when governments “invest” in, say, health or education, the value of this investment is judged by its economic rate of return, either to individuals or to society.

Those who advocate human development take a different view. Certainly, they welcome improvements in health or education. But they regard these as valuable in their own right, whether they increase production or not. Human capabilities, such as health or knowledge, are more than *means* of achieving human well-being. They are essential *components* of human well-being.

Despite the fundamental differences between human resource development and human development, there are areas of common interest. Indeed, it might be argued that if both would result in, say, better health or education, the distinction is immaterial. The motives might be different, but the outcome would be the same.

But there are many circumstances in which the different motives would result in

BOX 2.4

Sweden—an early model of growth with equity

In the century following 1870 Sweden's successes in economic growth and human development were spectacular and sustained. Its per capita income growth rate was second only to Japan's—and its progress in human development even more notable.

In the early stages export industries—timber, iron ore, paper and steel—were the country's engine of growth. Most export revenues were invested domestically, to strengthen the economy and promote human development. Economic growth was remarkably stable, averaging more than 3% a year from 1890 to 1930.

This success depended on laying a solid foundation of basic human development during the late 19th century. The number of primary school students more than doubled between 1850 and 1870, and universal literacy was achieved by 1875. Technical education also expanded rapidly during this period.

The Great Depression of the 1930s and its aftermath marked a dramatic change in the Swedish model of development. In 1932 the Social Democratic Party swept to victory, ushering in a new era of equitable growth, low unemployment and expanded social protection (pensions, child allowances, rent controls and health insurance). The state intervened in the labour market and to help workers find new jobs. As a result, unemployment remained below 3% until the 1990s.

From 1930 through the early 1970s Sweden experienced a golden era of development characterized by both rapid growth and increasing equity

through substantial redistribution of income. Sweden's Gini coefficient fell from 0.31 in 1967 to a historic low of 0.20 in 1982.

The government actively intervened in the economy to keep downturns infrequent and moderate. It maintained a liberal trade regime, strong incentives for business investment and an activist industrial policy, channelling credit into priority sectors.

But in the 1970s warning signals began to appear that such development could not be sustained. Public spending, already high at 43% of GDP in 1970, ballooned to 67% by 1982. Transfer payments, such as family allowances and housing subsidies, grew rapidly.

Slow economic growth could not support continued increases in government deficits. While Sweden's rate of per capita income growth was 3.4% from 1961 to 1974, it slipped to only 0.6% in 1974–93. By the early 1990s Sweden was plunged into an unprecedented socio-economic crisis. Growth turned negative, and unemployment leapt from 1.7% in 1990 to 8.2% in 1993.

Despite the slowdown in growth and an overhaul of the welfare state, human development remains high in Sweden. In the past 30 years advances in human development have outpaced increases in income. The country ranks among the top ten in the human development index. It has one of the most impressive records of equitable development, especially in gender equality. It ranks number one in the gender-related development index and number two in the gender empowerment measure.

Source: de Vylder 1995a.

different choices. The human development perspective would be concerned, for example, with all members of society—highly productive, less productive, even non-productive. This applies to the old, the infirm, the chronically sick and those with disabilities. With the decline of the extended family, such people are often abandoned unless the state assists them.

Human development and human resource development could also take different approaches to education. Both would argue for basic literacy and numeracy. But they might well diverge when it comes to higher education. Human resource development sees education as making people fit to work, and so is likely to favour technical or vocational subjects. Human development, by contrast, regards learning as having value in its own right. So, as well as promoting science, it would value the humanities as a means of deepening understanding of the natural and social world.

There could also be different approaches to health and nutrition. Human development sees these capabilities as ends in themselves and might advocate certain investments in health and nutrition even if their conventional economic rates of return turned out to be zero.

Ultimately, the fundamental distinction is between means and ends. For human resource advocates the end is the production of goods and services—while for human development advocates the capabilities are ends in themselves. Capabilities can certainly result in increased productivity and income, but these are of value only if they genuinely add to human well-being. Human development sets the priorities right.

Dimensions of human development

Human development has been an evolving concept. Each year the *Human Development Report* has re-examined it in light of criticisms or analysed it in greater detail. In recent years this work has included extended discussion of such issues as participation, sustainability and gender equity. As a result, the basic approach has been broadened and deepened. The concept now includes the following dimensions:

- *Empowerment*—Basic empowerment depends on the expansion of people's capabilities—expansion that involves an enlargement of choices and thus an increase in freedom. But people can exercise few choices without freedom from hunger, want and deprivation. In principle, everyone is free to buy food in the market, for example, but this freedom means little if people are too poor to afford it. Everyone may be free to read a newspaper, but exercising this freedom depends on literacy. And everyone may be free to travel around the country, but not if bedridden with illness.

Empowerment carries an additional connotation—that in the course of their daily lives people are able to participate in, or endorse, the decision-making that affects their lives. People's capabilities could be expanded by, for example, receiving primary health care, but they might have little say in how that expansion takes place. People should not be passive beneficiaries of a process engineered by others. They should be active agents in their own development.

- *Cooperation*—People live within a complex web of social structures—from the family to the state, from local self-help groups to multinational corporations. They are social beings who value participation in the life of their community. This sense of belonging is an important source of well-being. It gives enjoyment and direction, a sense of purpose and meaning.

Human development necessarily involves a concern with culture—the ways people choose to live together—for it is the sense of social cohesion based on culture and shared values and beliefs that shapes individual human development. If people live together well, if they cooperate in a mutually enriching way, this enlarges their individual choices. So, human development is concerned not just with people as individuals but also with how they interact and cooperate in communities.

- *Equity*—Equity is usually thought of in terms of wealth or income. But human development takes a much broader view—seeking equity in basic capabilities and opportunities. In this view everyone should have the opportunity to be educated, for

Basic empowerment depends on the expansion of people's capabilities

“Good” economic growth is growth that promotes human development in all its dimensions

example, and to lead a long and healthy life. This applies in particular to women, who face substantial discrimination. They make a major contribution to society, in the household and in the community (as well as at the workplace). But since most of their work is not paid, it often goes unrecognized.

Promoting equity may in some cases call for an unequal sharing of resources. The poor, for example, may require more state help than the rich. Some people, such as the sick or the disabled, may require more resources than others to support the same level of capability.

- *Sustainability*—Sustainable human development meets the needs of the present generation without compromising the ability of future generations to meet their needs. It thus involves considerations of intergenerational equity. But what needs to be passed on is not so much a specific stock of productive wealth as the potential for a particular level of human development. What should this level be? Basically, it must involve the absence of poverty and deprivation. What needs to be sustained are people’s opportunities to freely exercise their basic capabilities.

- *Security*—Millions of people in developing countries live on the edge of disaster. And even in industrial countries people are constantly at risk from crime or violence or unemployment. Joblessness is a major source of insecurity, undercutting people’s entitlement to income and other benefits.

For too long the idea of security has referred to military security or the security of states. One of the most basic needs is security of livelihood, but people also want to be free from chronic threats, such as disease or repression, as well as from sudden and hurtful disruptions in their daily lives. Human development insists that everyone should enjoy a minimum level of security.

Growth for human development

The dimensions of human development can be used to evaluate the quality of economic growth. What is “good” economic growth? It is growth that promotes human development in all its dimensions—growth that:

- Generates full employment and security of livelihoods.
- Fosters people’s freedom and empowerment.
- Distributes benefits equitably.
- Promotes social cohesion and cooperation.
- Safeguards future human development.

These are objectives, and countries may be succeeding in promoting some and not others. What is important is to see them as yardsticks by which to judge progress. Successful countries are efficient in converting increases in income into advances along these dimensions of human development.

At every stage policy-makers should question where growth is leading. Who is benefiting from it? Is it creating employment? Is it sustaining opportunities for future generations? Are people participating? Is it responsive to cultural diversity? Policy-makers—often mesmerized by the quantity of growth—should instead remain acutely conscious of its quality.

Growth of what and for whom?

New ideas take a while to be absorbed, and human development is no exception. Many governments pay lip service to human development but in practice feel that the immediate priority should still be economic growth.

This temptation is understandable, but it is much too narrow an approach. And its value has regularly been contradicted by experience.

The real questions should thus be: Growth of what, and for whom? Growth of pollution that calls for more antipollution devices? Growth in crime that employs armies of lawyers? Growth in car crashes requiring more repair workers? Growth of incomes only for the richest? Growth of military weapons? This is not what most people want, yet all of these can result in a rise in GNP. Clearly, something is wrong with this form of measurement. Growth in national income is far too general and abstract a concept to be a sensible policy objective (box 2.5).

To be fair, GNP was never designed to be a measure of human well-being. It is

intended to measure flows of production income and expenditures, which can be means to human well-being. More direct measures of human development are needed to determine whether ends are being achieved.

Some of the deficiencies of GNP as a measure of economic activity can in theory be corrected. It is possible for national income accounting, for example, to impute a value to the depletion of non-renewable raw materials. But other weaknesses are less easily remedied. Many elements of choice defy monetary measurement. The enjoyment of an unspoiled wilderness, the satisfaction from our daily work, the sense of community that grows out of engagement in social activities, and the freedom, peace and sense of security that are common in a good society—all these are impossible to quantify. They cannot be reduced to dollars or rupees, to deutsche marks or pesos. Yet they form part of the essence of human development.

Jobless growth—or job-creating

A vital component of human development is a secure livelihood. For most people that means a job. But one of the most disturbing trends in both industrial and developing countries is that economic growth has not been creating enough employment. In addition to depriving people of a livelihood, a lack of employment robs them of opportunities to develop their abilities and undermines their dignity and self-respect.

In some cases jobs may be lacking simply because growth has been too low to generate employment. Countries undergoing stabilization and structural adjustment, for example, have frequently been plunged into recession, putting many people out of work.

But even economies that have been growing faster have often failed to generate enough jobs. In both the industrial and the developing worlds many countries are suffering from jobless growth.

This is evident in national trends in the relative growth of employment. A number of developing countries have had growth but have generated little employment. In

Pakistan from 1975 to 1992, real GDP grew by about 6.3% annually, but employment by only 2.4%. In India from 1975 to 1989, yearly GDP growth was about 5%, while yearly employment growth lagged behind at 2%. While GDP growth was accelerating, employment growth was declining. During 1977–90 the annual increase in employment in Egypt was only 2%, while that for GDP was 6.6%. In Ghana between 1986 and 1991, GDP grew by 4.8%, but employment dropped by more than 13%—a stark example.

Other countries, by contrast, have achieved rapid growth of both income and employment. Among countries with annual per capita income growth of more than 3% between 1980 and 1990, several also had high annual rates of employment growth—Botswana, China, Indonesia, Malaysia, Mauritius, the Republic of Korea, Singapore and Turkey. In all of them, employment grew faster than the labour force. Some combined employment growth with significant growth in productivity—China, Malaysia, Mauritius, the Republic of Korea and Singapore. Much of this was based on investments in human capital.

GNP—navigating with a faulty instrument

BOX 2.5

GNP needs to be improved to reflect all important economic transactions. But even with such improvement, it cannot be taken as a measure of human well-being, mainly because its focal variable is inappropriate for this purpose. It measures means, not ends. In addition, GNP has the following limitations:

- *It registers only monetary exchanges.* GNP counts only goods and services that can be exchanged for money. Thus, it leaves out of consideration the large amount of work done within the family and community. Last year's Report estimated that, on average, two-thirds of women's work and a quarter of men's work never enter into GNP calculations.
- *It equates goods and bads.* It considers valuable services such as care for children or the elderly as having the same significance as the manufacture of, say, cigarettes or chemical weapons.
- *It counts both addictions and cures.* Addictive eating and drinking, for

example, are counted twice: once when the food and alcohol are consumed, and again when large sums are spent on the diet industry and cures for alcoholism.

- *It considers natural resources to be free.* Environmental degradation, pollution and resource depletion are not accounted for. The earth is treated, it has been said, "like a business in liquidation".

- *It places no value on leisure.* When GNP records the lower income associated with, say, fewer working hours or earlier retirement, it does not compensate by adding increased leisure hours to the other side of the ledger. Nor does it subtract the leisure lost when people are forced to take on second jobs.

- *It ignores human freedom.* National income accounting puts no value on freedom, human rights or participation. It would, for example, be perfectly possible to attain high per capita incomes and satisfy all material needs in a well-managed prison state.

The question of whether democracy is good or bad for growth is beside the point

Developing countries have substantial opportunities for investing in human capabilities. Greater human capital can initiate a virtuous circle in which labour productivity rises and triggers an increase in real wages, which in turn allows greater investment in human capital. The other half of the picture is encouraging growth that is labour-intensive (chapter 4). In most countries labour is the most abundant resource. In some the best employment opportunities arise from developing agriculture. In others the key may be to look to export markets. Indeed, most of the successful growth models have involved industrial policies that deliberately targeted sectors in which growth could be labour-intensive.

In industrial countries unemployment has been rising despite the recovery in the world economy in the 1990s. In the European Union unemployment has been rising since 1974 and was about 11% in 1995. Even in such countries as Austria, Sweden and Switzerland, where unemployment has traditionally been low, joblessness is on the rise. In the United States unemployment has remained lower—fluctuating around 6%—but the proportion of low-wage service sector jobs has climbed. Jobs are being created, but many are dead-end, temporary jobs—without security and without a future. As a result, productivity has suffered.

High unemployment in industrial countries can result from inadequate growth in

demand—due to inordinate fears of inflation or to balance of payments crises. Or it can be traced to technological change or to low-cost imports from developing countries. Whatever the cause, it is creating a polarized society in which millions of people are deemed superfluous.

Policies must be reoriented to boost employment as a top priority. Full employment is a feasible objective: until very recently such countries as Japan and Sweden maintained very low joblessness. When employment is insecure, society cannot long remain secure.

Voiceless growth—or participatory

Economic growth is not always accompanied by greater participation, empowerment and democracy. Many states that have promoted economic growth have been far from democratic. The East Asian economies have shown that trade unions may be repressed and workers' rights denied even where incomes are rising rapidly and are fairly equitably distributed.

But forgoing democracy is certainly not necessary for growth. Many of the industrial countries combined democracy with development. And many developing countries—such as Barbados, Botswana, Costa Rica and Mauritius—have had democratic regimes and good growth records.

Some argue that an emphasis on the rule of law and on political accountability conflicts with the value systems of some cultures. This argument carries little weight. As one example, Daw Aung San Suu Kyi, the human rights activist and Nobel laureate from Myanmar, cites the Buddhist view of responsible kingship: "The Ten Duties of Kings are: liberality, morality, self-sacrifice, integrity, kindness, austerity, non-anger, non-violence, forbearance, and non-opposition to the will of the people."

Active democracy can aid economic growth in several ways. More open and transparent forms of governance can reduce corruption and arbitrary rule. But in many ways the question of whether democracy is good or bad for growth is beside the point. The real issue is whether growth helps democracy. Democracy, participation

BOX 2.6

Is democracy a luxury? Who has famines?

Some policy-makers maintain that governments should concentrate on meeting basic needs, such as food, shelter and clothing, rather than ensuring people the right to vote. They regard political rights and freedoms as "luxuries" that poor countries can ill afford.

But economic and political opportunities tend to reinforce each other. As Amartya Sen has pointed out, serious famines rarely occur in independent, democratic countries with a free press. One simple reason is that although famines can kill millions of people, they

do not kill rulers. Kings and presidents, bureaucrats and bosses, generals and police chiefs—these people never starve.

If there are no elections, no opposition parties, no forums for public criticism, those who rule do not have to worry about the political consequences of failing to prevent a famine. That Botswana and Zimbabwe have been successful in preventing famine, and Ethiopia and Sudan have not, is testimony to the importance of political participation and democracy in helping people meet their basic needs.

Source: A. Sen 1995.

and empowerment are valued in themselves—whether they enhance growth or not. The movements for change in the former Soviet Union and Eastern Europe were the result of parallel quests for democracy and improved economic conditions, each valued independently.

Many people argue that too much is made of the virtues of democracy—and that the freedom to eat is more important than the freedom to vote (box 2.6). True, freedom from material want does liberate people to take greater control over their lives. But much also depends on how greater material welfare is achieved and on the patterns of production and consumption it encourages.

When it comes to production, growth may result in a form of enslavement if it means that people have to do demanding jobs in dangerous conditions—and have little control over their working environment, without independent trade unions or workers councils to defend their interests. They can also be required to work excessively long hours, leaving little time to spend with their families or participate in community life. Political democracy must be complemented by economic democracy.

Some people assume that the battle for democracy has basically been won. More than two-thirds of the world's people now live under formally pluralistic and democratic regimes. In 1993 alone, 43 countries held national elections for the first time. But progress is uneven, and the gains remain fragile—often more form than substance.

Ballot box elections do not necessarily signal a healthy democracy. People also participate in decision-making through the myriad of institutions that make up civil society—in the people's organizations that are the cradle of real democracy. But in many countries these vital organizations are in decline. Trade unions are an example. In the Netherlands union membership fell from 39% of the organizable workforce in 1978 to 25% in 1991. In the United States there has been a three-decade slide in union membership, from 30% to 15%. In many developing countries the share of the workforce unionized remains pitifully small: in

India, Kenya, Malaysia and Pakistan it is less than 10%.

Consumption too can become a form of enslavement, turning people into nations of passive consumers rather than active participants in their society. One study in the United States suggests that the spread of television, which now takes up 40% of the average American's free time, is responsible for a sharp reduction in voluntary activity. Over the past 30 years participation has declined by 25–50% in such voluntary organizations as parent-teacher associations, the League of Women Voters and the Red Cross.

How can growth best be translated into empowerment? In advocating participation, it is important to avoid both the paternalistic and the populist fallacies. Participation cannot be imposed from above by governments. But, equally, it does not emerge spontaneously from below. The state does have an important role in supporting democratic initiatives—through actions by the executive branch, legislative bodies or the judicial system, or by regional authorities. Such action can ensure that many other institutions of civil society—

BOX 2.7

Liberalization and inequality

Globalization is a two-edged sword. A number of countries in East Asia are success stories of export-led development—combining rapid growth with low inequality and high human development. By contrast, many countries in Sub-Saharan Africa have become increasingly marginalized by global forces.

There are also winners and losers within countries. Income inequality is clearly on the rise in many countries that have opened their economies.

In 1970 income inequality was fairly low in Sri Lanka: the Gini coefficient was 0.35. (This coefficient ranges from 0 to 1, with 0 being perfect equality and 1 complete inequality.) When the country began to liberalize its economy in the late 1970s, inequality rose dramatically. By 1990 the Gini coefficient was 0.51—an increase of almost half.

In the late 1970s China began to unleash market forces, privatize its economy and rapidly open up to international trade and finance. In 1979 its Gini coefficient was 0.33—lower than that in any other East Asian country. By 1988 it had risen to 0.38—surpassing those of Indonesia and the Republic of Korea. And inequality continues to rise, especially along the coast, which is most directly tied to the world economy.

Income inequality has also increased in Mexico, which liberalized its economy rapidly beginning in the mid-1980s. In 1984, before the reforms, its Gini coefficient was 0.43, but by 1992 it had risen to 0.48. And in Chile, one of the most open economies in Latin America, income inequality has been rising markedly since the 1970s. In 1970 its Gini coefficient was 0.45, but by 1990 it had increased by 27% to 0.57.

Source: Tabatabai 1995 and Berry 1995.

from trade unions to community groups to non-governmental organizations—are permitted to flourish.

Ruthless growth—or egalitarian

In many countries economic growth has been accompanied by widening disparities—the rich get richer in the midst of widespread poverty. This is ruthless growth. In many countries rising inequality is associated with increased integration with the

world economy, as the forces of globalization intensify disparities within countries (box 2.7).

Some countries in Latin America provide examples of ruthless growth. Few of the region's countries have made serious attempts at land reform, and schooling policies have generally helped the wealthy, not the poor. Moreover, until recently industrial policy had been based on import substitution, often involving capital-intensive production and a bias against agriculture. Not surprisingly, the incidence of poverty in the region rose from 23% to 28% in 1985–90 alone—a period of economic recovery.

Many East Asian countries, by contrast, have based their growth on the redistribution of assets, on investments in human capital and on employment that is both skill- and labour-intensive—helping them make rapid strides in reducing poverty. Indonesia reduced its incidence of absolute poverty from 29% to 17% between 1980 and 1990. And Malaysia reduced its poverty incidence from 49% to 14% between 1970 and 1993 (box 2.8).

One way of seeing how growth affects the poor is to consider the “growth elasticity of poverty reduction”, derived by dividing the percentage decrease in the number of poor people by the percentage increase in per capita income. The higher the elasticity, the better.

Countries in Latin America have some of the lowest elasticity figures—0.9 in Brazil and Panama, for example, and about 0.7 in Guatemala and Honduras. Several African countries do somewhat better: the elasticity for Ghana is 1.7, but for Nigeria, whose growth has been less pro-poor, it is 1.4. At the other end of the scale is East Asia, where the elasticities tend to be well above 2—for Indonesia the elasticity is 2.8, for Malaysia 3.4 and for rural China 3.0.

Both the percentages of poor and the elasticity figures may offer useful ways of looking at poverty—but they are limited because they look only at the lack of income. Human deprivation has many other dimensions: poor people also tend to be unhealthy, malnourished and uneducated. This is “poverty of capabilities”, captured in the new multidimensional measure

BOX 2.8

Malaysia—equitable growth for human development

Malaysia's real GDP growth averaged 6.9% a year between 1960 and 1985, and more than 8% in the past decade, among the highest in the world. Growth has been associated with full employment, low inflation and Malaysia's economic transformation from a producer of primary commodities to a manufacturer of sophisticated industrial goods. It is the world's third largest exporter of semiconductors, after Japan and the United States.

In a continuous chain of cause and effect, rapid growth and human development have been mutually reinforcing. Health standards improved—with life expectancy rising from 53 to 71 years between 1960 and 1993, and infant mortality dropping from 72 to 13 per thousand live births. In education, primary enrolment increased by about a third between 1956 and 1960. Almost every child between 6 and 11 years old was enrolled in primary school by 1993.

Gaps between ethnic groups widened after independence in 1957. While the richest tenth of the population (mostly of Chinese background) increased its share of national income by 18% in 1957–70, the poorest half (mostly Malays) saw its share fall by almost a third. By 1970 the per capita income of Malays (54% of the population) was about half that of non-Malays, and they accounted for only 25% of industrial employment. Economic and human development disparities between ethnic groups were seen as the root cause of the racial tensions culminating in the riots of 1969.

After the riots the government took a two-pronged approach to translating

rapid economic growth into human development for all. It adopted a 20-year perspective plan for promoting growth and human development, reducing poverty and increasing equity, all with quantitative targets. The government also made efforts to end racial discrimination in employment.

Government policy targeted Malays and others for human development and antipoverty programmes. Scholarships and racial quotas helped increase their enrolment in schools and universities. Antipoverty measures (irrigation, land reclamation) focused on the rural poor—rubber and coconut smallholders, estate workers and fishermen, as well as padi farmers, 90% of whom did not earn enough to meet their basic needs.

Growth, the expansion of people's capabilities and poverty reduction programmes helped reduce the proportion of poor households from 49% in 1970 to 14% in 1993. The real incomes of Malays increased by 89%, compared with 60% for Malaysians of Chinese origin and 50% for those of Indian background. The income of the poorest 40% of the population increased by 9% a year in 1973–93.

Greater equity helped boost growth. It contributed to social stability and harnessed the contributions of all Malaysians for their collective development. With the success of the first 20-year perspective plan, Malaysia developed further plans in 1990, within the long-term perspective of “Vision 2020”. Growth with equity continues to characterize Malaysia's rapid progress as it aims for the status of a fully developed nation by the year 2020.

Source: Bruton 1992, Isa 1995, Mehrotra and Jolly forthcoming and Yoke and Leng 1992.

of poverty introduced in chapter 1—the capability poverty measure (CPM).

Some countries perform much better when ranked by the CPM than when ranked by income—Costa Rica, Cuba, Jamaica, Mongolia, China and Viet Nam (figure 2.1). But even for some of these countries the CPM shows that capability deprivation is more widespread than income deprivation. In China 11% of people are income poor, while 17.5% are capability poor.

Several countries could use their resources more efficiently to reduce deprivation—among them Guatemala, Algeria, Morocco, Pakistan and Bangladesh. In Morocco 13% of the people are income poor, while about 50% are capability poor. And for Pakistan the corresponding figures are 34% and 61%.

But even such countries as Indonesia, Malaysia and Mauritius, which have had relatively equitable growth policies, could do better in reducing deprivation. While 17% of the people are income poor in Indonesia, 42% are capability poor. Rapidly growing countries such as Botswana, Thailand and Turkey could also do much more.

According to national income poverty lines, 21% of the people in the developing world are poor (figure 2.2). The results for the CPM suggest, however, that 37% of the people are capability poor. Excluding China, the figure is 45%. The 21% is based on high national poverty lines that reflect moderate poverty, not just extreme poverty. Although results for individual countries come from similar World Bank studies, they are not strictly comparable. But the sharp contrast between income poverty and capability poverty indicates that income poverty is significantly underestimated.

For certain regions the contrast between the two measures is very sharp. In South Asia about 29% of the people are income poor, while more than 62% are capability poor. In India 229 million are identified as income poor, but more than twice as many, 554 million, are capability poor. In Bangladesh the corresponding numbers are 55 million and 89 million. Clearly, South Asia needs to concentrate on developing people's basic capabilities.

Capability poverty results from a lack of opportunity, such as lack of access to basic health services. Such poverty tends to be more prevalent in rural areas because of the low coverage of such services (box 2.9).

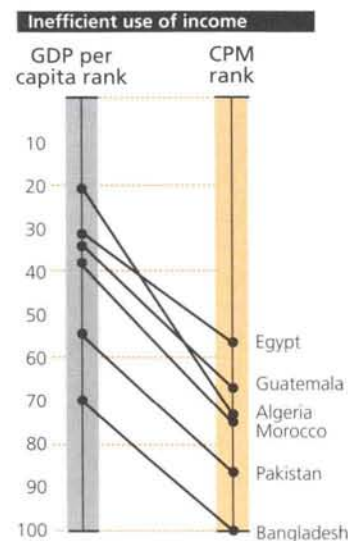
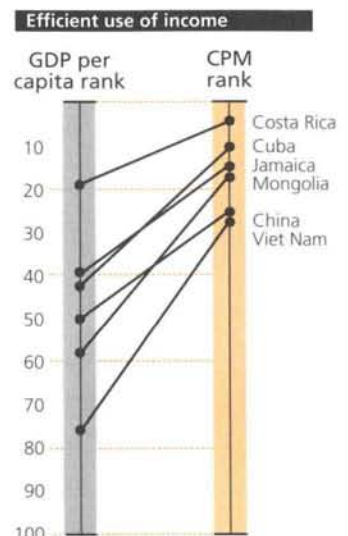
As indicated earlier in this chapter, ruthless growth is neither desirable nor efficient. Far from being essential, it is counter-productive.

Rootless growth—or enriching culture

Another effect of many forms of modern economic growth has been to homogenize diverse cultures. There are thought to be about 10,000 distinct cultures—but many are being marginalized or eliminated, some deliberately. Some national leaders thought that traditional cultures were a drag on modernization and development. National boundaries may have been drawn without regard for ethnic groups. And in the pursuit of nation-building, many countries tried to artificially fuse different ethnic groups into one cohesive nation by submerging cultural differences.

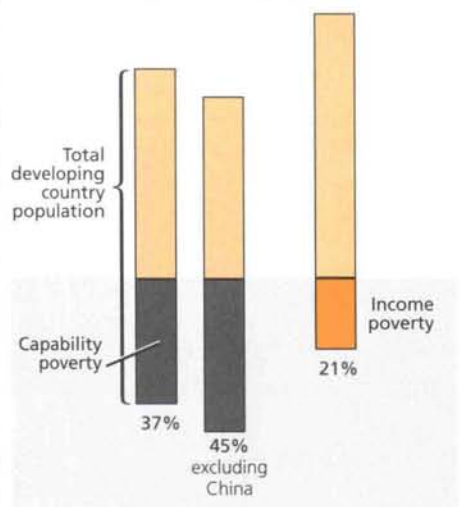
A pattern of growth that is inclusive and participatory can nurture and enhance cultural traditions. And it can open tremendous opportunities for people to share their cultures in a mutually enriching way. But a pattern of growth that is exclusive and dis-

FIGURE 2.1
The capability poverty measure shows variations in poverty reduction by income level



Ranks are for the 101 countries in technical note table 3.1

FIGURE 2.2
Capability poverty is more prevalent than income poverty in developing countries



Note: Income poverty is based on national poverty lines.
Source: World Bank 1995c and technical note table 3.1.

crimination can destroy cultural diversity and thereby impoverish the quality of everyone's lives. Gandhi eloquently expressed his view of cultural diversity: "I do not want my house to be walled in on all sides and my windows to be stuffed. I want the cultures of all the lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any."

Soviet policy in Central Asia exemplified cultural intolerance. Islam had flourished in the region for centuries, with great centres of learning and culture in such cities as Samarkand and Bukhara. But the Soviet drive for rapid industrialization left little room for cultural freedom. Islam was suppressed. Many mosques and shrines were destroyed. And the use of the Arabic script was forcibly discontinued.

As a result, the breakup of the Soviet Union unleashed several ethnic conflicts in its former Asian republics. In 1989 there

was a major clash between Uzbeks and Meskhetian Turks in the Fergana Valley of Uzbekistan, and in 1990 gun battles broke out between Uzbeks and Kyrgyz in the Kyrgyz city of Osk. Worst of all, a civil war erupted in Tajikistan, killing more than 50,000 people.

More important than government repression of cultures today is the effect of market forces. Globally marketed consumer products and the media are superimposing a uniform and stultifying view of the world. While the world's more than 1.2 billion TV sets can help spread knowledge and understanding and help hold governments accountable for their actions, they can also be a new form of cultural domination through the incentives and values they inculcate. The United States exports more than 120,000 hours of television programming to Europe alone, and the global trade in programming is growing by more than 15% a year.

Does this matter? Not everything about traditional cultures should be an object of uncritical adulation. Indeed, some practices—such as female genital mutilation, infanticide and the burning of widows—violate universal standards of ethics and human rights. But many other aspects of cultural homogenization represent a serious loss, for people who lose their heritage and for society.

In some Latin American countries indigenous cultures are still considered an impediment to development. Guatemala has never recognized any indigenous language as an official language even though more than 60% of its population is indigenous. Nor has Peru, where more than 50% of the population is indigenous. In Mexico the percentage of people who can speak an indigenous language has been falling dramatically. Of the 68 indigenous languages still spoken in that country, 26 are spoken by fewer than a thousand people and are likely to disappear in the future. By contrast, while Romansch is spoken by only 1% of the population of Switzerland, it is still one of the country's four national languages.

Mauritius is an example of a rapidly growing developing country that has been strengthened by its ethnic diversity. The

BOX 2.9

Equality of access to health services

The capability to lead a healthy, well-nourished life or to give birth under safe and healthy conditions depends on access to health services. A well-functioning society provides people this basic opportunity. Thus, poverty can be measured not only directly (by lack of capabilities), but also indirectly (by lack of opportunities).

In many developing countries there is a strong urban bias in access to potable water, adequate sanitation and health clinics. In Sierra Leone 90% of the urban population has access to health facilities, compared with only 20% of the rural population. Even in a higher-income country such as Argentina, 77% of the people in urban areas, but only 29% of those in rural areas, have access to safe water.

To illustrate this disparity, an "equally distributed health services index" was calculated for the percentage of the urban and rural populations having access to safe water, adequate sanitation and health facilities. For 50 countries with recent data the index was constructed in a way similar to the gender empowerment measure in *Human Development Report 1995*. The percent-

age of the total population with access to each of the three services was discounted by the degree of disparity in access between the urban and rural populations. The three discounted percentages were then added together with equal weight.

The top five countries in this limited sample are Trinidad and Tobago (0.983), the Republic of Korea (0.977), Tunisia (0.901), Costa Rica (0.884) and Syria (0.858). The bottom five are Zaire (0.201), Liberia (0.212), Sierra Leone (0.213), Mozambique (0.270) and Madagascar (0.272).

For a sample of the 50 countries, the health services index was compared with 1993 real GDP per capita. Relative to income level, the countries most successful in providing people with basic opportunities to lead a healthy life are the Republic of Korea, Trinidad and Tobago, Tunisia, Cuba, the Philippines and Tanzania. Costa Rica, Syria and Zimbabwe also have good records. Relative to the resources at their disposal, Argentina, Ecuador, Morocco, Zambia and Zaire have been the least successful in providing people with access to critical health services.

Source: UNDP 1995c, UNICEF 1996 and Human Development Report Office data.

country is a densely populated “rainbow” nation of the descendants of immigrants from Asia, Africa and Europe who practice most of the world’s major religions—Buddhism, Christianity, Hinduism and Islam. Rather than trying to impose uniformity, the country prides itself on its diversity and social and religious tolerance.

Just as the diversity of plant and animal species in the natural world represents a valuable resource, the diversity of cultures and languages in human society offers a treasury of different ways of looking at the world and of living together.

Of course, different cultures can often be sources of conflict. And in recent years cultures have been pitted against one another as part of increasing ethnic and national conflicts in multi-ethnic states. Many of these conflicts are due as much to an unfair distribution of resources between groups as to intolerance of different ways of life. But they underline the importance of promoting tolerance and respect among different cultures.

Futureless growth—or sustainable development

Growth can be physically destructive—laying waste to forests, polluting rivers, depleting natural resources. While these effects are undesirable enough for people living today, there are even greater concerns for future generations—based on a fear that this form of growth cannot last. Growth may be consuming its foundations. People in many countries are already in debt to future generations (box 2.10).

Issues of sustainability go beyond the environment. What is needed in general is a flexible and resilient social and economic system, resistant to shocks and crises, that can safeguard the possibilities for the well-being of future generations. Protecting possibilities for tomorrow also means not burdening future generations with internal or external financial debts, and not bequeathing them an unstable, undemocratic political system. This demands foresight and leadership from today’s policy-makers, since future generations do not have a vote on current decisions. To illustrate general

issues of sustainability, this section focuses on the environment.

Even countries to be lauded for combining economic growth with advances in human development have a history of rapidly depleting their natural resources. Indonesia in the 1980s had an annual deforestation rate of 1%, resulting in a loss of 1.2 million hectares of forest a year. It responded by outlawing the export of raw logs in the 1980s, but critics claim that logging operations continue to expand in the 1990s. Thailand too has been stripping its countryside: between 1961 and 1988 it reduced forest cover from 55% of the country to 28%. Faced with disastrous flooding, Thailand officially banned logging in 1989, but it appears to continue. To counteract

BOX 2.10

The greening of national accounts

Conventional national income accounts do not fully cover the depletion of natural resources and the degradation of the environment. They thus send the wrong signals to policy-makers.

To correct this, the Statistical Division of the United Nations has been working to supplement the System of National Accounts with a satellite system of integrated economic and environmental accounting. These experimental accounts contain some innovations. One of the most important concerns expenditure for environmental protection. Since such spending compensates for the negative impact of economic growth, it is considered to be a cost, to be deducted from national income.

These satellite accounts involve supplementing both standard balance sheets and income accounts. The first step for each country is to draw up a comprehensive balance sheet of natural resources measured in physical quantities. For some, but not all, it is also possible to impute a monetary value that can be added to physical capital to form an expanded capital account. If the resources are not scarce, their value is zero.

Depletion of capital can now include not just depreciation of physical capital but also depletion of natural resources,

along with the deterioration of environmental quality. When drawing up national income accounts, these environmental losses can then be subtracted to produce a new measure of growth—environmentally adjusted domestic product.

Once these deductions have been made, environmentally unsound production and consumption patterns can be identified—offering early warnings of economic growth that may be leading to unsustainable human development.

This new system has been tested in several countries. For Mexico in 1986–90 it was found that the environmentally adjusted domestic product was 13% less than the conventionally measured net domestic product. The new accounting measures also showed that net investment—which conventional measures showed as positive, at 4.6 billion pesos—was a negative 700 million pesos. Net savings, also assumed to be positive, were actually close to zero.

A case study for Papua New Guinea over the same period produced similar results. There, consumption exceeded output, so net savings were negative.

When such findings are more widely known, both by the public and by economic policy-makers, the nature of economic growth can be evaluated in new and more realistic terms.

Source: Bartelmus 1995.

powerful commercial interests, concerted public action is needed.

Some of the East Asian economies also have had flawed records in air and water pollution—although recently they have been attempting to reform their environmental policies. In Taiwan (province of China) less than 1% of human waste

receives sewage treatment—leading to one of the highest incidences of hepatitis B in the world. The Republic of Korea has similar problems. Much of the tap water is unfit to drink—contaminated with heavy metals and other pollutants—and Seoul has been rated as one of the five worst cities in the world for air pollution.

This kind of pollution and destruction highlights the dangers of pursuing economic growth without regard for long-term consequences. Growth cannot be a sensible object of policy because it is too abstract and unbounded—it implies infinite time horizons and unlimited increases in income. By contrast, the planet's carrying capacity has definite limits.

Many governments are attempting to reform their policies to minimize environmental pollution and destruction. China has demonstrated a strong political commitment to increasing forest cover. It has had an ambitious programme of afforestation over four decades, has recently boosted the survival rates of tree plantings and expects to plant 57 million more hectares of trees during the 1990s.

In many countries grass-roots organizations have played a big part in increasing tree cover. The Greenbelt Movement in Kenya, organized by the National Council of Women, has worked with farmers and schoolchildren to plant millions of trees. Burkina Faso has used a participatory approach in which community-based committees organize tree plantings, pasture improvement and soil conservation.

The costs of unreformed policies are high. Desertification's costs, for example, are estimated to be \$9 billion a year in Africa alone, \$42 billion a year globally. A quarter of the world's land area, 3.6 billion hectares, is affected.

Some mistakenly believe that conservation efforts should be aiming for "sustainable growth" as an end in itself—by maintaining some stock of physical capital, such as factories or infrastructure, and by preserving natural capital, such as oil reserves or forests.

But the real objective should not be sustainable growth. It should be sustainable human development—a goal that is spe-

BOX 2.11

A new measure of national wealth

The World Bank is experimenting with a new way of measuring national wealth. Although the methods of valuation are crude, they have produced some startling results.

Economists had long assumed that the main component of a country's productive wealth is physical capital ("produced assets"). But according to the World Bank's assessment for 192 countries, physical capital on average accounts for only 16% of total wealth. More important is natural capital, which accounts for 20%. And more important still is human capital, which accounts for 64%.

The dominance of human capital is particularly marked in high-income countries. In some, such as Germany, Japan and Switzerland, it accounts for as much as 80% of total capital. But in Sub-Saharan Africa, where human resources are poorly developed, more than half the wealth is still in natural resources. This underlines the importance in poor countries of using income from natural resources to develop human capabilities.

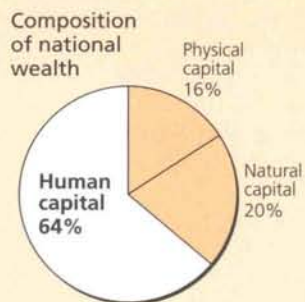
The Bank has also begun to apply a way of assessing whether total wealth is rising or falling. This measure of sustainability, called "genuine saving", represents what a country adds to or subtracts from its net worth. From out-

put, the measure subtracts consumption, depreciation of physical capital and net depletion of natural resources. Depletion of human capital, unfortunately, is not included.

The countries with the best records include Hong Kong, Japan, the Republic of Korea and Singapore. Indeed, East Asia has had a rapidly increasing genuine savings rate since the early 1980s, rising in the late 1980s to 15% of GNP. South Asia too has had a positive rate, though somewhat lower. At the other end of the scale, Sub-Saharan Africa has been dissaving since the late 1970s. By the late 1980s its annual rate of dissaving had reached an astounding 13% of GNP. During the late 1980s and early 1990s the Middle East, North Africa and Latin America and the Caribbean also were dissaving.

While the wealth measure is illuminating, it has shortcomings. Of natural capital, for example, it measures only land, water, forests and subsoil assets—and considers their value to humankind only in monetary terms. It thus excludes such items as species diversity, which has no recognized economic function. A further weakness is that human resources are not estimated directly. Instead, a country's future income is estimated, then a discount rate is applied to calculate current total capital.

But there is a more fundamental limitation to the whole exercise. Equating people's well-being with the monetary value of their capital risks making the same mistake as equating income with human development. Productive wealth has to be converted into human wealth—enhancing people's capabilities to lead healthy, well-nourished, educated and satisfying lives. It cannot simply be reduced to a monetary value, whether of income or of wealth.



Source: World Bank 1995b.

cific, bounded and attainable. Achieving this would mean, to begin with, taking a much broader approach to national accounts—incorporating not just physical capital, but also natural capital and human capital, along with the institutional capital necessary to organize and maintain the process of production.

The World Bank is already experimenting with a fuller set of asset accounts (box 2.11). The initial results are revealing. Many countries are consuming more than they produce—“dissaving”. Sub-Saharan Africa, for example, was dissaving up to 13% of GNP by the late 1980s—in part because of debt repayment and capital flight.

Evaluating the total stock of productive assets is a good start. But it does not go far enough, because it does not consider how those assets are being used. They should be devoted to human development—which means that future generations should be afforded at least the same capacity for human well-being as the present generation.

This means going beyond questions of monetary accounting—setting non-monetary standards, such as those based on the human development index and the capability poverty measure, to ensure that everyone has the means to lead a decent and satisfying life. These standards also have to

ensure that ecological and environmental limits are not violated—especially important because we do not know the long-term implications of disturbing many natural systems. Some damage is irreversible. Sustaining many natural systems supports life and is integral to sustaining human development—they are not separable.

Eliminating poverty is also closely related to sustainability. Concern about equity between generations implies that the lack of equity within the present generation cannot be ignored. Patterns of growth that perpetuate current levels of poverty are neither sustainable nor worth sustaining.

If some members of society are enjoying the benefits of its productive wealth at the expense of the basic human development of others, why sustain this situation? It is both inequitable and damaging to the environment. Many poor people rely heavily on natural resources that are in short supply. Meanwhile, the rich have few incentives to limit their consumption to a level sufficient for their own well-being.

The best solution is to invest in the human development of the poor—by building their human capital and giving them access to credit and to such productive assets as land. This can have a dramatically positive effect on the environment.

Patterns of growth that perpetuate current levels of poverty are neither sustainable nor worth sustaining



Links between growth and human development

Economic growth expands the material base for the fulfilment of human needs. But the extent to which these needs are met depends on the allocation of resources among people and uses and the distribution of opportunities, particularly employment. As argued earlier, the link between economic growth and human development is not automatic. But that link can be strengthened through sensible policy actions.

There is also a key link back. Human development requires, among other things, considerable investment in education,

health and nutrition. The result is a healthier and better educated population that is capable of being economically more productive. Indeed, many modern growth theories explain economic growth primarily in terms of expanded human capital. Growth can also be linked to many other elements of human development—such as political freedom, cultural heritage and environmental sustainability. While these additional links are important, they are not analysed here.

The links between human development and economic growth can make them mutually reinforcing. When the links are strong, they contribute to each other. But when the links are weak or broken, they can become mutually stifling as the absence of one undermines the other. Unbalanced links are the result of rapid human development with little growth or of fast growth with slow human development.

In the long run economic growth and human development generally move together and tend to be mutually reinforcing. A cross-country study found that economic growth has a positive impact on several human development indicators (technical note 4). This is not to say, however, that economic growth will invariably and automatically translate into human development if other important factors are not in place.

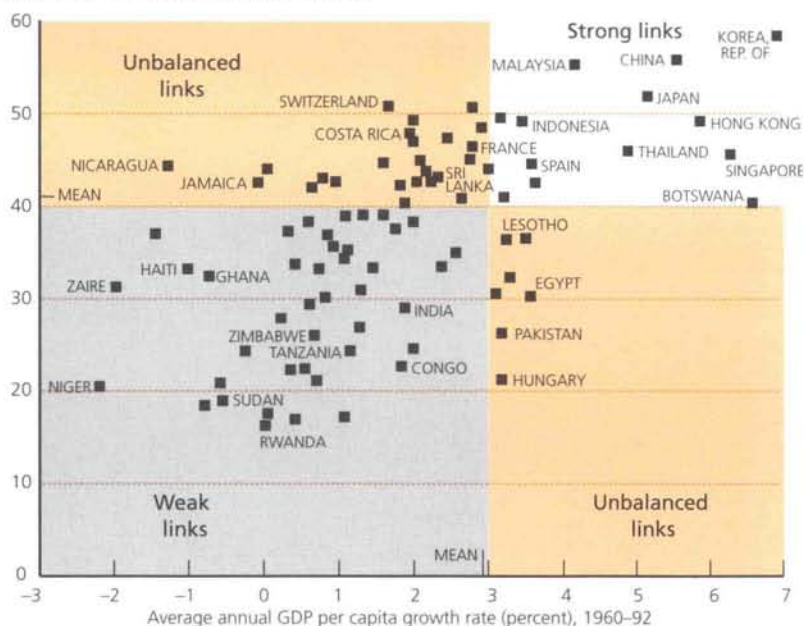
Countries differ in how well they translate income into human development—their “human development efficiency”.

With 3% annual growth in real GDP per capita in 1960–92, Indonesia achieved a nearly 50% reduction in the shortfall of the non-income components of the human development index (HDI*), while Pakistan achieved only a 26% reduction (figure 3.1).

FIGURE 3.1

Long-term pattern of economic growth and human development progress

Reduction in HDI* shortfall (percent), 1960–92



Note: To assess how effectively countries convert income into human capabilities, this exercise focuses on the elements of the HDI that do not automatically go up with income (HDI*). But because of the many human capabilities that are crucially dependent on a person's economic circumstances, the HDI with all its dimensions should generally be used when assessing human development, and only exercises such as this one justify using more limited versions. The divisions in this figure represent the approximate averages for the countries included, and 3% GDP per capita growth is the rate that would double per capita income in a generation.

Source: Human Development Report Office and World Bank 1994a.

And with GDP per capita for Guinea, Senegal and Sri Lanka around \$600, their HDI* levels nevertheless differ markedly, with that of Sri Lanka more than three times that of Guinea and Senegal (figure 3.2).

At each general level of income are countries that convert income into capabilities more effectively than others, countries that constitute the “human development frontier” of efficiency—among them Canada, China, Costa Rica and Sri Lanka. These countries, together with others that lie very close to the frontier, such as Chile and Jamaica, have the highest efficiency.

Countries can improve their efficiency of translating growth into human development. China, Indonesia, Jordan, Malaysia, Tunisia and Turkey had remarkable increases in efficiency between 1960 and 1992. Other countries, such as Costa Rica and Sri Lanka, which have the highest efficiency among developing countries, experienced only moderate growth in efficiency after 1960, and their advances in human development are beginning to slow. And one group of countries had fairly high efficiency in 1960 but has shown little improvement since. Among them are Argentina, Hong Kong, Paraguay and Singapore.

Other countries have an “efficiency shortfall” relative to their income. Italy falls short among the industrial countries, and Hong Kong and Singapore, even with incomes comparable to those of many industrial countries, fall far short. Several countries that have been growing rapidly—such as Botswana and Mauritius—do not show corresponding achievements in capabilities. Among the least efficient at converting income into human development are Congo, Gabon, Guinea and Senegal.

The efficiency of transforming income into human development shows that similar levels of human development can be achieved with markedly different levels of income. But human development’s main concern is with the range of human capabilities available to an individual, and income is relevant only in helping to enhance those capabilities.

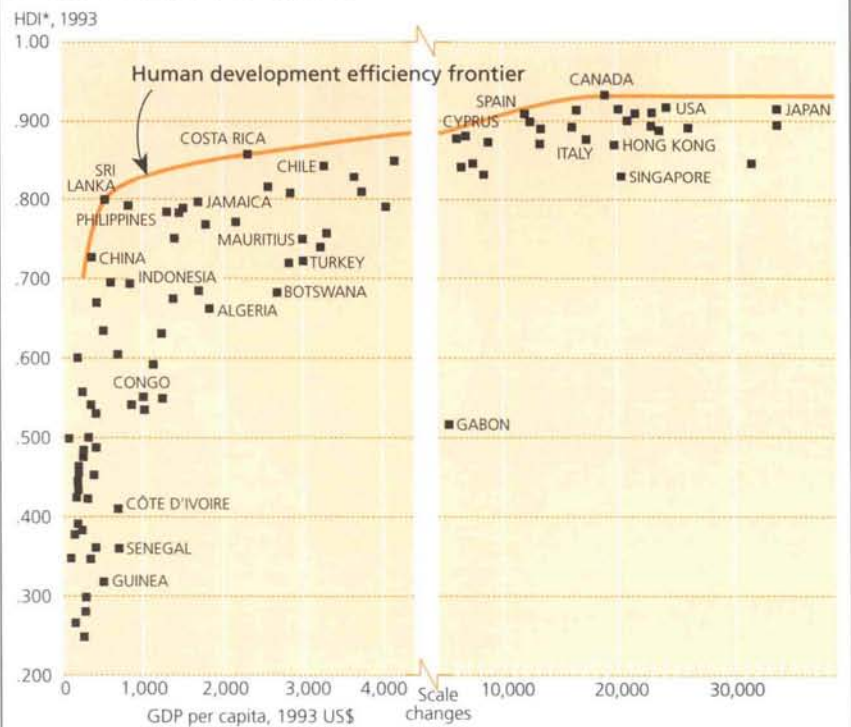
This chapter clarifies two chain reactions in the economic growth–human development cycle (figure 3.3). One leads

from economic growth to human development—growth for people. The other leads from human development to economic growth. The first shows how economic growth contributes to human development—the second how human development contributes to economic growth. In each case the links are strong but neither perfect nor perfectly efficient. But together they can form circles of reinforcing causality, which at their best can help a country advance strongly in human development and economic growth. But if the links are weak or out of balance, a country can go through periods of lopsided human development and lopsided growth.

Links from growth to human development

The chain towards human development has two main sets of links—the influence of household activity and spending on human development, and the influence of government policies and expenditures.

FIGURE 3.2
Income and human development—a general correlation, but far from an automatic link



Note: See note to figure 3.1.

Source: Human Development Report Office and World Bank 1994a.

Household activity and spending

Household activities—though mostly unpaid and therefore largely invisible in national accounts—contribute greatly to human development. Women do the most—managing the household, raising children, caring for the sick and elderly. In addition, their work in voluntary community organizations contributes to nutrition, health and education. The value of this work—much of it contributing directly to human development—was estimated last year at \$11 trillion, a large part of the \$16 trillion in non-monetized global output from such unpaid work. Households also contribute to human development by using their income to purchase food, medicines, schoolbooks and other means for improving capabilities.

The effects of a family's income on human development depend not just on the size of the income but also on how the family chooses to spend it. Poor households spend a large share of extra income on food. But not all goes to additional calorie consumption. Studies in Brazil, India and the Philippines show that some is used to switch to foods that are more nutritious or less monotonous or that take less time to prepare.

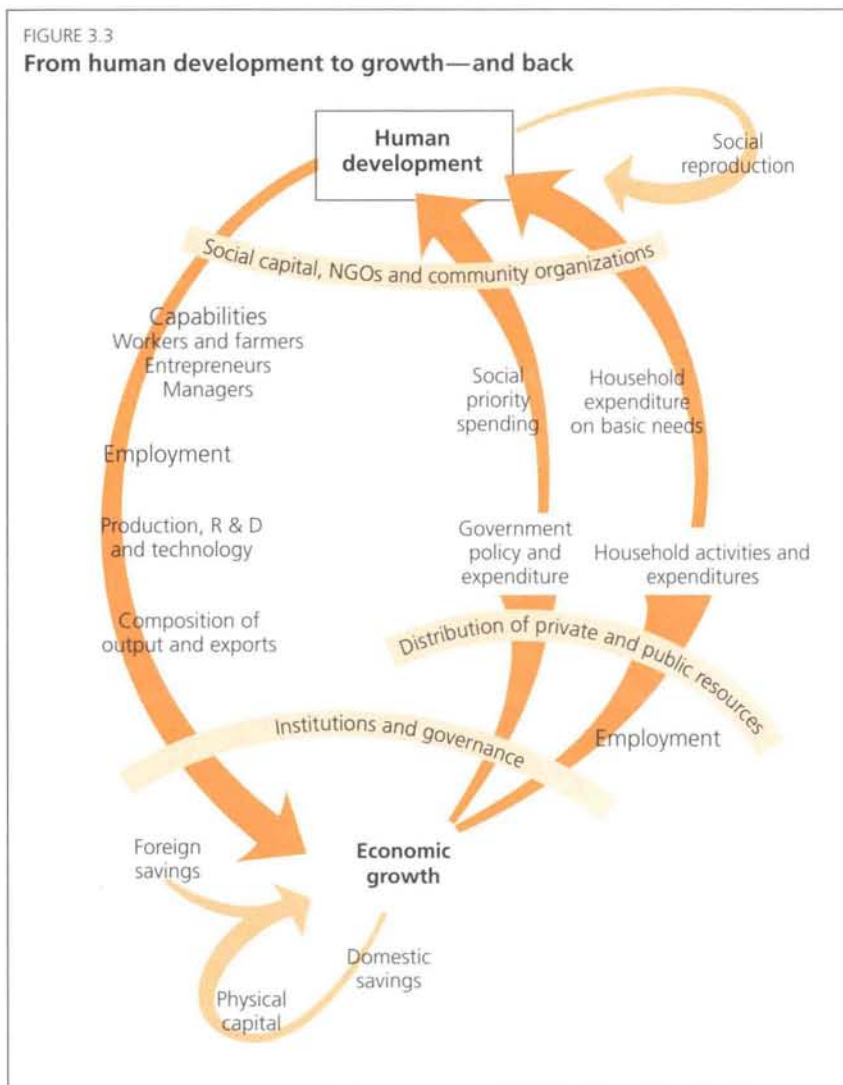
Households also share increases in income with other members of the community. And much is spent on children's education. The Republic of Korea, which over the past three decades has had the largest increase in mean years of schooling in the world, achieved much of this through private spending. Between 1966 and 1975 households provided 65% of total education spending.

Studies in Bolivia, Brazil, Côte d'Ivoire, Ghana, India, Indonesia, Malaysia, Nicaragua, Pakistan, Peru and the Philippines all point to the positive effects of higher family income on schooling. In Brazil it has been estimated that a 10% increase in income is associated with a 5–8% improvement in educational attainment. Families can spend more on school materials, for example, or are more likely to send children to school. And as families' incomes rise, they are in a better position to exert political pressure for better public schools.

A similar mix of effects is evident from a study in Pakistan of the relationship between household income and pupils' school performance. For younger children a 10% higher income is associated with an 8% improvement in cognitive achievement. But only about a third of this improvement is due to the formal education process. More important is the ability of richer families to create an environment more conducive to learning at home and at school. So, the usual way of assessing the effect of income on education—by considering only improvements in school enrolment—may understate the benefits.

Higher incomes also help improve health. Studies in Brazil, Chile, Côte d'Ivoire and Nicaragua show that an increase in household income is associated

FIGURE 3.3
From human development to growth—and back



with improvements in such health indicators as height-for-age ratios, survival rates and life expectancy at birth—and with reduced illness among children. In North-East Brazil a doubling of household spending increases the probability that a child will survive by 6.4% in rural areas.

These studies also show the importance of combining income with greater education. Cross-country analysis identifies per capita income and adult literacy as the most important determinants of life expectancy. In several studies the income effects on health appear to be larger for urban than for rural areas. Why? Possibly because urban areas have more health care facilities, rural areas fewer. So, although increased household income can improve health, the full benefits cannot be realized if health services are not widely available.

The importance of combining improvements in income with better education and better access to health services is graphically illustrated by the experience of the Pacific island state of Nauru, which for many years had the world's highest per capita GNP—thanks to its enormous revenues from phosphate exports. But it used little of this income to improve its education and health services. Instead, mining of phosphates degraded the environment. And as a result of the lack of education, dietary habits worsened as people switched from local produce to imported canned food. Life expectancy is only 59 years—less than that in Bolivia, which has less than a tenth of Nauru's per capita income.

Some families naturally make better use than others of higher incomes. Their choices depend partly on personal preferences and on education—and are conditioned by community knowledge and customs. Crucial is who controls the purse strings.

Several studies suggest that income is more likely to be spent on human development when women control the cash. In the Philippines the greater the share of household income earned by women, the greater the consumption of calories and protein. In Brazil both women's income and men's improve the nutritional status of families, but women's income has an effect about seven times that of men's. In Ghana too,

the greater the share of cereals under women's control, the greater households' consumption of calories.

When women have a say, money is also less likely to be squandered on cigarettes and alcohol. In Côte d'Ivoire it has been calculated that if women had as much control over cash income as men, the share of food in household spending would go up by 9%, while that of cigarettes would fall by 55% and that of alcohol by 99%.

Women's control over funds can also directly improve child survival. A study in Brazil shows that an increase in the non-labour income of women raises the probability of child survival 20 times as much as a comparable increase in non-labour income for men.

Improving the position of women also has strong positive effects on their children. Many studies—including some in Bolivia, Brazil, Côte d'Ivoire, India, Kenya, Malaysia, Nicaragua, Pakistan, Panama, Peru, the Philippines and the United States—show that better education for parents, especially for mothers, increases the likelihood that their children will be educated. The effects also show up in children's health and nutritional status. In rural Côte d'Ivoire 24% of children whose mothers received no education were stunted, compared with only 11% of children whose mothers had some primary schooling. And mothers' education was an important contributor to the impressive health achievements by China, Costa Rica and Sri Lanka, despite these countries' low incomes.

Government policies and expenditures

By contributing to economic growth, government action can add to the material resources for human development. For example, between 1965 and 1975 GDP growth averaged 6.7% a year in Malaysia and 4.1% in Argentina. A constant share of GDP allocated to public and private spending on health, education and other human development concerns would have doubled the resources to these areas in Malaysia, while in Argentina they would have increased by less than 50%. But whether the additional resources are actually used to

Income is more likely to be spent on human development when women control the cash

There are strong economic arguments for government action in support of human development

enhance human development depends largely on the pattern of growth and on the distribution of private and public resources and of the rewards from growth. These factors are interdependent and are affected by government actions.

As discussed in the next chapter, policies can encourage patterns of growth that create jobs, increase real wages and raise market demand for human capital—and thus for the health care and education that enhance this capital. So, by contributing to growth and influencing its patterns, governments influence both the supply of and the demand for human capital.

Human development has great intrinsic value and thus in itself warrants supportive government action. But there are also strong economic arguments for such action. Government intervention may be needed, for example, to rectify market failures that tend to inhibit investments in human development.

Failures in the capital market and in the flow of information reduce households' incentive and ability to invest in human development. Credit for human development is often lacking because lenders cannot easily stake a future claim on human capital (as they can with other types of capital when used as collateral). As a result, people who might be willing to borrow for school or health care because of the high private returns often cannot do so, especially if they are poor.

Failures in information flows often mislead the poor and the uneducated and prevent full awareness of the future returns to themselves and their children from education and preventive health care. As a result, they invest less in schooling and health care than they might if they were aware of these returns. Governments can encourage private investment in human development by making loans accessible and improving information about future returns. By addressing these and other coordination problems, government actions can accelerate a country's progress in human development at low cost.

A very important market failure is attributable to the externalities of human

capital. Households and firms base their investment decisions on private returns, which do not reflect the spillover benefits to those who interact with the direct beneficiaries of the investment. For example, through education a person increases not only her own income but also the income of those with whom she works, because work is often a collaborative effort in which the knowledge of each worker complements that of others.

Several dimensions of human development have social benefits not directly compensated for monetarily. For example, the education of the populace helps contain infectious diseases, and the education of mothers contributes to the health and well-being of their children.

Because of the intrinsic value and positive spillover effects of investments in human development, governments, acting on society's behalf, should make more such investments than individuals or households acting alone.

In principle, governments in wealthier countries could give more support to human development—since the greater the GNP, the more funds available for government spending on human development. But this is not always so—actual spending and the way it is used vary enormously for countries with similar GNPs. Consider some government expenditure ratios introduced in *Human Development Report 1991* (figure 3.4):

- *The public expenditure ratio*—The percentage of national income that goes into public expenditure in developing countries averages about 20–30% of GDP and ranges from 5% to more than 60%. This ratio depends largely on the ability and willingness of governments to collect taxes. As a proportion of GDP, taxes in developing countries are usually 10–20%, only about half the figure for industrial countries.

These low figures result in part from tax evasion. In India a 1985 study estimated that the unrecorded, and therefore untaxed, economy amounted to around 20% of GDP. Studies in other countries (including Chile, Colombia, Indonesia, Kenya and Nigeria) have also revealed widespread evasion.

- *The social allocation ratio*—The percentage of public expenditure earmarked for social sectors, such as health, education, social security, water supply and sanitation is strongly and positively correlated with progress in human development. In 1993 the social allocation ratio—reflecting central government spending on health and education as a share of total central government spending—averaged about 20% for the 61 countries for which data are available. Costa Rica had the highest ratio, with nearly half its central government expenditure going to health and education.

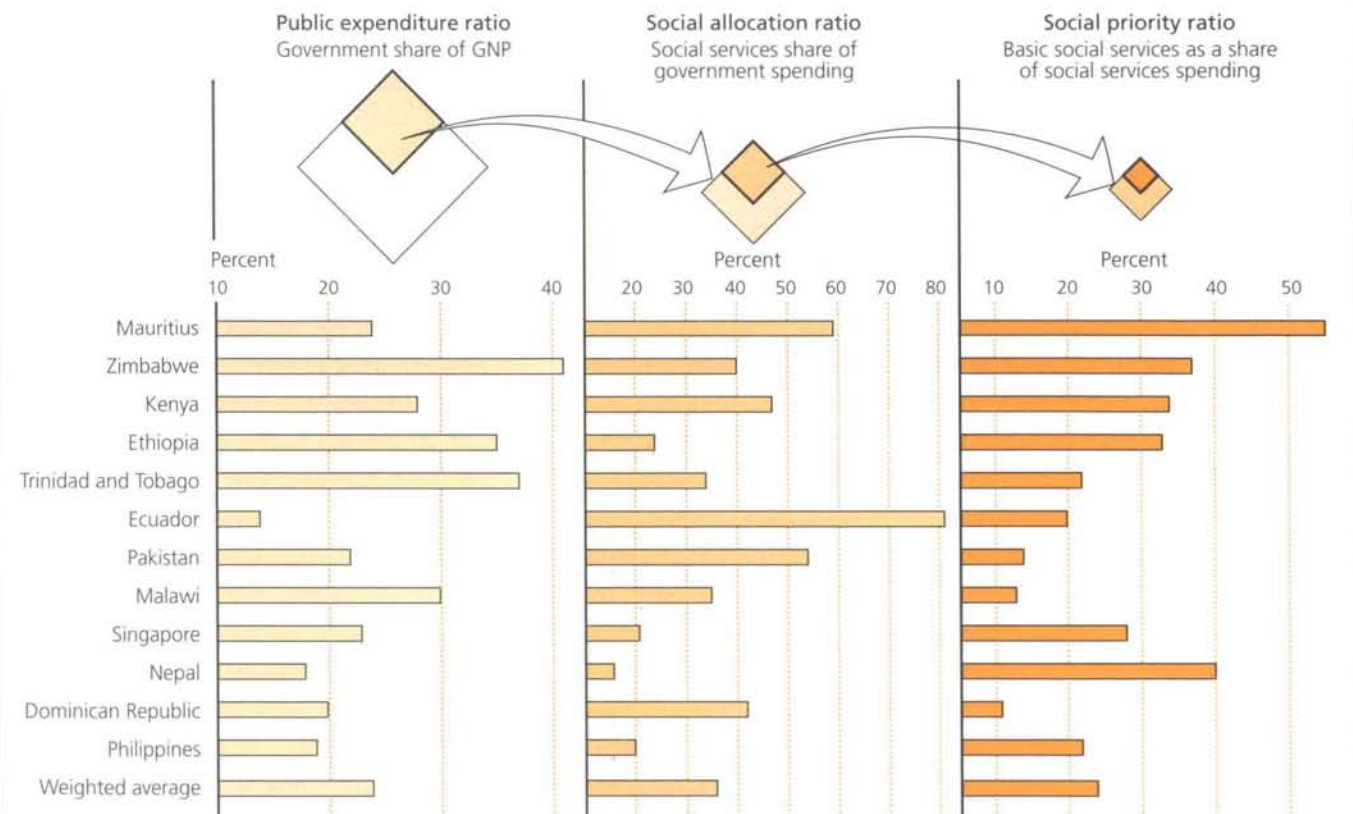
- *The social priority ratio*—The percentage of social expenditure devoted to basic social services—such as basic education, basic health care and nutrition and low-cost water supply and sanitation—depends on the government’s political objectives and how much it yields to the pressure of

different interest groups. For a sample of 12 developing countries for which data are available, the social priority ratio—reflecting only spending on basic education and primary health care—for various years in the 1980s averaged about 24%, ranging from about 11% to 55%.

Generally, the more basic social services the government supports, the better off the poor will be. But even if the proportion of national income going to human development concerns remains unchanged, countries can make more resources available for human development purely from growth in income. In 1960 Botswana and Kenya had virtually the same GDP per capita, and for the next three decades both spent on average 9% of their GDP on health and education. But because Botswana’s GDP growth rate was 6.5%, while Kenya’s was only 1.6%, by 1992

FIGURE 3.4

Spending for social priorities



Note: Ratios are for various years in the 1980s. The public expenditure and social allocation ratios are for central government expenditure. The social allocation ratio reflects spending on health and education only. The social priority ratio is calculated on the basis of current public expenditure on pre-primary and first-level education and recurrent government expenditure on primary health care.
 Source: Murray, Govindaraj and Chellaraj 1993, UNESCO 1993b, World Bank 1993c and Mehrotra and Thet 1996.

Most countries squander huge sums on budget items that do nothing for human development—and frequently undermine it

Botswana was spending five times as much per person on health and education as Kenya. Fast-growing countries thus have the potential—often not realized—for strengthening the chain from economic growth to human development.

Without government action and expenditure, this potential is not likely to be realized. Empirical evidence has shown, for example, that government expenditures on health and education have a significant effect in increasing life expectancy and reducing child mortality (technical note 4). The importance of this relationship is also evident from a cross-country study that found that per capita income and life expectancy rise together. But this positive correlation disappeared once public expenditures on health and the proportion of the population living in poverty were taken into account—showing that economic growth is important only in helping to expand public services and reduce poverty.

In the absence of economic growth, it is certainly possible to engineer significant short-term improvements in human development. Several countries have managed to increase public spending during periods of economic decline. Between 1980 and 1990 Nicaragua increased health spending from 3.2% of GDP to 4.9%, while GDP declined by an average 2.2% a year. But in the long term these improvements cannot be sustained without economic growth.

Diversion of government spending

The social allocation and social priority ratios depend on the government's commitment to human development, as well as on the demands of competing items. In some cases these items may also make a valuable contribution to human development, making it difficult to set priorities. Basic infrastructure, for example, may have a high priority because, as in the case of rural roads, it can boost the incomes of the poor.

But most countries squander huge sums on budget items that do nothing for human development—and frequently undermine it. Probably the worst of these is military expenditure—which in 1994 totalled about \$778 billion. Though indus-

trial countries spent the lion's share (82%), the human development opportunities forgone because of such spending were particularly felt in poorer countries.

Sub-Saharan Africa is still heavily, and expensively, militarized. Between 1960 and 1994 the proportion of the region's GDP devoted to military spending rose from 0.7% to 2.9%. The region's military expenditure is now around \$8 billion—this, in a region where 216 million people live in poverty, more than 120 million adults are illiterate, and 253 million have no access to health services. South Asia does no better—in 1994 it spent \$14 billion on the military, while 562 million of its people lived in absolute poverty.

In making decisions on the collection and allocation of resources, governments are subject to pressures both domestic and international.

At home, governments are often subject to heavy pressure from political and economic elites, who, in promoting their interests, skew government expenditure in favour of the rich.

Subsidies to tertiary education often absorb much public spending at the expense of primary education. This is inequitable, as students in tertiary education are typically from higher-income groups. It uses scarce public money for purposes that private spending could cover. And it makes particularly little human development or economic sense when much of the population is illiterate.

One solution is to insist that people pay more for their own tertiary education—often politically sensitive, but certainly possible. Between 1990 and 1993 the proportion of recurrent costs for higher education funded from tuition fees increased from 8% to 16% in Brazil and Mexico and from zero to 21% in Viet Nam. And fees can be introduced in parallel with scholarships for the poorer students, to provide a measure of equity.

There are similar problems in health services. Spending is often skewed towards high-tech hospitals offering high standards of treatment for the diseases of the affluent, leaving most people without even the most basic health care, particularly in rural areas.

For basic health care, preventive or curative, the evidence suggests that user fees should not be charged. A small contribution can be useful, and communities could contribute. But full-cost user fees can greatly discourage the use of basic health services, especially among poor families, which often need the services the most.

Political and economic elites, in addition to skewing government spending towards their own interests, sometimes drain public finances more directly—through widespread corruption. Former President Marcos of the Philippines is accused of siphoning \$3 billion into the New York property market and Swiss bank accounts. In Haiti the Duvalier dynasty accumulated enormous wealth on the backs of some of the world's most desperately poor people. But corruption is by no means limited to the poorest countries.

Even governments with the best of intentions can find their human development aspirations frustrated by pressures originating far beyond their national frontiers. Demands for the repayment of debt are a major problem for many developing countries and nowhere more so than in Sub-Saharan Africa. Between 1990 and 1993 debt servicing cost this region more than \$13 billion annually—considerably more than its combined spending on education and health. And if governments had met their payment schedules, they would have paid twice as much. Instead, the payments were rolled over, and debt accumulated—doubling between 1990 and 1993.

What else could African governments have done with that \$13 billion? UNICEF estimates that the total additional annual cost of meeting basic human needs for health, education, nutrition and reproductive health for everyone in Sub-Saharan Africa is only around \$9 billion.

Debt problems are also serious elsewhere. With foreign debt of \$11 billion, Nicaragua has the highest per capita debt in the world—each Nicaraguan owes six years of his or her income to foreign banks.

Aid donors, often providing a substantial share of resources, also influence the allocation of funds in many developing countries. Yet they often show too little

interest in social services and even less interest in basic health services, allocating only a small proportion of aid to human development. In 1993 commitments of bilateral aid to education, health and family planning services were on average 13.6% of the aid commitments of 21 major donors.

There is enormous potential for restructuring aid to enable developing countries to increase spending in these crucial areas. The 20:20 initiative promises to increase both national and international resources directed towards the provision of basic social services (box 3.1).

BOX 3.1

Mobilizing resources for human development— the 20:20 initiative

Developing countries are a long way from providing universal access to basic social services. One of the main problems, of course, is finance. UN agencies have estimated that meeting these needs by the end of the decade would require an extra \$30 billion to \$40 billion a year—for basic education, basic health care and nutrition, low-cost water supply and sanitation and reproductive health.

This seems a huge sum—but it is barely a quarter of what developing countries spend annually on their military or to service their debt. And most of the money needed could be mobilized by restructuring existing budgets. To achieve this, *Human Development Report 1994* suggested a “human development” compact, through which 20% of aid flows and 20% of developing country budgets would be earmarked for basic social services.

Drawing on that suggestion, UNDP, UNESCO, UNICEF, UNFPA and WHO launched the 20:20 initiative, and in 1995 the World Summit on Social Development and the Fourth World Conference on Women encouraged interested parties to adopt it. The proposal does not impose any universal recipe for allocations to specific programmes. But it does offer indicative spending targets that would help both developing country governments and aid donors review their programmes and move towards the goal of providing basic social services for all.

Where does implementation stand? The first obstacle is getting an informa-

tion base for monitoring allocations from aid budgets and in national budgets. Effective methods of monitoring achievement of the 20:20 principle are needed at both national and international levels.

Reporting systems differ from one country to another—and often do not analyse expenditures by the required sectors. Among donors, almost none report on aid allocations to the basic social services defined by the 20:20 initiative. Very few even report aid commitments to basic health and education. Those that do are able to identify only minimal allocations to these basic social sectors.

If governments and donors used internationally standardized expenditure categories, this would make possible more serious monitoring of progress and dissemination of relevant information.

Reports on the allocation of developing country spending should reflect expenditure at all levels—national, regional and local. And in addition to spending by the “social” ministries, they should include relevant spending by other ministries—such as those for rural or urban development. They should also include not only capital but also recurrent expenditure—particularly important for sustaining basic social services.

The 20:20 proposal, if carried through with conviction, could make an enormous contribution both to human development and to the eventual eradication of poverty.

Increased spending on nutrition or education may be welcome, but it is not the whole story. Just as important are selecting priorities and using resources effectively.

- *Decentralization*—Handing down the responsibility for public services to local government can make them more efficient and offer local people a greater say in planning and running them (box 3.2).
- *Efficient allocation*—Expenditure on basic services usually has greater impact on human development and economic growth than expenditure on tertiary education or curative medical services. It is estimated that the social rate of return for all developing countries averages 24% for primary schooling, 15% for secondary schooling and 12% for post-secondary schooling. The social returns to schooling are highest in developing countries with lower levels of schooling. Africa, for example, has estimated social returns of 26% for primary

schooling, 17% for secondary and 13% for tertiary.

- *Complementary inputs*—The input with the greatest power is education. The provision of safe water, for example, often needs to be combined with increased education to be fully effective. Education also affects health and life expectancy because it equips people with the knowledge and means to choose healthier diets, behaviours and life styles.

Educating girls, worth doing for its own sake, also has important spin-off benefits. Educated women are better able to ensure their children's survival and more likely to have fewer children. In a study of the links between education and fertility in 14 African countries from the mid-1980s onwards, secondary education yielded the most consistent benefit—invariably reducing fertility. Primary education was also frequently beneficial—with an effect in half the countries. The three recent success stories in reducing fertility—Botswana, Kenya and Zimbabwe—had the highest levels of female schooling, the lowest child mortality rates and the most vigorous family planning programmes.

Strengthening the links from growth to human development

The strength of the links between income growth and increases in human development depends on several factors. The most important:

- *Equity*—The more equal the distribution of resources, the more likely that income growth will be reflected in an improvement in the life of each individual (technical note 4).
- *Priority social spending*—Governments can greatly influence the state of human development by channelling a high proportion of public revenue into priority social expenditures—particularly through universal provision of basic social services.
- *Income-earning opportunities*—Economic growth is finally translated into improvements in human development through the expansion of income-earning opportunities. Successful pursuit of this objective requires employment-generating patterns of growth.

BOX 3.2

Decentralizing government services

The degree to which public services are decentralized affects the way that government expenditure is translated into human development. Decentralization, widely advocated to improve access to services, has been extended in countries from Pakistan to the Philippines, from Bolivia to the United States.

In principle, decentralization has advantages. One is efficiency: decision-makers who live locally are likely to know more about local conditions, so they should be able to match resources and needs more precisely. Another is accountability: when decision-makers live and work in close contact with users, they are exposed to more effective scrutiny and are under greater pressure to deliver the goods. There are also more opportunities for local people to participate in planning services, and to pay for some of them through local taxes.

Experience also shows that local governments tend to give a higher priority than central governments to human development. This may reflect

the functions that have been delegated to them. But it may also reflect local preferences. Studies in Indonesia found that both the social allocation ratio and the social priority ratio were much higher at the local level, and similar findings emerged from studies in Chile and Zimbabwe. In Bangladesh, however, decentralization was associated with lower social allocation ratios.

In practice, decentralization has been fairly successful in Chile, Indonesia, Malaysia and the Indian state of Karnataka, but less so in Argentina, Bangladesh and Brazil. The weaknesses often arise from a shortage of skills: local officials may have had little responsibility and so received less training than national officials. Moreover, local elites often seize the power that devolves to the lower levels—to the detriment of the poor. But a more general brake on decentralization is that central governments have been reluctant to release to the local level either funds or decision-making power.

Source: Behrman 1995b, Tanzi 1994 and 1995, Klugman 1992, Ranis and Stewart 1994 and Prud'homme 1995.

- *Access to productive assets*—For most people access to economic opportunities is constrained by poor access to productive assets—particularly land, credit and physical infrastructure. The state can do much by levelling the playing field in these areas.
- *Good governance*—When governments enable people to share the benefits of growth and when people participate extensively in public life, there is likely to be a much stronger link between economic growth and improvements in human lives.
- *Community action*—When people act together through institutions, they play a vital part in enhancing human development (box 3.3). Many non-governmental organizations and community groups supplement government activities—extending services to many people who would otherwise remain unserved. But just as important, they play a vital advocacy role, mobilizing public opinion and helping shape human development priorities.

The links between economic growth and human development can be strengthened through a series of well-directed policy actions that address the unequal distribution of private and public resources.

Links from human development to growth

The many ways in which human development contributes to economic growth have often been emphasized. And in recent years more and more studies have documented the strength and diversity of the links between the two. As chapter 2 explains, recent economic analysis has incorporated many of these links into new theories of growth.

A basic fact: Healthy, well-educated people make an economy more productive. But this does not mean that the only purpose of investments in health and education is to improve productivity—or that one should not make investments that do not improve productivity. No one would seriously suggest abandoning investments in health and education even if economic analysis found that such investments had low economic returns. The development of human capabilities is an end in itself.

Moreover, many investments that might seem economically unproductive have high human development dividends. Educating older people well beyond retirement is worth doing in its own right, as is helping the terminally ill lead lives as satisfying as possible. Neither investment adds greatly to the productivity of the economy—but both contribute much to human development.

Many other types of investment in human development do have a positive impact on the economy. Productivity can be increased by improving the capacity and organization of workers and management, enabling the use of higher levels of technol-

BOX 3.3

People acting together

When people have been together for a long time—developing shared norms, values and beliefs that enrich the way they live and work—they possess social capital. This complements physical and human capital—enabling them to be used and managed more efficiently. Creating a climate of trust and cooperation, for example, reduces the transaction costs of doing business and creates an environment in which investment, saving, and employment can grow. Thus, it makes a significant contribution to economic growth.

Even more important, social capital is crucial to human development. People acting as a strong, cohesive community—whether through community groups or other non-governmental organizations—can achieve more than individuals. And this also tends to offer more space for those who otherwise would be weak and powerless.

When people work together in this way, they help develop a virtuous circle as one form of social capital builds on another. The alternative—when social capital decays into individualistic, self-seeking behaviour—is more of a vicious circle, leading to greed, violence and crime.

A secure communal identity also encourages sustainability. When people identify with their community today, they want to see it survive. This gives people a longer-term perspective and so encourages types of development that are more sustainable.

But beyond its contribution to community life, social capital has a much wider influence—affecting the whole process of governance. When local and national institutions are firmly grounded in shared norms and values, they are more likely to be run in an open and transparent fashion, reducing the chances of inefficiency and corruption.

Social capital has played an important part in the human development success of many countries. In Sweden, for example, decades of successfully combining economic progress and advances in human welfare were based on a broad consensus among many parts of society—including churches, trade unions, employers, political parties and government. In Japan the extraordinary advances of the past 30 years were deeply rooted in social customs of cooperation. Other countries have had a less happy experience: part of the reason for the Soviet Union's collapse was the lack of any kind of effective "civic space" outside the government system.

So, how can social capital be developed? In many respects this is not a matter for government—most forms of cooperation are spontaneous and thrive without outside government influence. But governments can contribute, both through expenditure on education that gives people the capabilities to act together, and by ensuring that the many disparate parts of civic society have the space and freedom to develop their full potential.

Source: Coleman 1988, Putnam 1993 and de Vylder 1995a.

The high economic rates of return to schooling do not decline rapidly with the level of development

ogy, attracting foreign investment and technology and strengthening institutions both private and public, including the government and the legal and financial systems.

Human development alone cannot transform an economy. Even skilled and vigorous people need machinery, buildings and infrastructure. Yet here too human development has a bearing, since the quality of investment decisions and policy-making is bound to be influenced by the capacity of managers and policy-makers.

Some of the clearest economic benefits of human development arise from making workers, especially poorer workers, more productive by improving their nutrition, health and education.

- *Nutrition*—Studies indicate that an increased calorie intake can lead to gains in labour productivity of up to 47%—for farmers in Sierra Leone, sugar cane workers in Guatemala and road construction workers in Kenya. Most of the studies show that when workers get more calories or micronutrients, such as vitamins or minerals, their productivity improves almost immediately.

Other studies show long-term benefits. Some in Bangladesh, Brazil, India, the Philippines and Sri Lanka have demonstrated the value of investing in child nutrition, which results in stronger adult workers. In Chile providing children with nutritional supplements generated productivity benefits six to eight times the cost of the original intervention. In Cali, Colombia, a health and nutrition programme for children increased their lifetime earnings considerably—by up to nine times the yearly wage of an illiterate worker.

- *Health*—The overall contribution of a healthy population to economic growth is evident from a cross-country study showing that a 10% increase in life expectancy, equal to 5.7 years in 1970, raises the growth rate by an estimated one percentage point a year. Studies in Côte d'Ivoire and Ghana show the economic cost of sickness: men who had been ill reported lower hourly wage rates and less employment than those who had been well.

- *Education*—The positive effects of schooling show up in many empirical stud-

ies. Research suggests that increasing the labour force's average education by one year raises GDP by 9%. But this holds only for the first three years of extra education. After that, the returns to each additional year diminish to around 4% of GDP. This spotlights a major opportunity. Countries with low initial schooling stand to gain enormously by investing in primary education. But even countries with higher initial schooling can still make substantial gains.

In rural areas the benefits can often be seen in agricultural output. In Ghana, Malaysia and Peru one extra year of schooling for a farmer is associated, on average, with an increase in output of 2–5%.

The broader benefits of education are evident from country comparisons. In 1960 Pakistan and the Republic of Korea had similar incomes. But they had very different primary school enrolment ratios—30% in Pakistan, 94% in the Republic of Korea—one of the main reasons that over the next 25 years the per capita GDP of the Republic of Korea grew to three times that of Pakistan. Indeed, if the enrolment ratio in the Republic of Korea had stayed the same as that in Pakistan, its per capita GDP would have been around 40% lower than it is now.

The high economic rates of return to schooling do not decline rapidly with the level of development. Also clear is that the kinds of education investment that bring the highest returns tend to enhance equality. The returns appear to be highest for basic schooling (primary, and later secondary), for which further expansion will mainly involve enrolling more children from poor families. It has been estimated that a one percentage point increase in the share of the labour force with secondary education is associated with increases of 6–15 percentage points in the share of income received by the poorest 40%. And the total returns are higher for women than for men, another consideration for equity.

Human development and technology

The productivity benefits of education vary according to the technology available. Studies in Thailand, for example, found

that farmers with four or more years of schooling were three times as likely to adopt modern fertilizers and other inputs as were farmers with three or fewer years of schooling. In Nepal the completion of at least seven years of schooling increased productivity in wheat by more than a quarter and in rice by 13%. In India and Pakistan too similar levels of education have been found to increase productivity by 10% or more. Education helps farmers not so much because it provides them with more information—but because it enhances their ability to learn from their experience or that of others.

For industrial production too the new technologies depend critically on an educated and flexible workforce. The success of the East Asian economies depended much on their absorption of foreign technology. Singapore and Taiwan (province of China) raised technology levels by encouraging direct foreign investment. The Republic of Korea put more emphasis on licensing technology, implementing design improvements provided by foreign buyers and importing machinery and copying it through reverse engineering.

None of this would have made a difference if the workers had not been sufficiently educated to adapt the technology and disseminate it. Initially they might have had only simple assembly tasks, but later they were flexible enough to accommodate new technological and market conditions. Particularly important is specific, on-the-job training by employers.

At higher levels of technology it is also important to combine educated personnel with research and development. Where firms have been small, as in Taiwan (province of China), governments have supported them with public science and technology institutes and industrial parks. But where industry has been more concentrated, as in the Republic of Korea, government support has been more through tax incentives that encourage firms to carry out in-house research and development.

To be emphasized is that such research activity can be exploited only if it is linked to market demands—and if local firms are open to new ideas and technologies. India

has educated personnel and many high-level research institutes. But they have not contributed as they should have to rapid productivity growth—partly because of prevailing economic policies and a restrictive attitude towards foreign technology.

India's textile institutes are technically the peer of any in the world, yet they have had relatively little impact. The reason? The government fixed the textile firms' total output, so they had little incentive to expand. It also protected firms from competitive pressures, so they were less concerned about increasing productivity—even by incorporating knowledge on such mundane but critical matters as how to reduce the number of yarns broken during spinning. These controls and regulations are now being removed as a part of India's current liberalization drive.

Human development and trade

One less-emphasized result of the interaction between human development and technology is that it changes a country's pattern of trade—in particular, whether it exports primary products or manufactures. Even “unskilled” workers in a modern factory need the literacy, numeracy and discipline learned in primary and lower-secondary school—skills that give countries with well-educated people an advantage in exporting manufactures.

These skills are particularly important for countries with few natural resources, which have a direct incentive to develop an alternative form of comparative advantage. Japan and Singapore, with few natural resources but an educated workforce, have developed the strongest comparative advantage in manufacturing. But in some parts of Africa the combination of good natural resources and low levels of education limits exports to unprocessed primary products. Many Latin American countries occupy the middle ground: with moderate education and abundant natural resources, they tend to favour processed primary products.

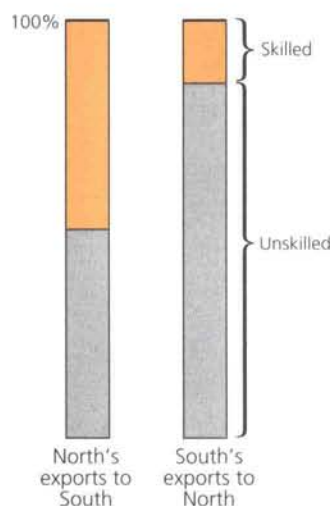
In the long run the terms of trade tend to move against primary products and towards manufactures (now more than 70% of world merchandise trade). Even within

One less-emphasized result of the interaction between human development and technology is that it changes a country's pattern of trade

manufactures, they move in favour of more skill-intensive products, explaining why countries are keen to climb the skill ladder.

Generally, the North's manufactured exports to the South have greater skill content than the South's exports to the North. Even in services the North tends to export skill-intensive products, such as insurance, design and medical care, while the South exports labour-intensive services, such as shipping, tourism and routine data processing (figure 3.5).

FIGURE 3.5
Skill content of exports



Source: Wood 1995.

Human development, savings and investment

One of the hallmarks of the developing countries that have grown rapidly and promoted human development is their success in mobilizing domestic savings for productive investment. The global average for gross domestic savings as a proportion of GDP is 22%. But in Malaysia, the Republic of Korea and Thailand the ratio is between 35% and 40%—and in Singapore it is 47%.

Other countries might claim that they do not have the income to achieve high savings rates—often an inadequate excuse. A poorer country like China manages 40%. The real problem in many countries is that so much of their savings leaves the country in the form of capital flight, debt repayment or profit remittances.

If governments wish to raise domestic savings rates, they need first to maintain positive real interest rates. But they also need to ensure that there are enough productive uses for savings, perhaps by offering firms incentives for the more productive investments, such as research and development. But governments should also offer public goods that complement private sector activity—particularly basic education, basic health and such physical infrastructure as roads, irrigation works and communications systems.

Households make productive investments in future opportunities. For example, when they send their children to school, they are often forgoing income—either because of the cost of education or because of the loss of their children's labour—to finance greater consumption in the future, for themselves or for their children.

As Eastern Europe and the Soviet Union showed, high rates of saving and investment do not guarantee sustained growth. Only when combined with the appropriate mix of human ingenuity and technology, along with a supportive policy and institutional environment, can they make a major contribution.

One way of stimulating this environment is by encouraging foreign investment. Total capital flows to developing countries tripled between 1987 and 1994. The composition shifted markedly away from official development assistance (ODA) and towards private capital flows, which increased from 37% of total flows to 76%. In real terms ODA fell between 1985 and 1993 by 9%.

The stagnation of ODA is especially unfortunate since, for the poorest and least developed countries, it remains the main form of foreign exchange support and the largest source of financing for public expenditures. Aid is also one of the most direct ways of investing in human development. In Burundi aid provided 56% of total expenditure on health and education in 1988. The proportion was also high in Chad (53%), Uganda (48%), Somalia (38%) and Ethiopia (35%).

The sevenfold expansion of private flows might seem to offset this to some extent (figure 3.6). But private funds have mostly ignored the most capital-scarce developing countries, heading instead for the semi-industrialized "emerging markets". Of total flows in 1993, 68% went to Argentina, China, Mexico, Singapore and Turkey. Also concentrated is foreign direct investment, which does more than provide fresh capital—it also brings higher levels of technology. A record 37%, or \$84 billion, is estimated to have gone to developing countries in 1994. Nearly 40% of this went to China. Another 24% went to Hong Kong, Indonesia, Malaysia, Singapore and Thailand. By contrast, Sub-Saharan Africa received only 3.6%, and the least developed countries only 1%.

This bias is understandable. Companies wishing to produce goods of international quality are attracted to locations where they do not have to invest in training workers

from scratch. The United Nations has collected detailed evidence on firms' location decisions that suggests that the crucial factor is a country's level of human development.

Strengthening the links for economic growth

The strength of the links from human development to economic growth depends, first, on the accumulation of human capital—through investments in health and nutrition, education and skill training, and research and development. It depends, second, on accessible opportunities for people to contribute to economic development—through social, political and economic participation. Opportunities for economic participation are the focus of chapter 4.

Strong, weak and unbalanced links

High levels of human development promote economic growth, which in turn can promote human development. Conversely, weak human development is likely to result in low growth, further undermining the prospect of future human development.

The strength of a chain depends on the strength of each link. Weak links can provoke a vicious circle or at least result in development that is lopsided. The chain towards human development relies, for example, on effective public expenditure. But if the social priority ratio is low, economic growth—even if high—may not generate significant improvements in human development, so development is lopsided. Similarly, if income distribution is skewed, many households will not have enough money for food, education and health care, again slowing human development. Egypt, Lesotho and Pakistan are examples of unbalanced links—fairly good growth but slow human development (see figure 3.1 on page 66).

Weak links can also unbalance development in the other direction. In the chain towards economic growth the weak links could arise from government mismanagement, such as policies that introduce factor market distortions discouraging employment-generating production and exports—or savings or investment. Another possible

weak link is a lack of science and technology geared to the needs of the economy. Costa Rica, Jamaica and Sri Lanka are examples of countries with exceptionally good human development but only moderate growth—again, lopsided development.

Once identified, lopsided development can be corrected, though some imbalances are easier to correct than others. It generally is easier to deal with the “good human development and poor growth” problem than with the opposite—poor human development with good growth. Many of the changes to make better use of existing human capabilities, such as new trade or technology policies, can be made quite easily if the political will is there. But correcting for weakness in human development requires a much longer-term effort.

This is not to underestimate the task of strengthening some of the links in the chain towards economic growth, particularly the need to develop appropriate institutions and regulatory environments. As many of the countries of Eastern Europe and the CIS are discovering, this is no easy task.

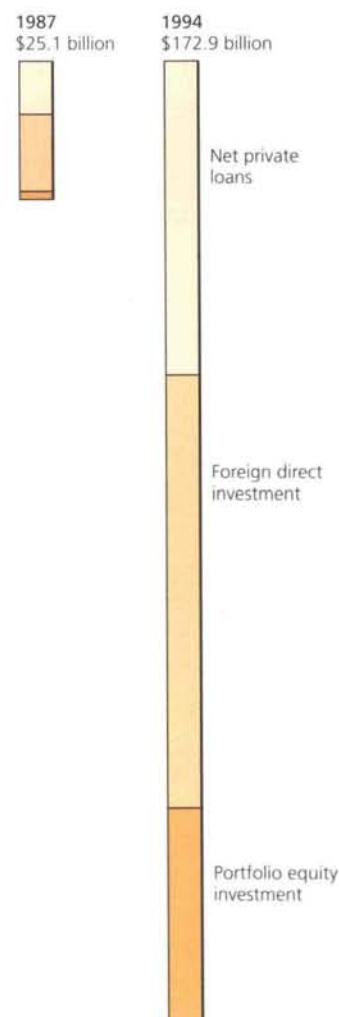
Typology of country cases

For the analysis here, countries have been classified by how much they have grown and how they have used growth for human development.

- *Strong links*—In countries in this category both economic growth and human development have advanced rapidly, reinforcing each other through policy links (upper right quadrant of figure 3.1). Resources generated by economic growth have financed human development and created employment, while human development has contributed to economic growth. Among the most prominent examples in this category are the high-performing Asian economies: Hong Kong, Japan, Malaysia, the Republic of Korea (box 3.4) and Singapore. Some industrial countries are also here—such as Spain and Portugal—as is Botswana.

- *Weak links*—In countries in this category economic growth has been slow or negative, and human development progress also slow, one undermining the other (lower

FIGURE 3.6
Private flows to developing countries



Source: UN 1995d.

left quadrant of figure 3.1). Without economic growth, resources to invest in human development are lacking—and with poor standards of health, education and nutrition, rapid economic growth becomes very difficult. Most of the least developed countries are in this category, such as Bangladesh, Niger and Tanzania.

BOX 3.4

The Republic of Korea—human development fostering equitable growth

Behind the Republic of Korea's rapid advance in human development has been mutually reinforcing growth in education and in employment opportunities. Until the early 1960s the Republic of Korea was a poor country dependent on foreign aid and with high population growth. But by the 1980s GDP had reached middle-income levels and was growing at 9.2% a year, thanks to a well-directed strategy of export orientation, high savings and investment rates and extensive government controls over the economy and labour.

The Republic of Korea's focus on education started at the end of the Second World War. In 1945 only 13% of adults had any formal schooling. By 1960, 56% had primary education and 20% some secondary schooling. Between 1960 and 1990 an average of more than five years of additional schooling was provided for all children. The biggest increase in the world, this brought average years of schooling to 9.9 years (higher even than in OECD countries). There were also big advances in quality: Korean children have some of the highest scores on international scholastic tests.

Why was education pursued so vigorously? In a fairly homogenous postwar society (with few differences of race, culture or language) parents saw education as a good way of achieving social status and mobility for their children. And they were willing to pay for it. A large share of the infrastructure and running costs was met initially by the US Army military government (which financed about two-thirds of the costs of primary schools) and later by foreign aid. Even so, this still left a substantial share for parents. From the 1960s onwards, the push came from the

demands of an export-oriented economy: jobs requiring higher education were better paid.

The government also helped by expanding vocational training. Between 1967 and 1980 it established 26 public training institutes. It also granted subsidies to employers to train their workforces. In the 1980s, with the demands of more advanced technology, the government increased support for colleges and universities.

Also increasing the demand for education was the equality in distributing the fruits of economic growth. In 1947 and 1949 there were substantial land reforms. And after the Korean War, which destroyed most physical capital, assets were distributed fairly evenly. Income distribution remained relatively equitable even through the economic boom between 1965 and 1990.

Rising incomes meant that more parents could afford to pay for education. In 1990, for example, 37% of secondary education was in private schools. This contributed to a big increase in secondary school enrolment between 1960 and 1990—from 27% to 88%.

Just as the education boom was stimulated by export-oriented economic growth, so the economy benefited from a more highly qualified workforce. The government was determined to raise technological know-how and offered subsidies for the import of advanced technologies. Educated workers were able to respond flexibly to the changing demands, and Koreans have moved into many new technological fields with remarkable speed. They are now world-class in the manufacture of automobiles and semiconductors and in telecommunications, aerospace and civilian nuclear energy.

Source: Lee 1995a.

- *Unbalanced links*—Development in this group has been lopsided, with rapid economic growth but slow human development (lower right quadrant of figure 3.1). Links have been weak in translating economic growth into human development. Examples of countries in this category include Egypt, Lesotho and Pakistan.

Development can also be lopsided with rapid human development but slow or negative economic growth (upper left quadrant of figure 3.1). Although achieving human development despite slow growth is commendable, this scenario is not sustainable in the long run and causes social tensions because of such imbalances as unemployment among the educated. This category includes such countries as Costa Rica, Jamaica, Peru and Sri Lanka and the state of Kerala in India (box 3.5).

Countries with strong or weak links may continue on the same tracks for a long period. But those with unbalanced links are in a much less stable position. Social or political upheaval may well lead to weak links. Or appropriate policy action can propel economic growth and human development so that both move forward in a dynamic and mutually reinforcing way.

Decade-by-decade analysis

Although there is no automatic link between human development and economic growth, as is evident in lopsided development, the lopsidedness does not appear to continue for long (figure 3.7). Decade-by-decade analysis shows that while some countries consistently appear in the strong or weak links quadrant in each of the three decades from 1960 to 1992, no country remains in an unbalanced links quadrant. Human development and economic growth eventually converge towards strong or weak links.

Six high-performing East Asian countries—Hong Kong, Japan, Malaysia, the Republic of Korea, Singapore and Thailand—and Israel, Portugal and Spain appear in the strong links quadrant during each of the three decades. In contrast, several Sub-Saharan African countries—such as Niger, Sudan and Zambia—remain in the weak

links quadrant. Some, like Zimbabwe, accelerated human development through considerable investments in basic services (box 3.6). But because of the absence of growth, their efforts were unsustainable.

A number of countries move between quadrants over the three decades:

- *Botswana and Sri Lanka*—move from weak links to strong as human development and growth become mutually reinforcing. In Botswana political commitment helps translate proceeds from diamond exports into gains in health and education. And investments in basic health and education in Sri Lanka in the 1970s bear fruit in the 1980s as industrial growth accelerates. Their progress offers a message of hope to many countries in Sub-Saharan Africa and South Asia still suffering from poor human development and slow growth.

- *China and Indonesia*—start in 1960–70 with fast human development and slow growth. As human capital accumulates, economic growth accelerates, and they move to the strong links quadrant in 1970–80 and towards even faster growth in 1980–92.

- *Argentina and Honduras*—accelerate human development during the 1980s, despite persistent slow growth. They move to lopsided development in 1980–92 as human development accelerates while growth remains slow.

- *Barbados and Mexico*—experience rapid economic growth in the 1960s that falters in the 1970s and ceases in the 1980s. Although human development improves at above-average rates throughout the three decades, failure to restart growth could threaten future human development. The links between growth and human development must be constantly nurtured to remain mutually reinforcing.

- *India*—remains in the weak links quadrant with low human development and low growth during the 1960s and 1970s. It moves to lopsided development in 1980–92 as growth accelerates while progress in human development remains slow.

- *Cameroon, Malawi, Pakistan, Sierra Leone and Trinidad and Tobago*—alternate between unbalanced links with high growth and low human development and weak

links. Throughout, they maintain slow human progress and as a result are unable to sustain growth.

- *Brazil, Egypt and Lesotho*—experience relatively high economic growth in the 1960s and 1970s with below-average human development. They are unable to fully translate their growth into better education and health, however, and by the 1980s their lack of broadly based human capital acts as an important brake on their rapid growth. Faster human development in these countries in the 1980s promises

BOX 3.5

Kerala—sustaining human development through public action

With a population as large as Canada's (30 million), and despite decades of low income and low-productivity growth, Kerala has made human development gains that outstrip those of other Indian states and many developing countries.

The critical conditions for Kerala's progress are replicable: mass literacy, agrarian reform, improvement in the status of the oppressed castes and enlightened attitudes towards girls' and women's education and status. All these have been supported by public policy at the state level.

Kerala's HDI ranks it highest among Indian states and more than 20 places higher than India. Its health indicators are similar to those of high human development countries. Male life expectancy (69 years) is 10 years higher than the Indian average and equal to Hungary's. Female life expectancy (74) is 15 years higher than the Indian average and higher even than Russia's. And there are no great disparities between urban and rural areas.

A critical factor in health has been good nutrition. Kerala, although not self-sufficient in food, has the best public food distribution system in India.

Education has had a strong and consistent political commitment in the state. As far back as 1819 the ruler of Travancore in south Kerala called for the state to meet the cost of education. Universal literacy was achieved in 1991.

Women in Kerala have shared the benefits of education and health with men to a far greater extent than elsewhere in India. Women's status in

Kerala is reflected in its 1991 sex ratio of 104 females to 100 males, higher than Japan's 103 to 100. Matrilineal social structures and lack of organized social opposition to women's education and social and economic advancement contributed to women's progress, although gender discrimination still persists in many areas.

The breakdown of the oppressive and hierarchical caste culture has also been crucial in Kerala's progress. Its people were once burdened with one of the most brutal caste systems, including untouchability and extending to inapproachability and unseeability. Social reforms in the early 20th century ended these practices. They were helped by strong peasant movements and the left-led state government.

A pressing challenge remains the crisis in employment and production. After years of little growth since 1970, per capita income in Kerala is below the Indian average.

But the tide of growth seems to be turning. Between 1987 and 1992 Kerala's annual rate of growth in per capita income (6.2%) was almost twice that of India (3.8%). Industrial growth improved, and stagnation in agriculture gave way to 7.5% annual growth.

The next challenge for Kerala is to accelerate productivity growth to raise living standards and sustain economic opportunities. But it cannot rely on income growth alone. It must build on the human development gains of public action—by people, their organizations and the state.

Source: Ramachandran forthcoming, Shiva Kumar 1996 and Dreze and Sen 1995.

to reverse the decline in their growth rates.

After impressive advances in basic human development and rapid growth, Eastern Europe and the CIS countries suffered from weak links during the first half of the 1990s. Russia, for example, experienced a downward spiral of declining human development and reduced growth (box 3.7).

During 1960–92 not a single country succeeded in moving from lopsided devel-

opment with slow human development and rapid growth to a virtuous circle in which human development and growth can become mutually reinforcing. Every country that has been able to combine and sustain both rapid human development and rapid growth did so by accelerating advancements in human development.

Policy recommendations for countries with weak links

Countries with weak links need a major effort to generate and accelerate growth through investment in human development. Growth is needed to sustain improvements in human capabilities, and these in turn are needed to accelerate growth.

Experience suggests that no country undergoes a structural transformation of the economy without raising basic education levels. The well-known links between female education and fertility, between education and productivity and between mother's education and children's educational attainment all explain why this is so.

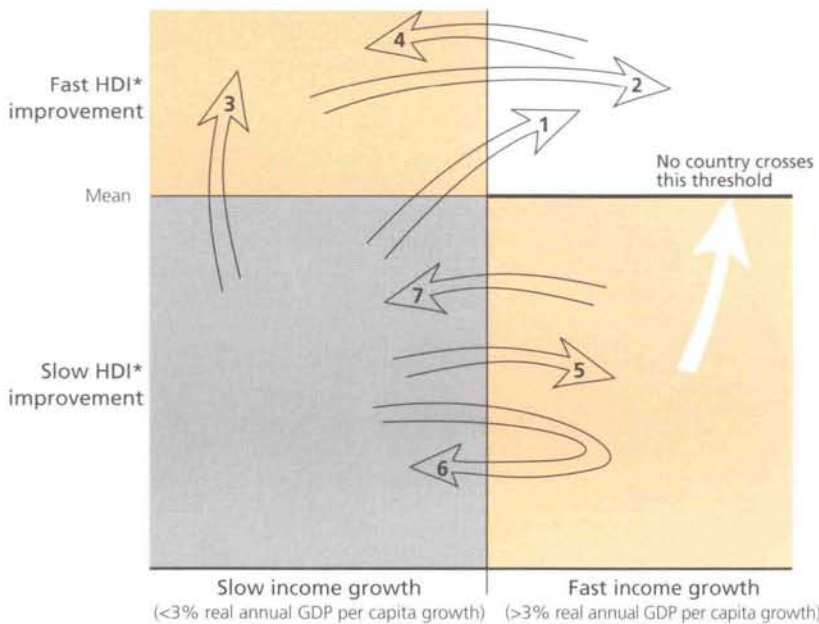
From a policy perspective, a basic level of human development, particularly minimum literacy and universal primary education, must set the stage for the process of transformation and sustainable growth. This need has become even more compelling as the global economy becomes more integrated and countries must compete more in the global market. Without a labour force with basic skills, a country cannot adapt to changing market conditions and climb the ladder to the production of goods requiring higher skills.

The rapid growth in the 1960s in some African countries with weak links was short-lived because it was based on a commodity price boom and undiversified economies. These countries need to accelerate their economic growth to initiate and sustain improvements in human development. Although many have achieved significant improvements in human development with modest growth, the pace of improvement slackens with economic decline. In Côte d'Ivoire, for example, primary school enrolment grew steadily from the 1960s to 1979. But it began to taper off, and by the 1990s

FIGURE 3.7

Synergies, dead ends, reversals and traps

Decade-by-decade reduction in HDI* shortfall (percent), 1960–92



Income and human development progress by decade
(percent)

Country	GDP per capita growth rate			HDI* shortfall reduction		
	1960–70	1970–80	1980–92	1960–70	1970–80	1980–92
Pattern 1						
Botswana	2.4	11.4	6.0	10.9	15.0	21.1
Sri Lanka	2.1	2.8	3.0	10.1	15.2	22.1
Pattern 2						
China	1.7	4.1	10.0	24.9	23.4	23.3
Indonesia	1.5	4.8	4.0	16.2	17.9	25.7
Pattern 3						
Argentina	2.5	1.2	-0.7	9.0	13.6	19.5
Honduras	1.5	2.2	-0.8	13.0	17.6	20.3
Pattern 4						
Barbados	6.4	2.5	0.1	17.6	18.3	26.5
Mexico	3.7	3.5	0	15.0	16.5	19.3
Pattern 5						
India	1.6	0.8	3.0	8.5	10.2	13.3
Pattern 6						
Cameroon	-0.3	5.1	-2.1	8.5	10.2	14.0
Pattern 7						
Brazil	3.3	6.0	-0.7	11.4	12.9	15.5
Egypt	2.9	5.7	2.3	9.1	10.1	14.8

Source: Human Development Report Office and World Bank 1994a.

the growth in primary enrolment was no longer keeping up with the increase in the school-age population.

At the rates of progress that prevailed between 1970 and 1993, these countries will not achieve the HDI of industrial countries for nearly 65 years. At the rates prevailing during the same period in a country such as Mozambique or Niger, it would take more than two centuries to reach the HDI level of industrial countries.

Countries in South Asia that experienced both slow human development and slow economic growth during the 1970s should work to translate their now-accelerating economic growth into enhanced human capabilities. Efforts should be directed to enhancing the quality of the growth, by improving the distribution of income and by focusing on employment creation and poverty reduction.

Accelerating the pace of progress calls for policy change—and a long-term commitment by the leaders and the people to pursue universal education, literacy and minimum standards of health. National, regional, local, community and family goals must be set.

Financing this acceleration will require restructuring both public and private resources. There is scope for such restructuring: military spending is on the rise in some of these countries. For Sub-Saharan Africa it totals \$8 billion, nearly enough to achieve universal primary education and provide basic health care, nutrition and family planning. In several countries the annual deficits of loss-making public enterprises far exceed the budgetary provisions for health and education. The budgetary allocations for social services can sometimes be doubled or tripled by selling off such enterprises.

Resources also need to be reallocated within sectors, away from prestigious development projects and towards human development priorities that benefit the people broadly. Budgetary subsidies should be reserved for social programmes that reach the masses rather than those that benefit a few elites—for primary health care services rather than urban hospitals, for basic education rather than universities.

A useful exercise in all countries would be to prepare a transparent breakdown of their budgets to show the real beneficiaries of budgetary allocations. Additional resources are always desirable, but the immediate challenge is to reallocate exist-

BOX 3.6

Zimbabwe—two steps forward, two back

After independence in 1980 Zimbabwe invested heavily in human development, devising several innovative programmes for accelerated action in education, health, housing and water and sanitation. But in the late 1980s this investment faltered under the pressure of adjustment and because the government failed to develop economic opportunities to use the people's improved capabilities. Between 1980 and 1987 Zimbabwe's human development index increased from 0.386 to 0.576; by 1990 it had dropped back to 0.398.

Zimbabwe's first majority government adopted a policy of "growth with equity" and emphasized social development. Health was high on the list. Before independence per capita spending on health for whites was seven times that for rural blacks, and infant mortality among rural blacks was ten times that among whites. The new government concentrated on primary health care in rural areas. In its first two years it raised health expenditure by more than 60% and maintained it at around 5% of spending throughout the 1980s. It expanded immunization and other priority health actions. Infant mortality fell from 82 per thousand live births in 1980 to 67 by 1990. And life expectancy rose from 54 to 58 years.

There was a similar push in education. Before independence black school enrolment was 50% or less. The new government made primary education free and compulsory for all, and built thousands of new schools. To allow rapid expansion of the teaching force, it developed the innovative ZIMTEC programme for training teachers on the job. School enrolment shot up to 100% of eligible children.

At first this social spending was financed from an economic boom. In 1980 and 1981, thanks to good rainfall, high world commodity prices and agri-

cultural pricing policies that rewarded producers and helped stimulate domestic demand, Zimbabwe's GDP increased by 7% a year.

The boom was short-lived, however, and two years of drought and declining per capita GDP followed. Then came a revival and another decline. This boom-bust pattern is due in part to the vagaries of weather. But the severity of the bust periods is also due to extensive government controls that reduced the economy's productive efficiency. The problems were compounded by high public sector spending that for most of the 1980s produced fiscal deficits of more than 10% of GDP.

Job creation too was inadequate. In 1980–89 formal sector jobs grew from 1 million to only 1.25 million, while the labour force increased from 2.5 million to 4 million. This increased the inequality of income, and the Gini coefficient rose to 0.72.

This poor record was the result of slow economic growth. But it was not helped by policies that made capital cheap relative to labour and encouraged labour substitution. Nor did the government manage to redistribute productive resources effectively.

Faced with slow growth and a high budget deficit, the government embarked on a structural adjustment programme in 1991. This undermined many gains in social development—but has not yet delivered better economic performance. The introduction of user fees for health services, for example, along with rising food prices, has affected health standards. By 1993 infant mortality was still 67 per thousand live births and life expectancy had fallen to 53 years. And in education, budget cuts and the introduction of school fees have reduced both enrolment and completion rates.

Source: Mumbengegwi 1995 and Loewenson and Chisvo 1995.

ing resources. This can be difficult and painful. But the long-term gains are enormous—as shown by the now fast-growing countries, which made early investments in human development.

Massive investment in human development can change countries' comparative advantage in external trade and thus promote growth. Many countries now have a major imbalance between (scarce) human and social capital and (plentiful) natural

capital, condemning them to the export of low-value unprocessed primary products. Recent technological developments can help level the playing field for international opportunities—if countries make the effort to acquire new technical skills.

Policy recommendations for countries with strong links

The challenge for countries enjoying a virtuous circle of rapid improvement in both human development and income is to give even greater attention to human development—including poverty reduction, human rights and environmental conservation and regeneration. These countries should ensure that their high growth rates are fully used for human development.

Although they have achieved considerable human development progress in the past three decades, the human development levels of some of these countries—such as Hong Kong, Malaysia and Singapore—still fall below those of other countries with similar per capita incomes. To bridge this gap, they should target segments of the population that have not fully benefited from overall human development and growth, such as women.

In addition to fully meeting the basic needs of their people, countries in this group need to aim at advancing the higher levels of human development, such as tertiary education. This should ensure their international competitiveness and thus sustain their income growth in the future.

Policy recommendations for countries with unbalanced links

FAST GROWTH AND SLOW HUMAN DEVELOPMENT. A more equitable distribution of public and private resources is needed to address the lopsided development of countries with fast growth and slow human development. More participatory patterns of economic growth, in most cases emphasizing job creation and productivity growth, would help. So would redistributing productive assets and income and emphasizing human rather than physical capital. Redistributing productive assets has long been

BOX 3.7

Russia—into reverse

By international standards the Soviet Union achieved many impressive advances in basic human development over much of the 20th century. Even so, its human development index in 1990 (0.862) was below that of countries with lower incomes, such as Chile, the Republic of Korea, Trinidad and Tobago and Uruguay.

Since 1991 Russia's growth and human development have plummeted. Deep recession and hyperinflation sharply increased unemployment and poverty and exacerbated income inequality. Life expectancy, mortality and morbidity have worsened dramatically. Russia is now struggling to rebound from this downward spiral.

In the late 1980s only about 10% of Russians were living below the official poverty line—set at half the national per capita income. Since 1991 that percentage has more than tripled despite a lowering of the poverty line. Income inequality has soared, and the Gini coefficient rose from 0.26 in 1991 to 0.41 in 1994. In 1991–94 average real wages dropped by more than a third, and agricultural wages by more than half. The working poor have been hit hard: in 1990 the minimum wage was 23% of the average wage, in early 1995 only 6%.

Actual wages (rather than official figures) are often even lower. Many wages are paid three or four months late, in some cases never. And inflation has eroded their real value—as it has for pensions and unemployment benefits. In early 1995 the minimum pension was only about 30% of subsistence income.

While official unemployment is less than 3%, one in five workers is probably

out of work. Many workers are not recorded as unemployed because they are on long-term "unpaid leave". Other workers are not paid. Many are not laid off because enterprises would owe them two or three months' severance pay.

There has been a catastrophic fall in life expectancy, particularly for men. In 1989–90 male life expectancy was 64 years; by early 1995 it was 57.3, and female life expectancy had fallen by more than four years, to 70. No other industrial country has experienced such a sustained decline, and no country has a greater gender gap (almost 13 years) in life expectancy.

The Russian population is shrinking rapidly as birth rates decline and death rates rise. There has been a worrying rise in infant mortality, now four times as high as that in the United States. Mortality among young and middle-aged men has risen dramatically—largely because of the stress of wrenching structural adjustment, the rising incidence of cardiovascular disease and industrial pollution. Homicides, suicides and accidental deaths are on the increase.

The Russian education system is also deteriorating. There has been a sharp drop in teachers' salaries. Secondary and tertiary enrolment has declined. About 17% of teenagers (aged 15–19) were neither studying nor employed in 1994.

Some argue that all such calamities were necessary to lay the foundation for a new society and real economic growth. But need the transition have been so abrupt or so bad? And if growth is revived, will the new order be structured to foster human development?

Source: Standing 1995.

recognized as the most efficient way of promoting equity without hurting growth.

The recent literature on equity and growth suggests that such a redistribution may enhance economic growth. More egalitarian distribution of human capital through investment in education is among the more socially feasible and assured ways of promoting growth by increasing equality.

Improving the equality of distribution of private resources should enable more people to invest in developing their capabilities. For public resources, inequitable and inefficient allocation—rather than the lack of such resources—is often the reason for their limited impact on human development. Reallocating public expenditures within and between sectors to ensure that basic needs are met should enhance the impact of spending on human development. These countries too should give a transparent breakdown of their budgets to show who the real beneficiaries are.

SLOW GROWTH AND FAST HUMAN DEVELOPMENT. To harness the human capabilities in countries with slow income growth and fast human development, a stronger link

between human resource development and the economy needs to be established. Demand for available human resources should be augmented through investment in productive activities corresponding to the skill composition of the population.

For countries with faster human development, skill-intensive productive activities should be considered. Such countries can benefit from the experience of East Asia, where the effect of rising education on growth was augmented through government actions. These included an emphasis on manufactured exports to generate demand for labour—and increasingly for skilled labour. Government action is also needed to strengthen the links between science and technology institutions and the needs of the economy.

Public action along these lines could establish a virtuous circle that would increase both the demand for and the supply of education. One of the most important ways of achieving and maintaining this virtuous circle is ensuring that people have a full range of opportunities to match their growing capabilities, the focus of the next chapter.

More egalitarian distribution of human capital through investment in education is among the more socially feasible and assured ways of promoting growth by increasing equality



Translating growth into employment opportunities

Economic growth has the potential to enhance human capabilities and enlarge people's choices. But for this potential to be realized, there must be a steady expansion in opportunities, to enable people to make improved choices. And for people to have greater freedom to choose among different ways of living, the opportunities need to be more equitably distributed—between men and women, between rural and urban areas, between ethnic minorities and dominant groups, and among all members of society. At the same time, without growth, striving for an equitable distribution of opportunities could well result in a zero-sum game—better opportunities for some but a loss of opportunities for others. This is akin to redistribution of poverty. The goal is to equal-

ize opportunities while expanding them.

The opportunities that are vital in human life are of many different kinds: access to jobs, information and technology, access to productive assets such as land and credit, access to proper shelter, safe drinking water, basic education and health services, and access to physical infrastructure such as good roads, electricity and adequate communications. Equally important are opportunities to move about and speak freely, to pursue cultural and religious beliefs, to participate without discrimination in political processes and in activities of civil society, to be free from exploitation and to lead a life of self-determination and self-respect as a member of a community.

These opportunities are of three broad types—economic, social and political. But the three categories are closely interrelated, and expanding one type of opportunity often helps expand others. Promoting access to education, for example, expands job opportunities (economic), helps people improve their status in society (social) and often empowers them in the community and society (political).

Everyone should have access to these opportunities to participate in economic, social, cultural and political life. They are a basic right. When the world's leaders drew up the Universal Declaration of Human Rights in 1947, they incorporated a holistic vision of rights—extending beyond free political and civil participation to economic, cultural and social development: "Everyone is entitled to the economic, social and cultural rights indispensable for his dignity and the free development of his personality" (box 4.1). Since 1947 a series of conventions and declarations have defined the content of these rights.

BOX 4.1

Commitment to rights to development

International agreements and declarations on rights to development are explicit and far-reaching. Under them, all people have the right of access to opportunities and resources and the right to participate in (and contribute to) national development. These are positive rights that require action—in contrast to negative rights that involve refraining from action. Most political and civil human rights are negative rights—the right not to be tortured, for example.

How can states guarantee such rights when they lack the necessary resources? Treaties and declarations recognize that these rights are goals and objectives to be achieved progressively. What is important is to recognize that these are indeed universal goals.

And how serious are states' commitments to equal rights? Many have not

even signed and ratified the conventions that they agreed to in global debate. Only the Convention on the Rights of the Child has been close to universal ratification (see indicator table 48). One hundred eighty-four states have ratified this document, four have signed but not yet ratified it (including the United States), and four have done neither.

The impressive success of the Convention on the Rights of the Child can be contrasted with the slow ratification of other treaties. Only 133 states ratified the Covenant on Economic, Social and Cultural Rights, 132 the Covenant on Civil and Political Rights and 149 the Convention on the Elimination of All Forms of Discrimination against Women. Countries committed to human rights should work to ratify all the conventions—and then to implement them.

Source: United Nations Centre for Human Rights 1995.

Opportunity for productive work —the key

This chapter focuses on employment—on job creation—because it is the main bridge between economic growth and the opportunities of human development.

The most fundamental of all economic opportunities, employment—or work—provides people with incomes that enable them to establish command over a range of goods and services needed to ensure a decent standard of living.

Employment here means all ways of securing a livelihood, not just wage employment. Many people in developing countries work on their own farms or are otherwise self-employed, often in the informal sector. Nor is work limited to paid employment. People engage in many unpaid activities in the household or community that make a valuable contribution to society—raising children and caring for the sick and elderly, or participating in voluntary organizations or religious groups (chapter 2).

People value their work for many reasons beyond income. Work allows them to make a productive contribution to society and to exercise their skills and creativity. It brings strong recognition that fosters self-respect and dignity. And it gives them opportunities to participate in collective effort and to interact socially.

Work is also closely tied to a way of life, and people elect to do one kind of work rather than another as a life choice. The Tuareg nomads in West Africa manage their cattle—that is their “job”, but it is also a way of life. Moreover, the right kind of employment opens a broad range of opportunities—empowering people not just economically but also socially and politically. For women, earning an income is often critical in gaining more say in decision-making in the family and community.

Growing income and expanding opportunity

Ensuring that economic growth expands employment opportunities that meet people’s aspirations should be restored as a top policy objective in all countries. It also

South Africa’s challenge and example

In the history of nations generations have made their mark through their acumen in appreciating critical turning points and, with determination and creativity, seizing the moment. A new and better life will be achieved only if we shed the temptation to proceed casually along the road—only if we fully take the opportunities that beckon.

We must unite in a New Patriotism to achieve the goal of creating a new society.

The potential for economic growth and development is better than it has been for many decades. But let us be brutally frank.

Despite the welcome growth, very few jobs have been created. In fact, against the backdrop of new entrants into the job market, there has been a shrinkage in opportunities. We need a national vision to lift us out of this quagmire.

If we do not act together in the public and private sectors to develop and implement such a national strategic vision, the danger is that even the modest growth we have attained will peter out in a matter of a few years, as the strains of limited capacity, skill shortages and balance of payments and other constraints start to gather momentum, and as increasing unemployment and accelerating poverty bear down on our society.

The task of government is to harness the energies of the people into a material force for growth and development. What is required is a partnership, among communities, government and the private sector.

Nelson Mandela
President of South Africa

needs to be made a global objective. Meeting this challenge has in recent years become more difficult, and the determination to meet the challenge less sure (see the special contribution by President Nelson Mandela of South Africa).

Unemployment is high and growing, particularly in industrial countries. It has been rising in almost all OECD countries, and in 1993 ranged from 2.5% in Japan to 23% in Spain. Unemployment affects 35 million people, and there are another 4 million or so “discouraged workers” who do not register as unemployed because they have given up hope of finding an acceptable job. Millions of others are employed only part-time. Women figure prominently among both discouraged and part-time workers. They constitute up to 77% of discouraged workers in Australia and 72% of involuntary part-time workers in Japan. Unemployment is also concentrated among the young: youth unemployment is 20% in France and 25% in Ireland and Italy.

In Eastern Europe and the CIS countries unemployment has ballooned (from zero) since the start of reforms in 1990, with

wage employment falling sharply—by as much as 30% in Bulgaria and Hungary.

Even many fast-growing developing countries are struggling to expand employment fast enough to keep up with their growing populations, especially in urban areas. The challenge in coming years is great even for China, which has dramatically lowered its population growth rate and is creating many jobs through a growth strategy based on labour-intensive industries.

In other developing countries, with the notable exception of the fast-growing economies in East and South-East Asia and a handful of others, unemployment problems are acute although different in nature. Unemployment ranges widely, both within and between regions—from 2% in the Republic of Korea to 19% in Trinidad and Tobago. Official unemployment statistics in most developing countries, however, have limited meaning, because much of the employment is in rural areas and in the urban informal sector, both of which are poorly covered in official statistics. But open unemployment is severe and growing in many urban areas, particularly among the youth. In Kenya it has risen to 29%—compared with an average of 10% in urban areas—and in Algeria to 21%.

The jobs that are available are less and less satisfactory. Job security is being eroded. Employment is increasingly part-time and in piecework in industrial countries and in the informal sector in developing countries. In Latin America three-fourths of the jobs created are now in the informal sector. People employed in the informal sector must struggle to use their creativity and entrepreneurship, usually with little capital, few skills and limited technology.

In Eastern Europe and the CIS countries people long accustomed to secure and full employment suddenly face increasing insecurity and unemployment as the public sector restructures and the private sector lags in generating new jobs. Even where the economy is growing, wages are declining. Eastern Europe's five strongest economies—the Czech Republic, Hungary, Poland, Slovakia and Slovenia—grew by an average 3–5% in 1994. But except in the Czech

Republic, nominal wages in industry fell in 1994 and early 1995.

Nowhere is the issue of job security more acute than in the United States, where the economy is growing and unemployment is low, but job security is declining. In a recent survey a third of respondents had had their lives disrupted because they or a member of their household had been laid off.

All this is cause for public concern and debate—from Harare to Paris to Beijing. Politicians promise action but have found it difficult to deliver.

Unemployment today is not just an issue of poor economic growth, particularly in the OECD countries. The old assumption that economic growth would automatically expand employment and wages is increasingly questioned. People are asking why, if the economy is growing at a healthy pace, is unemployment increasing and job security being eroded? And why can people afford less leisure, even as they work harder? Some call it the “end of work”—where the link between economic growth and employment expansion has been weakened, if not broken.

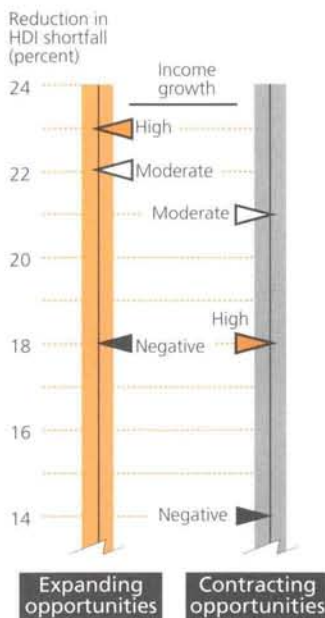
Does economic growth expand opportunities?

Does economic growth expand opportunities? Is jobless growth a reality? Where was there job-creating growth, and how was it achieved?

If employment grows faster than the labour force, there will be some expansion in work opportunities. Although a crude and simple measure, opportunity expansion implies greater chances for people to find work. An analysis of the experience of expanding opportunities during the 1980s, based on data available for 69 countries, came to two major conclusions.

First, growth in employment opportunities is strongly and positively correlated with both GDP per capita growth and reduction in HDI shortfall (figure 4.1). A 1 percentage point increase in the average annual GDP per capita growth rate was associated with an 0.18 percentage point increase in the growth rate of opportunities. And a 1 percentage point reduction in the HDI

FIGURE 4.1
Expanding opportunities coupled with strong growth means human development progress



Source: ILO, *Yearbook of Labour Statistics*, various editions, World Bank 1994a and UNDP 1994a.

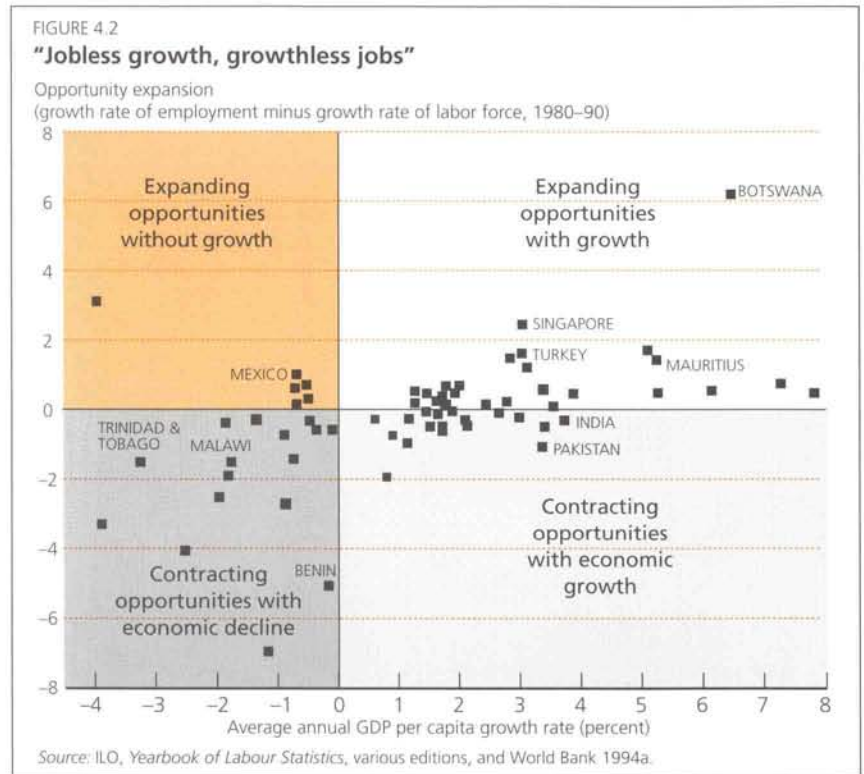
shortfall was associated with a 0.09 percentage point increase in the growth rate of opportunities. These results show that the expansion of employment opportunities depends on economic growth and on the expansion of basic human capabilities.

But income growth will not invariably and automatically translate into expansion of employment opportunities if certain supportive policies are not also in place. Countries with similar rates of growth in per capita income had strikingly different results in opportunity expansion. Put another way, the same opportunity expansion can be achieved with slow or fast per capita growth.

Second, as shown in chapter 1, the 1980s were a difficult decade for growth in Africa, Latin America and the Arab States. Most of the countries in the sample studied fared even worse in expanding opportunities (figure 4.2). Only about a third (27) achieved both an increase in per capita income and growth in opportunities. In another 19 countries opportunities contracted despite growing income. This was true, for example, for Pakistan, which had a healthy growth rate of more than 3% a year (figure 4.3). The other 23 countries had declines in per capita income, so it is not surprising that opportunities contracted in many of them. But in some of these countries employment opportunities expanded. This was only possible through the addition of a large number of low-productivity jobs.

These trends, based on official employment and labour force data, probably overstate the poor opportunity expansion for most developing countries because they omit what has happened in the informal sector. If the informal sector were taken into account, several countries—especially in Latin America and the Caribbean—would probably be characterized as having jobs with growth or even growthless jobs. One such country is Jamaica, where per capita GDP grew by 1.3% a year, opportunities grew at a modest 0.5%, and productivity stagnated.

Even where opportunities expand, job growth might not be enough to absorb the backlog of unemployment, especially in urban areas. The rapid urbanization taking



place creates strong pressure for employment creation, particularly for the youth. An analysis focusing only on urban areas might identify many more cases of growth without opportunity expansion and opportunity expansion without growth.

These trends also show the impact of population growth in developing countries (figure 4.4). In many cases of jobless growth lots of employment was being created, but not fast enough to match the rapid growth in the labour force—such as in India, where employment expanded by 2%, Pakistan (3.5%), Colombia (3%) and Burundi (2.7%). Many countries that generated jobs with growth and productivity increases also had high rates of labour force expansion, such as Botswana (3.4%), Turkey (3%), Malaysia (2.9%) and Chile (2.7%).

Productivity improvements are necessary for both sustained growth in GDP and wage increases. Productivity increases were registered in almost all countries that achieved growth with opportunity expansion. This is an ideal scenario: sustained economic growth contributes to opportunity expansion, reducing unemployment and spreading productivity gains among the growing number of employed. But produc-

FIGURE 4.3
Same employment growth, different labour force growth

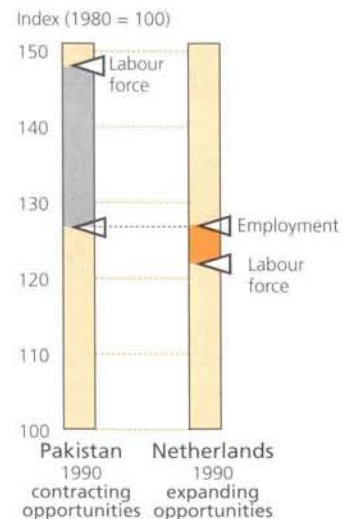
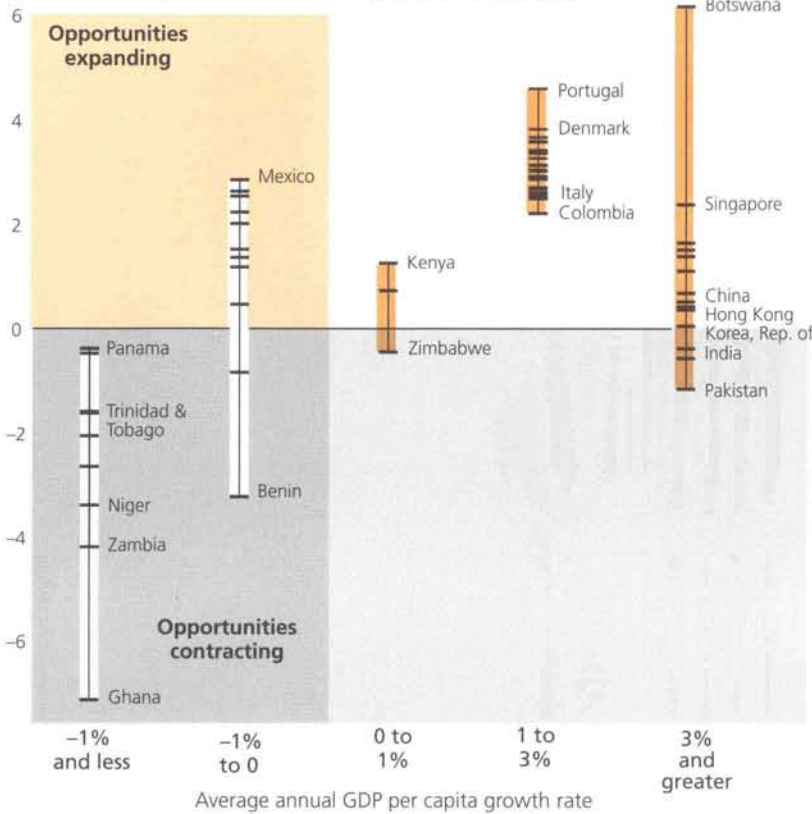


FIGURE 4.4

Opportunities expand at different rates despite similar income growth

Opportunity expansion

(growth rate of employment minus growth rate of labor force, 1980–90)



Source: ILO, *Yearbook of Labour Statistics*, various editions, and World Bank 1994a.

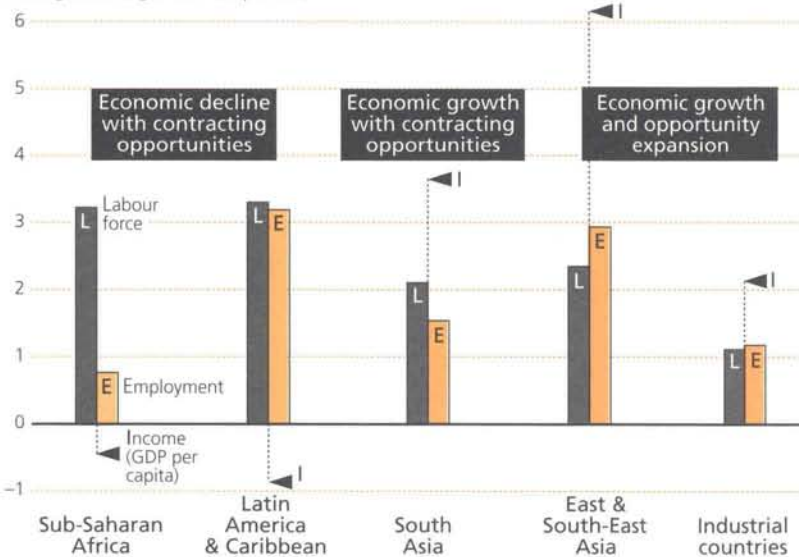
tivity also rose in some countries that experienced jobless growth, such as Colombia, India, Pakistan, Sri Lanka and Zimbabwe among the developing countries and Austria, France, Italy, Norway and Sweden among the industrial countries (figure 4.5). In this situation income and productivity growth benefited only those lucky enough to be employed, while unemployment grew and disparities between the employed and the unemployed widened. In Sweden per capita income rose by 1.7%, productivity by 1.5% and employment by 0.5%. But with labour force growth at 1%, opportunities shrank by 0.5%.

A country's total productivity can rise even when there is stagnation and unemployment. This could arise from the elimination of low-productivity jobs. Such productivity gains come at the expense of employment, as is often the case with stabilization policies, causing pain today in the hope of recovery tomorrow. In Benin and Ghana, for example, which implemented major public sector retrenchment programmes during a recession, total employment shrank, as did per capita incomes. Employment opportunities contracted by 5% a year in Benin and by 7% in Ghana. But productivity rose by 5% and 6%.

FIGURE 4.5

Opportunity expansion by region, 1980–90

Average annual growth rate (percent)



Source: ILO *Yearbook of Labour Statistics*, various editions and World Bank 1994.

Employment-creating growth—and the synergy with capability expansion

What lessons can be drawn from these divergent experiences? Economic growth is a major determinant of expanding opportunities, but that is not the end of the story. The 27 countries achieving growth with opportunity expansion include 12 industrial countries with moderate growth, among them Canada, Switzerland and the United States. The rest are mostly the high-growth East Asian economies and others now following high-growth strategies, such as Chile, China, Mauritius and Turkey.

These developing countries had high growth (more than 3% per capita a year), but their growth pattern clearly favoured sectors with high potential for both job creation and productivity increases. Some of these, such as the Republic of Korea and

Singapore, adopted such a strategy well before the 1980s and succeeded in reducing unemployment. Another important element was the synergy created when this type of growth was combined with rapid improvement in the skills of workers.

Thus, whether growth expands the opportunities for work—and contributes to human development—depends not just on the rate of growth but also on its pattern. It depends on what is produced, by whom and how, on the composition of output and the technology used, on the organization of production and on the distribution of such productive assets as land and financial capital. All these affect the amount and kind of employment generated. And all are responsive to policy (figure 4.6).

So, in pursuing growth, countries have choices—between growth that generates much employment and growth that generates little or none at all, between growth that raises wages and growth that suppresses them, between growth that improves working conditions and growth that keeps them miserable and between growth that secures livelihoods and growth that makes life precarious. In short, countries have a choice between growth that improves the quantity and quality of work opportunities and growth that does neither.

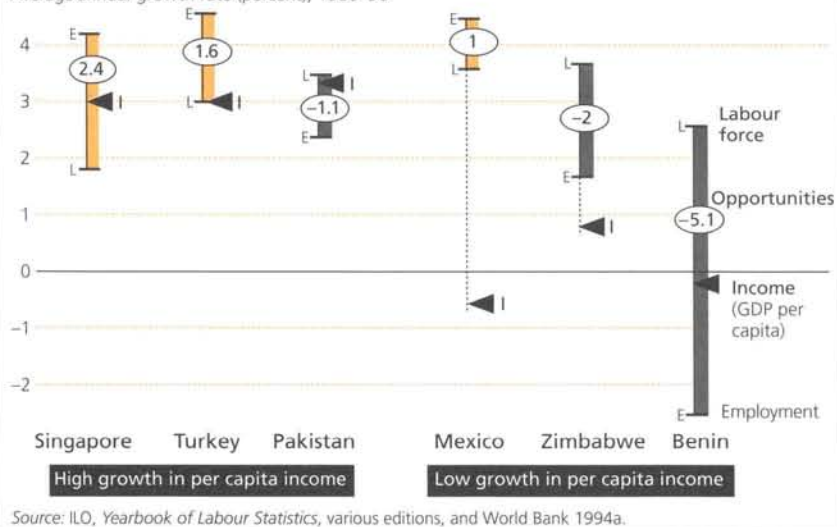
The quality of work is especially important. Much work is hard, exploitative and dangerous—more burden than blessing. Child labour is an extreme case of such exploitative work (box 4.2). So, if work is to enhance human development, it must also be creative, safe and secure, and it must meet people's choices and aspirations. Where sustained economic growth was combined with opportunity expansion, high growth translated not only into more jobs but also into higher wages. During 1960–90 real wages rose by nearly 8% a year in the Republic of Korea (figure 4.7).

At the same time, education expanded rapidly. Production was shifted progressively to higher-skill and higher-wage sectors. These shifts to higher-productivity sectors were made possible by the progressive improvement in workers' education and skill levels, investments in research and

FIGURE 4.6

Countries with similar growth in income vary in opportunity expansion

Average annual growth rate (percent), 1980–90



BOX 4.2

The unjust employment of children

Millions of children are put to work in ways that deny them their right to childhood. These children invariably work long hours every day in poor, unhealthy and hazardous conditions—knotting carpets, packing matches into boxes, picking garbage, carrying molten glass—without respite and recreation. Such work frequently leads to chronic illnesses, destroyed eyesight, physical and intellectual stunting and, in many cases, even premature death. Most of these children belong to marginal communities and to socially and economically deprived groups. The worst consequence of all may be that child labour keeps children out of school, thereby preventing the development of their capabilities—a priority for a long-run solution to poverty and exploitation.

The unjust employment of children, unlike unemployment and underemployment, has received little attention until very recently. Estimates of the number of employed children vary from 14 million to 100 million in India, 2 million to 19 million in Pakistan, 5 million to 15 million in Bangladesh, 2 million to 7 million in Brazil, 1.3 million to 13 million in Mexico and some 12 million in Nigeria. In Africa more than 20% of children are considered to be working, and in Latin America between 10% and

25%. Some of the most widespread forms of child labour—domestic help, agricultural and bonded workers, especially girls—are largely invisible.

Child labour is not an economic compulsion of all poor families. It is the consequence of extreme social and economic exploitation. How can it be eliminated? By prevention.

The only way to prevent child labour is to recognize that children's rightful place is in school, not in the workplace or in the house. So, the first step is to ensure compulsory primary education for all children. Historically and worldwide, wherever child labour has been abolished, this is how it has been done.

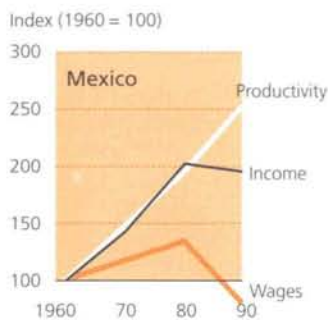
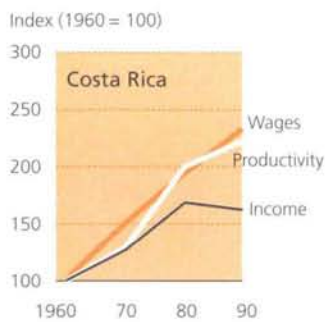
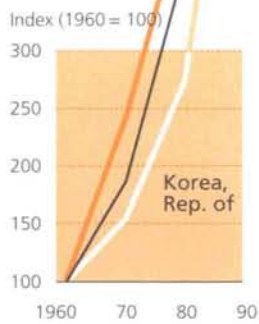
At the same time, a set of complementary measures need to be put into place: income enhancement programmes for the poor, payment of minimum wages, the empowerment of women, enactment and enforcement of appropriate laws, and social services for the families of child workers.

More broadly, public action must be mobilized along all fronts: among non-governmental organizations, trade unions, the media, human rights activists, trade associations, employers organizations and children, to change attitudes towards child labour and to build public pressure against hiring children.

Source: ILO and UNICEF data.



FIGURE 4.7
Productivity and real wages



Source: Tokman and Infante 1995.

development and progressive technological advance. Birdsall, Ross and Sabot explain how in the Republic of Korea, the rapid rise in employment and incomes fuelled the demand for education. Families had more disposable income, but they also saw the potential returns to investing in their children's future as the wage differential between skilled and unskilled jobs increased.

This pattern of growth—with full employment and rising wages—was one reason behind the reduction in poverty and inequality that accompanied high growth in Japan, Mauritius, the Republic of Korea and Singapore.

This experience contrasts with that of such Latin American countries as Brazil, Chile, Colombia, Costa Rica and Mexico. These countries too achieved high growth during 1960–80, ranging from 2.5% to 8.7% a year, but growth faltered in the 1980s.

Employment expanded in the modern manufacturing sector, but not fast enough to absorb the growing labour force. Employment also grew in the service sector, and the informal sector grew exponentially. But most of the jobs in these sectors were not high productivity, increasing the segmentation of the labour market—between the modern sector with high-wage jobs and good working conditions, and the informal sector, service sector and agriculture, all with much lower productivity. In Mexico productivity per worker in agriculture was 20% of productivity in industry in 1960, 21% in 1980 and 28% in 1990. But even the higher rate in 1990 is much less than the 57% in the Republic of Korea for that year. This pattern of growth does not promote reduction in inequalities.

Policies for employment-creating growth

There clearly is no universal recipe for combining growth with the expansion of opportunities in an “employment-friendly” growth strategy. Even so, lessons from successful countries show some of the major components that can be combined in such a strategy.

1. A clear political commitment to full employment

Where employment creation has been most successful, it has generally been the result of a deliberate strategy. Rather than assuming that employment would materialize automatically, political leaders have identified it as a central policy objective.

Back in 1947, when world leaders were still haunted by memories of mass unemployment and hunger marches in the 1930s, guaranteeing full employment was at the top of national and international agendas. These leaders saw unemployment as a threat to individual livelihoods—and to world peace and security.

The Universal Declaration of Human Rights is specific about the right to work. Article 23 of the declaration states that “everyone has the right to work, to free choice of employment, to just and favourable conditions of work, and to protection against unemployment.” ILO Convention 122 on employment policy further reinforces the promotion of “full, productive and freely chosen employment” as a major policy goal.

And historically, the countries most successful in expanding opportunities emphasized employment growth as a policy goal and as an integral part of a growth strategy. Most important, they sustained this policy objective through a long-term vision and commitment. Mauritius adopted full employment as a top priority on its independence in 1968 and pursued it until it was achieved in 1990 (box 4.3). In Japan and Sweden, which maintained the lowest unemployment rates among industrial countries through business cycles and economic ups and downs, there was a long-term national commitment—by government, politicians, trade unions and employers—to protecting employment.

The priority given to employment has driven the choice of development strategy and led to reversals of long-standing policies. Facing rising unemployment in the early 1960s, Singapore adopted a development strategy based on labour-intensive manufacturing industries. China reversed its policy of investment in capital-intensive

industries to favour investment in labour-intensive production, especially for export, and the expansion of the private sector and rural industries (box 4.4). It also reversed agricultural policies, to give greater encouragement to small family plots.

Employment needs to be restored to its place among the top policy concerns of economic management. The macroeconomic frameworks agreed to between governments and the Bretton Woods institutions need to focus on employment—not just inflation, GDP growth, short- and medium-term reforms and short-term fiscal and budgetary targets. They need to set employment targets, which are essential to human development and to sustained future growth.

2. *Faster employment-led growth*

Countries that combined growth with opportunity expansion opted for growth strategies led by labour-intensive sectors in early development stages, when there was surplus labour. They identified the sectors that made the best use of the abundant unskilled and semi-skilled labour and used various policy instruments to promote them. Mauritius established an export processing zone, and Singapore granted tariff protection to labour-intensive, export-oriented manufacturing industries and others that also generated many jobs.

But staying in labour-intensive, low-skill sectors does not improve productivity and incomes. Long-term development strategies must set out to move from low-skill, low-productivity sectors to more skill-intensive, higher-productivity ones. Singapore adopted a strategy for industrial restructuring under its 1979 New Economic Policy, shifting to activities that require more skill-intensive technologies for higher-value-added products, such as semiconductors and communications equipment.

Countries with different resources—and at different stages of development—will find that different sectors have the most potential for job creation. Skills, surplus labour and wages are key elements in this choice. Manufactured exports were central

in many success stories—China, Malaysia, Mauritius and the Republic of Korea. This sector creates many jobs for relatively unskilled workers and for women, and it has the added advantage of promoting faster learning and technology upgrading than, say, mining. Computer software and data processing may be the job-generating sectors of the 1990s and beyond, as India has shown.

But other sectors should not be neglected. For many developing countries

BOX 4.3

Mauritius—commitment to opportunity expansion

Mauritius has consistently given top priority to both capability and opportunity expansion since its independence in 1968. Government policies were aimed at equitable growth through the expansion of productive jobs, full employment and equal access to education. Since 1968 GDP has grown at 5% a year, income inequality has declined (the Gini coefficient fell from 0.42 in 1975 to 0.38 in 1992), life expectancy rose from 62 to 70 years, and the population over age five never attending school fell from 52% to 11%.

When Mauritius came to independence in 1968, the island nation was a one-crop (sugar) economy, suffering from stagnating economic growth, high population growth and widespread unemployment. Yet 65% of men and 51% of women had achieved literacy by 1960, and primary school enrolment had reached 100% for boys by 1950 and for girls around 1970. Commitment to open opportunities began in the colonial times, through the 1946 Ten-Year Development Plan, which was characterized as “an attack on the Mauritian people’s two great handicaps—ill health and inadequate education”—and aimed at democratizing educational opportunities.

The strategy that brought rapid economic growth after independence was built around labour-intensive sectors—expanding the sugar sector by negotiating for European markets under the Lomé Convention, promoting tourism and establishing an export processing zone. Employment expanded rapidly, more than doubling between 1962 and 1991.

Women in particular took advantage of the new opportunities, and the share of women working grew from 18% in 1962 to 35% in 1991. In manufacturing women hold 56% of jobs.

In education too, access was made more equitable as secondary education became free in 1976 and tertiary education in 1988. Other efforts were also made to equalize opportunities, such as improving standards in low-achieving primary schools and guaranteeing access to secondary school for two pupils in any school from which no child otherwise qualified. Government policy protected these priorities during structural adjustment programmes, resisting options to cut spending and impose fees.

Today, the country continues to make concerted efforts to “climb the skill ladder”, to increase productivity and to diversify into higher-skill industry with policies in:

- *Technology*—Incentives have been granted to enterprises using higher levels of technology and skills, even those outside the export processing zone that are manufacturing for the local market.
- *Training*—A 1% levy has been placed on basic salaries for a fund to provide incentive grants for vocational training.
- *Education*—The system is to be overhauled to improve vocational and technical education. Education is to be compulsory to age 15.
- *Credit*—Government controls have been relaxed to improve access to financing for small and medium-scale enterprises.

Source: Dommen and Dommen 1995, World Bank 1992a, Gulhati and Nallari 1990 and Hein 1988.

small-scale farming and industry still offer potential for increasing rural employment and productivity. Many of the poorest countries—once exporters of food—are now net importers with good potential to increase production. Agricultural development strategies can favour small over large holdings, following the considerable evidence that small holdings produce higher yields than large, mechanized holdings (box 4.5).

BOX 4.4

China—new economy, new jobs

Until the 1980s there was virtually no unemployment in China. After 1979 and the upheaval of economic reform, however, it became evident that up to half the labour force in some rural areas had been unemployed or underemployed. And in urban areas up to 25 million were out of work in 1979.

Since then China has reversed long-standing policies and adopted an employment-led growth strategy. Between 1978 and 1993 urban employment increased by 3.5% a year—from 95 million to 159 million. Rural employment increased by 2.5% a year—from 306 million to 443 million.

With the lifting of restrictions on businesses, much of the new urban employment is in the private sector. Unofficial sources suggest that the urban private sector accounts for around a third of all employment—and that it will soon replace the state as China's main creator of new jobs.

Reforms have also benefited employment in rural areas—particularly through the expansion of township and village enterprises. Between 1978 and 1993 these enterprises increased their share of gross national industrial production from 12% to 39%. And by 1995 the township enterprises and other businesses provided almost 35% of rural jobs.

In both rural and urban areas the rise in output and employment is due chiefly to the expansion of labour-intensive manufacturing. In the 30 years before reform most investment went into capital-intensive production. But since the late 1970s China has adopted policies to change the structure of production and investment in favour of labour-intensive

goods, together with open trade and export-led policies. These policies included identifying pillars of industrial output and employment, dismantling restrictive trade regulations and encouraging foreign investment and the subsequent growth of the non-state sector.

The results of the policies are apparent. The share of labour-intensive manufactures in total exports rose from 36% in 1975 to 74% in 1990, while the share of capital-intensive manufactures dropped from 50% to 19%. Employment increased significantly. Between 1985 and 1993 employment in textiles increased by 20%, in clothing and fibre products by 43%, in plastic products by 51%. China is now a major exporter of labour-intensive products to many industrial countries.

The government has been taking an active role in the labour market—helping workers develop skills, promoting re-employment and upgrading employment services. An unemployment insurance scheme has been set up—95 million workers now contribute, and around a third of the officially unemployed receive benefits.

For all its dynamic job creation, China still faces a formidable employment challenge. Economic reforms have released a “floating population” of around 80 million, most of whom are seeking work. The State Planning Commission estimates that some 20 million workers will be shed from state enterprises over the next five years and that 120 million more will leave rural areas hoping for work in the cities. Labour-intensive economic growth will need to continue at a rapid pace if all these people are to find work.

Source: Zhang 1995a.

Other labour-intensive activities are rural infrastructure development and rural industries. In Botswana, another country that combined growth with jobs, government spending on infrastructure, education, public services and other development programmes accounted for 25–30% of employment in the 1980s. Rural industries absorb much labour, often relatively unskilled, and create employment for the rural poor.

In Taiwan (province of China) growth was led by small-scale agriculture. In Japan and the Republic of Korea investment in small-scale agriculture in the early stages of growth kept labour in the rural areas, expanding incomes broadly and equitably. In Japan even today more than 60% of workers are employed in firms with 100 or fewer employees. In these economies the period of rapid economic growth saw a continuous birth and rebirth of such small firms as government policy promoted labour-intensive, small-scale enterprises through special credit facilities and protective government regulations.

By contrast, many countries have promoted capital-intensive sectors, such as extractive mining, or supported large mechanized farms rather than small family holdings. The result is a dualistic economy with a modern sector integrated into the global economy existing side by side with a lower-productivity informal sector.

Many countries have also adopted policies that discourage employment creation, such as overvalued exchange rates and negative real interest rates, which encourage capital-intensive technology. In Pakistan industrial growth has not meant more jobs, partly because small-scale industries suffer discrimination in access to inputs and financing. Large-scale manufacturing industries using capital-intensive technologies have been the main beneficiaries of trade and exchange rate policies—and of credit rationing under artificially low interest rates. And perversely, some of the most capital-intensive industries (industrial chemicals, petroleum products and iron and steel) were highly protected while labour-intensive products (rubber and tobacco) had low or even negative protection.

3. Sustained investments in people—to climb the ladder of skills, productivity and wages

It is not enough to just generate jobs. The aim must be to improve the wages and productivity of all those working, by progressively adopting technologies and moving to sectors requiring higher skills. The effect is to climb the ladder of wage and productivity increases through skill improvements and the progressive expansion of employment in higher-productivity sectors. These new jobs need to be matched by new skills; employment and human capabilities must advance in tandem.

As wages rise, countries need to continuously upgrade their skills and technology and shift the composition of output from unskilled to skill-intensive products—from shoes and wigs to cars and semiconductors.

The ascent is difficult. Increasing the supply of highly skilled labour requires costly tertiary education. It also requires research and development. And it requires industrial policy to ensure that jobs are available for graduates to acquire skills and experience.

High-employment economies have invested heavily in the development of just such human capabilities—from basic education and health to technical education to research and development to in-service training. The Republic of Korea invests \$160 per person a year in education and health, Malaysia \$150. India, by contrast, invests only \$14, Pakistan \$10 and Bangladesh \$5. But beyond formal education, further skill training targeted to productivity increase is needed, in vocational institutions and in research and development (R & D). Asia now has 1.23 million scientists engaged in R & D, more than in Europe (1.1 million) or in North America (0.9 million), but less than in the CIS countries (1.7 million). But most important is training workers in the workplace so that they can master the ever-changing technology and continuously enhance their creative abilities and productivity. The competitiveness of the Japanese automobile industry, for example, is attributed largely to management techniques and worker training by the employer. Techniques developed in the

industry—such as “the quality circle”, which mobilizes workers’ creativity to improve productivity—are now spreading internationally.

4. Pro-employment incentives and other interventions in the labour market

Labour markets do not work as smoothly as commodity markets. Intervention is needed to help people adjust to changing labour markets, and for markets to adjust to human needs.

Small farms—for more employment and more output

BOX 4.5

Small farms make more efficient use of resources than large farms. This proposition has one well-known policy implication: an agricultural development strategy that promotes small rather than large farms can serve both growth and distribution objectives.

Evidence from countries as diverse as Brazil and India indicates an inverse relationship between farm size and output and labour per unit of area. A land survey in North-East Brazil showed that farms of 0–10 hectares had production of \$85 per hectare, while the largest farms, those over 500 hectares, had a gross output of only \$2 per hectare. And a survey in India revealed that farms of 0–5 acres had output of 737 rupees per acre, and farms over 25 acres only 346 rupees per acre. The decisive factor in this inverse relationship is the way factor markets work, particularly rural labour markets. The most important reasons for this relationship:

- *Land use intensity.* As farm size increases, the proportion of land in productive use declines.
- *Labour intensity.* There is an inverse relationship between farm size and the amount of labour used per unit of area.

Small farmers face a low opportunity cost of labour because of family labour combined with relatively high prices for land and capital, while large farmers face a higher price for hired labour combined with relatively low prices for land and capital. Because of these differences in relative factor prices, small farmers commit more labour to production than large farmers, and large farmers treat land as a

relatively abundant resource and substitute machines for labour.

Small farmers could be even more productive if they could acquire land or credit at reasonable prices. They require relatively small quantities of additional non-labour resources to achieve large gains in output. By contrast, large farms require large quantities of capital to achieve the same yield increases using mechanized technology. Since capital is a scarce resource, this is a socially inefficient alternative for increasing output in agriculture.

In some countries a precondition for pursuing a strategy centred on small farms is a massive change in the land ownership structure. Because the private ownership of land is so heavily skewed towards large holdings, no amount of manipulation of relative prices or taxes can shift land allocation towards smaller holdings.

As land is redistributed from big to small farms, not only family labour per hectare can increase sharply. So can hired labour. And beneficiaries of land reform often divert family labour from the job market to their own farms. For both reasons, the employment situation improves even for those who remain landless after the land reform.

The main conclusion: an agricultural development strategy centred on small farms rather than large simultaneously increases the social efficiency of resource use in agriculture and improves social equity through employment creation and the more equal income distribution that small farms generate.

Source: Ellis 1993, Lipton 1995 and Berry and Cline 1979.

Government interventions in the labour market have traditionally been oriented to regulation. Some of these—such as severance pay, or a minimum wage out of line with labour market realities—have had the

perverse effect of discouraging employment creation. But labour regulations to enforce decent working conditions and prevent exploitation are needed more than ever. In addition, government should take a rigorous facilitating role, to smooth adjustment by enhancing information flows and encouraging the retraining of workers—as Mauritius did in the 1970s and 1980s and as China has begun to do now. In the context of global competition the constant upgrading of skills to keep up with technological change is even more important (box 4.6).

Worker retraining can be promoted not only through public training programmes, but also through financing schemes such as special funds. Publicly funded employment subsidy schemes—such as public works schemes—have played an important role in expanding employment in such diverse conditions as Chile in the 1970s and Maharashtra in India since 1972 (box 4.7).

Employment policy was one of the pillars of Sweden's successful postwar development. The state kept unemployment low by encouraging workers to move to new sectors and locations and to adapt to changing economic demand. But there were also special tax privileges to encourage companies to set aside profits during good times for investing later, when there was a downturn.

Smoothing labour market adjustments is the responsibility not just of governments, but also of employers. Social compacts between workers and employers can ensure that conditions of work respect the dignity of the worker. Alongside government intervention, such compacts can also foster the adoption of new technology, positive in the long term but disruptive for people in the short term, by supporting retraining and other measures to counter short-term displacement of workers.

In Sweden there was a solid compact between workers and employers: trade unions were strong, relations with employers were harmonious, and there were relatively few strikes. In Japan the compact between workers and managers played a big part in its record of maintaining unemployment below 3% until 1995, despite business

BOX 4.6

Mexico—globalization and employment

Less than a decade after acceding to the General Agreement on Tariffs and Trade (GATT), Mexico has already experienced both the benefits and the costs of an increasingly global economic system. In the 1980s it began rapid economic diversification and liberalization and became an important recipient of foreign direct investment. Long-term capital flows were invested mainly in manufacturing, expanding employment and strengthening export capacity.

Much of the foreign investment went into the automotive industry, which, with a skilled labour force, has become one of the world's most efficient. Its high productivity has allowed expanded production for the export market, creating thousands of jobs for Mexican workers.

Even before the signing of the North American Free Trade Agreement (NAFTA), Mexico's trade expanded considerably. Exports grew by 24% a year between 1990 and 1994. But aided by an overvalued exchange rate, imports grew even faster, creating a large current account deficit and displacing many Mexican producers. The current account deficit was financed by international capital flows, two-thirds of which were short-term speculative capital.

Although NAFTA hurt many small businesses, agriculture has been relatively unaffected because agricultural tariffs are to be phased out over a ten-year period. The poorest segment of the labour force, Mexican farmers cultivate corn on low-productivity, labour-intensive farms and are unable to compete against cheaper grain from the capital-intensive farms of the American Midwest. To ease the transition to an open economy, the Mexican government gives farmers cash benefits to help them switch from subsistence crops to commercial crops, while gradually reducing subsidies.

In 1994 Mexico suffered several political shocks. These, together with

changes in the international financial environment, caused a sharp fall in the country's foreign reserves. By the end of 1994 the exchange rate was no longer sustainable, and the government was forced to devalue the peso, plunging the country into the deepest recession in recent Mexican history and causing the worst unemployment of the past six decades.

What conclusions can be drawn from Mexico's recent experience with the globalization of trade and finance? Globalization can expand employment opportunities by opening new markets for a country's exports and bringing foreign direct investment that adds to its productive base. But it will displace workers unready to face international competition. And because capital moves so quickly and freely in the new global environment, governments that do not pursue sound policies risk severe economic disruptions. Mexico made the mistake of pursuing incompatible monetary and exchange rate policies, which ultimately led to a severe recession and to an enormous contraction in employment opportunities.

But to say that NAFTA and globalization are to blame for Mexico's social and economic problems would be a mistake. Because of NAFTA, Mexico has continued liberalizing its economy and has expanded exports considerably since the 1994 devaluation, moving ever more firmly towards a solid economic basis for sustained economic and employment growth. NAFTA has locked in that policy approach, making it irreversible even when painfully tested.

Globalization presents risks and opportunities to people and countries alike. The challenge lies in seizing the opportunities for income and employment expansion and in helping those who might be marginalized or displaced to acquire the skills they need to compete in the new global environment.

Source: Data from Instituto Nacional de Estadística, Geografía e Informática and Banco de México.

Maharashtra—guaranteeing employment

The Employment Guarantee Scheme of Maharashtra in India has been widely recognized as a model employment safety net for those without work.

Maharashtra's scheme began in 1972 with the aim of providing, on request, a guarantee of employment at a stipulated wage within 15 days and no more than 5 kilometres from the applicant's village home.

Despite a recent decline, the scheme created about 89.4 million person-days of work in 1990–91. It provided employment to about 2.5% of the state's labour force and eliminated some 7% of the state's rural unemployment.

The programme pays the official minimum wage, somewhat higher than the market wage (around \$1 a day). When it was not possible to provide employment, an unemployment allowance was paid. In 1991 the programme cost 2.4 billion rupees (\$103 million),

Source: Dev 1993.

more than 60% of which went to wages.

About 62% of workers in the programme come from households below the poverty line.

The programme has helped to mobilize the rural poor as a political force. It has developed backwards and resource-poor areas. It has also acted as a check on the power of local officials. It is one of the most cost-effective schemes anywhere for helping the poor.

The scheme has several weaknesses, however. With its focus on employment generation through labour intensity, it has sometimes neglected the formation of productive assets in rural areas. The scheme aims to build up a stock of ready-to-go investment projects, but this has not always been achieved. And there have been some corruption and leakages. Even so, there is no denying that the scheme has helped create employment and reduce poverty.

cycles. The life-long employment system in large companies contributed to this stability, with bonuses allowing for flexible pay to adjust to ups and downs in business profitability. The system is based not only on a legal contract but also on trust and confidence—social capital—between workers and employers. While most observers predict a breakdown of this system, it is still the predominant form of employment for large employers (see box 4.10 on page 102).

5. Encouragement of the informal sector

The informal sector can be a major source of employment in developing countries. A recent study shows that the informal sector accounts for nearly 80% of all employment in Cotonou, Benin, and Ibadan, Nigeria, 68% in Bombay, India, and 66% in Douala, Cameroon. In Latin America an estimated 59% of the urban poor and 67% of the destitute derive their income from the informal sector. The informal sector is also where women mostly work.

Much job creation takes place in the informal sector. In Latin America during 1980–93, 82 of every 100 new jobs were generated in the informal sector. Informal sector employment grew by 8% a year, doubling previous trends and surpassing the growth of the urban labour force. In Brazil in 1980–93 the informal sector's share of non-agricultural employment grew from 34% to 56%. In Colombia it grew to 60%, and in Costa Rica from 36% to 53%. Municipalities in many countries have found that procurement from the informal sector and subcontracting to microenterprises have both saved on resources and reduced poverty.

Government policies often discourage the expansion of the informal sector, either inadvertently or because of concerns about enforcing tax and health laws and other industrial regulations. Conditions that tend to stifle the urban informal sector include zoning laws, laws prohibiting informal firms from selling their products in the most profitable locations and harassment by local police seeking bribes. Moreover, government interventions in labour, raw material and capital markets can distort prices in

favour of formal businesses, reducing the competitive edge of informal firms.

A more positive approach would be to recognize the valuable contributions of the informal sector to employment—and to take actions that encourage it to expand.

Improving the productivity and working conditions of small-scale producers and microenterprises will be key. A microenterprise promotion programme in Cali, Colombia, has been extremely successful because it recognizes that poor people moving into the city are resourceful, creative and hard-working and have a propensity to save. Interventions must build on the entrepreneurial vitality of the informal sector to ensure quick results in improving living conditions and employment opportunities. Such interventions should create an enabling environment for informal sector growth through deregulation, assistance to microenterprises and access to raw materials, markets and technology. But also necessary is institutional development, so that informal sector operators can collectively negotiate regulations and services that support rather than undermine their activities.

6. Equitable access to productive assets

Lack of access to productive assets, particularly land and capital, is the main constraint for the rural and urban poor in developing countries, who are concentrated in small-scale agriculture and the informal sector.

ACCESS TO CAPITAL. Many people are self-employed, own small businesses or work in family enterprises or farms, the incubators of employment opportunities. But they get a small share of institutional credit. In the Philippines in 1991 small enterprises received barely 8% of institutional credit. And enterprises in the informal sector find it particularly difficult: in Costa Rica they get less than 15% of formal credit, and in Kenya barely 5%, considerably limiting their potential. Small enterprises in Ghana report that shortages of working capital leave up to 50% of their capacity idle.

Women have the worst access. In many African countries women account for more than 60% of the agricultural labour force and contribute up to 80% of total small-scale food production—yet receive less than 10% of the credit to small farmers and only 1% of total credit to agriculture. Although women make up 18% of the self-employed in developing countries, they are only 11% of the beneficiaries of formal credit programmes in Latin America and 10% in the Philippines. The bias is similar in loans from international sources. In 1990 multilateral banks allocated about \$6 billion for rural credit to developing countries, but only 5% reached rural women.

This discrimination against small entrepreneurs is surprising. They account for up to two-thirds of the labour force in some countries—making the largest contribution to value added and doing so fairly efficiently. But commercial banks are reluctant to extend loans to them because of the perceived lower likelihood of repayment and the cost of administering many small loans.

There are exceptions and innovations. South Africa's largest commercial banks have begun a bold experiment to provide simple banking services to the poor. India,

Indonesia, Malaysia and Pakistan now impose minimum quotas for small enterprises in the lending portfolios of commercial banks. And in Botswana the Financial Assistance Policy is aimed at job creation by encouraging investment in small industry.

Most of the recent innovations in credit provision to the poor have come from non-governmental organizations (NGOs). In Bangladesh, for example, most rural micro-credit programmes are operated by rural development NGOs.

ACCESS TO LAND. A family with some land can achieve not only a reasonable income but also a sense of ownership, recognition and social stature. But in many parts of the world land distribution is profoundly unequal. The Gini coefficient of land distribution—which ranges from 0 to 1 (the closer to 1, the more unequal the distribution)—is 0.57 in Jordan, 0.62 in Sri Lanka, 0.64 in Chile, 0.70 in Colombia, 0.83 in Saudi Arabia, 0.84 in Panama, 0.84 in Uruguay and 0.94 in Paraguay.

Disturbingly, the Gini coefficient is getting worse in some countries. In Uganda between 1962 and 1984 it rose from 0.47 to 0.59, in Pakistan between 1960 and 1980, from 0.41 to 0.54, and in Turkey between 1963 and 1980, from 0.47 to 0.52.

Radical land redistribution, the elimination of absentee land ownership, the imposition of ceilings for holdings and programmes of resettlement can be powerful forces for improving access to opportunities and empowering the dispossessed. Socialist states such as Algeria, China, Cuba and the former People's Democratic Republic of Yemen established collective or cooperative farms—doomed to poor productivity because agricultural production requires flexibility and skills lacking in centrally planned production.

Redistributing land to small family holdings had better results, and many other countries have attempted or are pressing ahead with such programmes. These programmes are complex and face political constraints. Even committed governments like that of Zimbabwe after independence could not fully implement such programmes. But many countries are pressing ahead, and such

Lack of access to productive assets, particularly land and capital, is the main constraint for the rural and urban poor

countries as Brazil and South Africa are making progress. Kenya enjoyed a good measure of success with its land settlement programmes launched at independence—more than 66,000 families settled on farmland previously owned by 1,000.

But land reform takes more than merely redistributing land. Mexico's Agrarian Reform Programme was the most extensive effort. Over three decades starting in 1936 nearly 43% of agricultural land was distributed, benefiting 44% of rural families. Did this empower the peasants economically, socially and politically—as it was intended to do? No, because the associated development was inadequate. And a chronic weakness of most agrarian reforms is that they discriminate against women. In El Salvador, Honduras and Mexico during the past two decades, fewer than 25% of beneficiaries have been women. The governments gave land titles to men—assuming them to be the household heads.

Indeed, there is a general bias against women in agricultural development. In Kenya a woman has access to land only if she has a living husband or son, and she stands less chance of benefiting from government agricultural extension services, such as training programmes or the distribution of seeds or fertilizers. This bias shows up in staffing: in the developing countries in the late 1980s only 13% of agricultural field agents were women.

7. Equal access to social services

Ensuring equal access to social services is also essential for opportunity expansion. When education and health facilities are not universally provided, it is the poor who are most disadvantaged. Access is particularly uneven for people living in rural areas. The poor are usually those with less access to education (figure 4.8). Chapter 3 establishes the links between education, health and economic growth. The point to be emphasized here is the direct impact of access to education and health care on job opportunities.

Equal access to education for all is the best way to ensure open access to jobs—and through that, the economic empower-

ment of all people. In the Republic of Korea at the beginning of its period of rapid growth, everyone was equally poor, and education was the route to higher income and social status. This prospect strengthened the links between growth, education and productivity. Parents invested their savings in the education of their children, who were prepared to take on more technologically advanced activities.

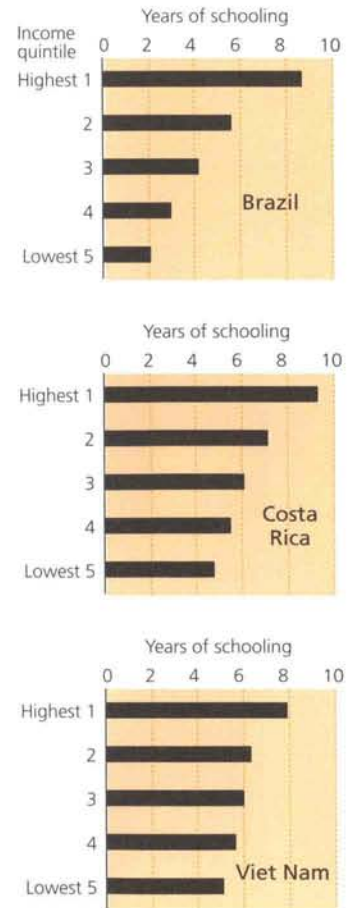
When people are sick, they cannot work, so improved access to primary health care is a condition for secure employment and a responsibility of the state and employers. Many health problems are caused by a lack of access to sanitation. Even in middle- and upper-income countries such as Argentina, Mexico and Venezuela almost 30% of the population lacks adequate access to sanitation. And fewer than a third of the people in Afghanistan, Chad, Ethiopia, Haiti, Madagascar and Mozambique have access to safe water. More than 70% of the population in Afghanistan, Angola, Benin, Chad, Mali and Niger cannot reach a health facility within one hour by local transport. The problem is generally much worse in rural areas than in urban. In Mozambique and Niger the entire urban population has access to health services, but only 30% of the rural population is served.

8. Expanded opportunities for disadvantaged groups

Some groups of people face discrimination—because of race, ethnicity, gender, age or physical attributes. In India literacy among the general population is 52%, but among the communities classified as scheduled castes or tribes it is only 30%. In apartheid South Africa opportunities were unequally divided by race, with the white minority getting the largest share of the pie in education, health, land, credit and high-paying jobs. Equalizing opportunities and expanding them through economic growth is the number one challenge for the new South Africa.

Unequal opportunities for women are marked throughout the world—*Human Development Report 1995* concluded that “in no society do women enjoy the same

FIGURE 4.8
Schooling by income quintile



Source: World Bank 1995f.

opportunities as men". In all countries the gender-related development index is lower than the human development index, reflecting lower achievements in human development for women than for men. Gender gaps in education and health are closing, but opportunities for economic and political participation are severely limited for women. Women occupy only 12% of seats in parliament, and only 14% of administrative and managerial positions. With the average gender empowerment measure 0.391, all countries have a long way to go before reaching equality.

In work, women face constraints in opportunity that men do not. Women take

the lion's share of responsibility for the family and community and spend three-quarters of their time in unpaid work. These responsibilities conflict with income-earning work. Not surprisingly, 70% of the world's 1.3 billion poor are female, and around the world women's earnings average 75% of men's. Women have fewer opportunities to secure livelihoods because of constraints to land ownership and lack of access to credit. In industrial countries unemployment averaged 8.1% for women in 1993 but 7% for men, with the highest gap in Spain, where unemployment is 24% for women and 10% for men. And in Europe there are more women than men among involuntary part-time workers.

Expanding access to jobs and to productive assets for women is thus a priority for human development around the world. Access to opportunities must also be made more open for three other groups: the old, the young and the disabled. In today's world of rapid restructuring and redundancies, older workers are often the first to be let go and the last to be rehired. With no experience, the youth also find employment opportunities limited. Youth unemployment is more than double the national average—at 17% for women and 16% for men in industrial countries (box 4.8).

People with disabilities also suffer limited access to opportunities. Society is often prejudiced against them and does not make the necessary arrangements for people with disabilities to make full use of their capabilities (box 4.9).

Prospects

Expanding employment opportunities to meet people's new needs and aspirations is among the top priorities for human development in the years to come. It will be a large and daunting task. Opportunities must be expanded enough to reverse the tide of growing unemployment, absorb the growing labour force and improve the productivity and incomes of the poor. In the past decade only a quarter of countries achieved satisfactory expansion of opportunities, minimizing unemployment and raising wages and productivity.

BOX 4.8

Unequal opportunities for the young and the aged

Even if opportunities are narrowly defined in terms of employment, two groups are still at a disadvantage—the young and the aged. In most industrial countries youth unemployment is in the double digits. In Spain it is 36% for males and 47% for females, in Italy 26% for males and 36% for females. In countries such as Australia, Canada, Finland, Israel, Poland and Sweden it is more than 20%. In most industrial countries youth unemployment is almost twice overall unemployment.

Things are just as bad in developing countries, especially among educated young people. More than 20% of young people with primary education were unemployed in the early 1990s in Algeria and Tunisia—and more than 20% of those with secondary education in Côte d'Ivoire and Kenya. More than 10% of young people with tertiary education did not have a job in Ghana and India. This is a terrible waste of an important asset.

Even though the share of older people in the population has increased significantly in recent years, their labour force participation has declined. In the past 20 years the economic activity of men declined by more than two-thirds in Austria, France and the Netherlands, by more than half in Finland and New Zealand and by 30–40% in some other countries. This decline was due in part to older workers' taking retirement. But many more were made redundant or laid off.

Source: ILO 1992 and 1995e.

Indeed, older workers often are the first victims of enterprise restructuring. They are seen as more expensive than the young, because of higher remuneration, seniority rights, fringe benefits and social security contributions. But their performance and their accumulated knowledge more often than not compensate for their higher costs, and their earnings do not necessarily continue to rise until the end of their working life.

Because of the shortage of jobs, some people feel that the old should give way to the young. But new entrants to the labour market often lack the experience and know-how needed in jobs vacated by older workers. Often those jobs just disappear. Another commonly held view—that older workers are less productive than younger ones—does not always stand up to facts. Studies have found that declines in productivity are gradual, so that the productivity of workers in their late fifties often exceeds that of workers in their teens and early twenties. And declines in performance may be falsely attributed to age when they are due instead to skill obsolescence or a "burnout" that can occur at any age. All these myths restrict the employment opportunities of the aged—and lead to a missed opportunity, because society can benefit greatly from their knowledge, experience and productivity.

Disability—opportunities denied

Worldwide there are 500 million people with disabilities, 400 million in the developing world. In industrial countries more than 10% of people have a disability. In developing countries internal conflicts have greatly increased the number of people with disabilities. Each month 120 Angolans are killed or injured by land-mines; in Cambodia the number is 300.

People with disabilities have many capabilities. But they face obstacles to using their capabilities and to developing further—prejudice in society denies them opportunities. In Hong Kong in the early 1980s a quarter of people aged 15–24 with disabilities had no schooling, compared with only 2% of the total population. In Australia at the same time, more than half the working age men with disabilities were not in the labour force, compared with only 13% of all working-age men. And almost three-quarters of Australian women with disabilities were not in the labour force.

Women with disabilities face severe barriers to opportunities. In the Philip-

pinas 80% of women with disabilities have no paid work, and the 20% who work earn \$10 a month—roughly a third of the World Bank–defined income poverty line.

Disability is part of life, particularly as people grow older. Estimates have been made for several countries of the average number of years of life that people will live with disability, as a share of life expectancy at birth and at 65 years of age. In Australia, for example, the average number of years lived with disability is 20% of life expectancy at birth. Women tend to live longer with disability. In the Netherlands average years with disability are 25% of life expectancy for women, 18% for men. The share of life expectancy with disability is much higher at age 65 than at birth. In Australia it is 55% for men and 54% for women, and in the Netherlands 37% for men and 58% for women. Planning for life with disability means keeping doors open, work and recreation integrated and public areas safe and accommodating for all.

Source: Haber and Dowd 1994 and UN 1990.

If current global trends continue, polarization will increase within countries and between countries—between workers who have secure and well-paying jobs and those who do not, between countries that are growing fast and whose people are climbing the skill and wage ladder and those that are left out of the global competition. Most affected will be those who are weak—the long-term unemployed, women, the unskilled and many of the young and the old. Among countries, it will be those least integrated and competitive in the growing world economy.

The need for growth or the need to redefine work

Policy-makers can devise growth strategies that generate employment. But without growth, unemployment will increase or, at the very best, low-productivity jobs will proliferate—the situation in nearly 70 countries in the 1980s. Many of these countries, especially those in Latin America and some in Eastern Europe, are reviving growth. But too many are still stuck in economic stagnation or decline. In such countries—mostly Sub-Saharan African and other least developed countries (LDCs)—regenerating employment-led growth is a prerequisite for human development. But this growth must be accompanied by a rapid improvement in basic human capabilities.

In all countries the challenge is to forge strong links between growth and employment by adopting employment-generating growth patterns and ensuring rapid improvement in human skills.

The high-growth economies of East and South-East Asia need to stay the course and continue to climb the ladder of employment, skills and wages. They need to pay special attention to the quality of jobs and to equality of access to those jobs—particularly for women. And in the long term they need to prepare for a “soft landing”, to maintain employment and opportunities, even as economic growth slows.

The Latin American and South Asian countries whose economic growth is strong or recovering will need to adopt new pat-

terns of growth with stronger links to employment and skills. These countries need to draw lessons from the 1960s and 1970s on what the pattern of growth can mean for employment and poverty reduction. Some countries, such as Bangladesh and Chile, have in recent years made good progress in moving towards growth that expands opportunities.

The OECD countries are struggling to address their growing unemployment, deteriorating job security and increasing wage disparities. The cause of these growing problems is unclear. Is it a slowdown in growth? Is it structural change due to a new technological revolution? Is it the pressure of globalization and competition with developing countries? Or a combination of all three?

For OECD countries the rapidly advancing technological revolution promises higher productivity and a liberation from drudgery. But the labour-displacing effects of technological advance and the competitive pres-

tures of globalization will put many people out of their current jobs and, if they cannot adapt, rob them of livelihoods. Technology would benefit some but leave out many.

A recent ILO report shows that during 1975–82 every percentage point increase in the GDP growth rate translated into half a percentage point increase in the employment growth rate, and in 1982–93 to slightly more—0.63 percentage point. But these data do not put to rest the concerns about “jobless growth”. Data for the most recent year or two for many industrial countries show a decline in employment’s relationship with growth—a slowdown in employment creation.

Whatever the cause, the solution is not simply more growth to create more jobs and

more income. Economic growth must translate more effectively into satisfactory job choices—not just reducing unemployment but improving working conditions with growth and technological advance. People are less secure, working harder and under more pressure—often for the same or lower wages. And it is more difficult to secure care for those who need it—older people, young children and the sick. Despite per capita incomes of \$20,000 and economies that are still growing, people’s working lives are not getting better. New institutional arrangements are needed to achieve goals important for human development. That means more job security and more equity—especially gender equity in work and pay. And it means more leisure time for personal development, more time for family and community work and more assurance that care is available for the old, the young and the sick. Developing new life styles and institutional arrangements should be a subject of public debate and a goal for public policy (box 4.10).

The global economy and international action

Today’s employment challenges have to be met not in the postwar context of the 1950s and 1960s, with a stable world economy of fixed exchange rates and trade barriers and aid flows motivated by cold war interests. Instead, they must be met in the context of “globalization”, where the lives of five billion people, more than 180 states and thousands of transnational businesses are closely intertwined—with connections proliferating through international flows of trade, capital, information and culture.

The liberalization of trade and the development of regional trading arrangements have expanded world trade and, through it, global economic interdependence. Trade in goods and services has grown tremendously, from 25% of world GDP in 1970 to about 45% in 1990. Capital has become more mobile, with private investment flows to developing countries rocketing from \$5 billion in 1970 to about \$175 billion today.

A growing world economy can create the environment for each country’s growth

BOX 4.10

Sweden and Japan—record-breakers facing new challenges

Sweden and Japan hold the industrial countries’ record for long-sustained growth. And they share another record—for the lowest sustained unemployment, well below 3% for 40 years. Both countries protected employment and insulated it from the ups and downs of the business cycle and growth.

This employment policy was a building block for equitable growth—in both countries the Gini coefficient declined as the economy grew. But Sweden and Japan followed different distributive approaches. Sweden depended on the redistribution of income and the mechanisms of a welfare state. Japan redistributed land and wealth, and then protected small agriculture and promoted small firms.

In both, a social order protected employment through a consensus between employers and employees unions, between politicians and government administration, between small and large enterprises, between private business and the government. Employer-employee relations were marked by commitment and trust and by few violent disputes. And workers enjoyed a significant measure of security, which also encouraged a more positive attitude towards technological change, important in raising productivity.

Now facing lower growth and increasing competition in a global economy, the systems that worked so well for 40 years are under stress. Both countries find public subsidies a growing burden—those for agricultural incomes in Japan and for the welfare state in Sweden. Unemployment has been on the rise—in Sweden jumping from 1.6% in 1990 to 8.2% in 1995, and in Japan hitting a postwar record of 3.4% in December 1995.

The rules of the game are changing. In Sweden the restrictions against shedding redundant labour have been abandoned, and there have been massive layoffs, even in the civil service. In Japan corporations are reviewing relations with smaller supplier firms in favour of foreign imports, and the lifetime employment system may be eroding.

The impetus for change comes not only from the shifting economic environment, but also from questions people are beginning to ask about life styles. Shouldn’t there be more time for leisure? Should women in Sweden continue to depend on others to look after their children? Shouldn’t men in Japan do more for the family? New models combining equity, growth and human development may have to be built less around growth and more around new life styles.

Source: de Vylder 1995a, Ishikawa 1995 and Ito 1992.

and employment. The total effect of expanding global trade and capital flows will be positive. But not all countries or all people will benefit equally from the global gains. And the powerful forces of world economic expansion pose new problems that today's global institutions are poorly equipped to handle.

One risk is that countries that are poorly integrated in the world economy will be further marginalized. The Uruguay Round, for example, is expected to produce global benefits estimated at \$200 billion annually. But it will do little for people and countries not producing for the global economy. It has been estimated that the LDCs of Sub-Saharan Africa would lose \$8 billion in exports a year. Clearly, the international community's efforts to bring LDCs into the global economy have fallen short of what is needed—indeed, far short of the commitments made in 1990 (box 4.11).

Some developing regions owe their current prosperity and human development to international trade. But others have been vulnerable to its vagaries. The East Asian economies maintained annual export growth of more than 12% over the past two decades, and South Asia is trying to catch up. But many of the Arab states and the countries of Sub-Saharan Africa, which remain producers of primary commodities with declining terms of trade, trail behind. Similar disparities show up in international capital flows. Of the cumulative private capital flows of \$585 billion to developing countries in 1989–94, 40% went to East Asia, followed by Latin America with 30%. South Asia received only 3% of these flows, and Sub-Saharan Africa barely 1%.

The risk is not just that the benefits of globalization will bypass these nations. The risk is that these countries will become increasingly marginal as their shares of world trade and international capital flows continue to decline. This will further delay the structural transformation of their economies, needed to strengthen them against the vagaries of the market and climate. Sub-Saharan Africa's exports remain narrowly based on primary commodities, and little progress has been made in diversifying into non-traditional exports, espe-

cially manufactured goods. Manufacturing value added has been growing by only 2–3% a year since the early 1980s, and now contributes only 10% of GDP.

A second risk is that the people least able to adapt to changing market conditions and take up new technology or new skills will also be further marginalized. The World Bank's *World Development Report 1995* shows two possible scenarios for wage trends. The first is a "divergent" scenario in which wage gaps between skilled and unskilled workers within countries, and wage gaps between countries and regions,

BOX 4.11

The LDC Programme of Action—commitments unmet

In 1990 the Second United Nations Conference on the Least Developed Countries (LDCs) adopted a Programme of Action for the LDCs for the 1990s. The key commitments were to generate accelerated and sustained economic growth for LDCs, to speed up efforts to improve education, training, health and sanitation, to allocate more donor GNP to aid, to enhance access for exports from LDCs and to significantly reduce their debt burden.

Performance has fallen far short of these commitments. A mid-term review assessing progress in 1995 found this:

- *Economic growth.* The LDCs' average annual growth in real GDP was only 1.6% in 1990–93, compared with 2.2% in 1980–90. Allowing for population growth, their real GDP per capita fell by 1.2% annually in 1990–93, compared with 0.3% in 1980–90. Average income per capita is thus declining at an accelerating pace in the LDCs, suggesting grim prospects for future development. To some extent this reflects lack of progress in implementing the programme of action.
- *Human resource development.* The adult literacy rate increased from 42% in 1985 to 47% in 1993, and life expectancy at birth from 50 years in 1990 to 52 years in 1993. But the pace of such improvements has been slowing, and the very weak performance in economic growth brings into question their sustainability. A determined revival of the programme of action is thus needed to reverse the worrying trends.

- *Aid.* Donors were to allocate a minimum of 0.15% of their GNP to official development assistance (ODA) for LDCs by 1995, increasing to a minimum of 0.20% by 2000. But aid to LDCs fell from 0.09% of donor GNP in 1990 to 0.07% by 1993. Only four donor countries—Norway, Denmark, Sweden and the Netherlands—had reached the 0.20% target by 1993, and Portugal had reached the 0.15% target. The total net flow of ODA to LDCs fell from \$16 billion in 1990 to \$15 billion in 1993, implying a steep drop in per capita ODA—from \$32 to \$27.

- *Trade.* Industrial countries reduced their tariffs on industrial products imported from LDCs by 25%. But their tariffs on such imports from other industrial countries fell by as much as 40%, undercutting much of the advantage for LDCs. Tariff reductions are significantly reducing LDCs' overall margin of preference, seriously eroding their competitiveness. Moreover, the LDCs have had to accept the many obligations in the Uruguay Round outcome—some of which would hardly have been acceptable to industrial countries only a few years ago—though LDCs have been accorded some flexibility in the timing of their compliance.
- *Debt.* Despite debt relief measures in the LDCs' favour since 1990, their total external debt increased from \$114 billion in 1990 to an estimated \$127 billion in 1993. New initiatives are required to make faster progress (box 4.12).

Source: UN 1991 and UNCTAD 1995.

would become more pronounced. By 2010 wages would grow by 15% for unskilled workers in OECD countries but by 47% for skilled workers, 3% for the unskilled and 29% for the skilled in Eastern Europe and the CIS countries, and -3% for the unskilled and 45% for the skilled in Latin America.

In a more optimistic “convergent” scenario incomes would rise in all regions and countries and inequality would fall. Even so, the unskilled in Africa would see wages rise by 44% by 2010, compared with 81%

for the East Asian skilled workers. The international wage gap between the richest and poorest—skilled industrial workers and African farmers—would fall, but only from 60:1 in 1992 to 50:1 in 2010.

Globalization makes it more difficult for national policies to forge strong links between growth, employment and human development. All countries find job creation increasingly difficult in today’s environment. Increased competition for market shares and capital flows puts a premium on productivity, wage restraint, balanced budgets, export expansion and pared-back social services. And it leaves national governments less room to manoeuvre in designing pro-employment policies and such social provisions as pensions, unemployment insurance and compensation for unpaid work, such as caring for the sick or the elderly.

These risks of the marginalization of people and countries demand international attention and solutions at the global level.

First, international measures to support national policy and action for full employment. Full employment should no longer be treated as a residual in international policy objectives. The postwar commitment to full employment led the United Nations to set up a special commission of five distinguished economists. They prepared a path-breaking report in 1949, *National and International Measures for Full Employment*. Taking the full employment pledge of the UN Charter (Article 55) as its starting point, this report analysed the domestic and international implications and developed recommendations for the major domestic policy areas, including fiscal policy, control of the volume of investment and the stimulation of demand.

The international measures recommended by the report start with creating a workable system of international trade for a stable and expanding world economy, eliminating trade barriers and restoring currency convertibility. They also cover the need to “accelerate the orderly economic development of the underdeveloped areas of the world”. And they highlight the importance of preventing the international propagation of fluctuations in effective demand. These purposes were to be

BOX 4.12

Making external debt work for development

Debt repayments often absorb a quarter to a third of developing countries’ limited government revenue, crowding out critical public investment in human development. The problem is worst for the 32 severely indebted low-income countries (SILICs), many of which are also low human development countries. In four of these countries (Guinea-Bissau, Mauritania, Zaire and Zambia) debt service due ranges from three to six times public expenditure on education. High debt and unpaid arrears also discourage foreign private investment and encourage the flight of domestic savings—both critical sources of the financing needed for human development, economic growth and improved living standards.

Some steps have been taken in recent years to address the debt problem. Multilateral institutions and bilateral donors have supported commercial debt reduction schemes. Official (government) creditors have cancelled grant debt owed to them. And creditor governments have agreed on a series of measures such as the Toronto terms, the Trinidad terms and, in 1995, the Naples terms. Although these measures have helped reduce debt, many SILICs are still left with the bulk of their debt. What’s more, these measures are not enough.

Analysis of recent World Bank data shows that even if all existing debt relief measures were fully applied, 23 of the 32 SILICs and 4 similarly indebted countries would still have unsustainable debt burdens (with the ratio of the net

present value of debt to exports exceeding 200–220%). This group includes such countries as Angola, Burundi, Ethiopia, Guinea-Bissau, Sierra Leone, Somalia, Sudan, Tanzania, Uganda, Yemen and Zambia.

Technically feasible solutions to the debt problem have been proposed. But implementation lags, even for SILICs that have made great efforts in implementing economic policy reform and structural adjustment. At the latest count, only \$7 billion of the debt of Sub-Saharan Africa had been forgiven, leaving \$150 billion to be dealt with.

In the words of the Secretary General of the United Nations, “debt is a millstone around the neck of Africa”, holding back human development and economic growth. Urgent international actions are needed to provide a sufficient and durable solution to the SILICs’ debt problems. These should include:

- Parallel measures to deal rapidly and comprehensively with all outstanding debt—commercial, bilateral and multilateral.
- Commitments to use part of the benefits of debt forgiveness for massive investment in human development.
- More straightforward and public monitoring, to enable concerned citizens to see the progress for individual countries and for the SILICs and Sub-Saharan African countries as a group.
- A small but high-level political meeting, with representation from both SILICs and creditor countries, to devise a strategy for more rapid action.

Source: World Bank 1994b.

achieved through more targeted foreign investment, supported by new, more active policies by the World Bank and IMF.

A similar initiative is needed today—to assess national policy options and to formulate supportive international measures for full employment in today's vastly changed environment of global economic integration and technological progress.

Second, international initiatives to raise skill and education levels in the low human development countries. This goal is important in itself, but it is also a precondition for these countries' integration into the global economy. As the 1995 UNIDO global report concludes: industrial competitiveness now depends on technology and skills, less on such factors as raw materials and capital. Without basic literacy and numeracy, people's ability to adapt to changing production methods and technologies is severely constrained.

Reducing military spending would be one way for national governments to generate some of the necessary funds. And initiatives by bilateral donors and multilateral institutions to reduce the \$150 billion debt of Sub-Saharan Africa could go a long way towards releasing the \$9 billion needed annually to provide universal access to basic social services. But progress has been painfully slow. Debt relief measures have dealt with only \$7 billion of the debt of Sub-Saharan Africa, leaving \$150 billion to resolve (box 4.12).

Third, international mechanisms to prevent the marginalization of the least developed countries. Aid is the main institutional mechanism currently in force. And that is on a precipitous decline, falling from \$62 billion in 1991 to \$57 billion in 1993 (in 1992 dollars).

The critical needs of Sub-Saharan Africa were recently recognized by the system of UN organizations in a new commitment to help accelerate development in Africa. The "UN System-wide Special Initiative on Africa," announced in March 1996, consists of:

- A set of major coordinated development actions centred on a commitment to help provide universal basic education and improved community health services within the next decade.
- A new emphasis on assisting efforts to improve governance (including strengthening peacemaking), increase the security of household water and food supply and strengthen civil society in Africa.
- A special mobilization of political commitment and support for Africa's development, involving the participation of the heads of all UN agencies.
- A new approach to donor relationships with African countries aimed at increasing the coherence of aid efforts, more clearly placing African plans at the centre of the process and broadening the consultation process to include the private sector.

An estimated \$25 billion in external resources will be needed—to come from new aid and redirected resources of UN agencies, bilateral donors and non-governmental organizations. A restructuring of domestic resources is also expected as a key part of the programme. With education and health initiatives alone expected to account for more than 85% of the resources of the special initiative, the effort involves a strong impetus towards reorienting external and domestic resources towards human development.

The forces of expanding global trade and technological advance promise new advances in economic growth in the years to come. But to have meaning for human progress, this growth must translate into human development. It must also reduce inequality and poverty. And it must ensure sustainability, participation and peace. We need to reverse the failed growth in almost 100 countries, and the failure of growth to translate into human development in many others. Only much deeper global and national commitments can forge stronger links between growth and human development.

Without basic literacy and numeracy, people's ability to adapt to changing production methods and technologies is severely constrained

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The *Human Development Report* has endeavoured since its inception in 1990 to present data on broad aspects of human development. This requires a far-ranging array of statistics reflecting the well-being and opportunities that people actually enjoy.

Human Development Report 1995 introduced important improvements in the selection, use and presentation of statistics. Greater attention was paid to coordination with international statistical bodies and to harmonizing the selection of indicators with the data reported by those bodies. Some statistical series published in previous Reports were dropped, such as the allocation of donor aid to basic social services. The 1995 Report also provided more thorough documentation and referencing of the international statistical sources selected. In the indicator tables extensive footnotes were introduced to indicate the choice of series and the calculations made and explain data limitations and exceptions.

These improvements are continued in *Human Development Report 1996*. Further efforts to improve the selection and presentation of statistical indicators are ongoing.

As a standard practice, this Report, like earlier ones, relies on national estimates reported by the United Nations and its agencies and by other internationally recognized organizations, and thus on the standardization and consistency of data produced by these offices. The few exceptions in which data from other sources have been used—such as for parliamentary representation—are noted in the relevant tables.

Data standards and methodology

Even when standardized international sources are used, a number of problems exist that must be addressed in any statistical analysis. Despite the considerable efforts made by the specialized agencies in collecting, processing and disseminating economic and social statistics, and in standardizing definitions and data collection methods, important limitations remain in

the coverage, consistency and comparability of data across time and countries. The use of statistical data must be subject to a general understanding of these limitations.

The consistency and comparability of human development indicators, which are mostly derived from national censuses or surveys, are also subject to qualification. One source of weakness is the use of out-of-date censuses or surveys, or of old models and assumptions with new data. And because of infrequent updating in the past, dramatic shifts and breaks in statistical series can occur when new data and methods are introduced.

Many of these concerns arise in preparing the human development index (HDI). For example, in the 1994 revision of the United Nations' "World Population Prospects Database 1950–2050", the Population Division derived estimates and projections from population censuses—supplemented with information from national survey data—using specialized demographic techniques. A new survey or census in a country that has provided no national information for ten or more years may result in significant adjustments in the UN population estimates for that country.

These population estimates have an effect on other indicators—for example, school enrolment ratios calculated by UNESCO. The UNESCO estimates are dependent on the estimates of age- and sex-specific populations by the United Nations Population Division. They are also affected by fluctuation in estimates of the number of people attending school based on data from administrative registries, population censuses and educational surveys. UNESCO has also made methodological changes in the way that it produces its own estimates and projections of literacy and enrolment, independent of the variations in population estimates used in the denominator. Thus, there is potential fluctuation in both the numerator and the denominator of rates of literacy and educational enrolment that must be taken into consideration in any comparison of countries across time.

The way in which national data are collected and computed also affects comparability across countries. For example, because many people enrolled early in the school year drop out later in the year, the timing of data collection on enrolment affects the results. Enrolment ratios estimated at the beginning of the year are likely to be much larger than those calculated at midyear or later. Scant information is available on the timing and magnitude of absenteeism and school drop-outs in international data sets.

Estimates of income used in the HDI are also fraught with measurement difficulties. Economic data are initially reported in the domestic currencies and then converted into a common currency such as the US dollar. Because extreme fluctuations in exchange rates make comparisons across countries difficult, purchasing power parity rates in US dollars (PPP\$) have been used for conversion by the World Bank and the International Monetary Fund. But even the PPP\$-based estimates of GDP present problems of comparability, because of differences in the International Comparison Programme (ICP) survey procedures and in the methods used in producing the estimates.

Another major problem is the extremely limited availability of data on such important human development issues as poverty, gender equality, crime, violence, HIV/AIDS, maternal mortality and the environment.

The transition in the Eastern European and CIS countries has led to a break in most of their statistical series, so the data available for recent years present problems of reliability, consistency and comparability at the international level and are often subject to revision.

Data availability is also uneven across country groups. Some issues, such as literacy, are well documented in the developing countries but less so in the industrial countries, or vice versa. In such cases the Report presents the limited data available, primarily from official national reporting systems and compiled by the United Nations, with the caveat that these data may not be readily used for

international comparisons. Yet these data require increased attention if human development statistics are to improve.

Country classification

The main criterion for classifying countries is the HDI. Countries are classified into three groups: high human development countries, with HDI values of 0.800 and above; medium human development countries, with HDI values of 0.500 to 0.799; and low human development countries, with HDI values below 0.500. For analytic purposes, aggregate measures for the medium and low human development countries are also computed after excluding China and India from their respective groups because the magnitudes of their population, GDP and other measurements overwhelm those of the smaller countries.

The regional classification of countries corresponds to the Regional Bureaux of UNDP and the income classification to the definitions in the World Bank's *World Development Report 1995*.

Indicator tables

In the indicator tables countries and areas are ranked in descending order by their human development index. Where estimates have been calculated using established international statistical series, the estimates are footnoted and the sources given in the notes at the bottom of the table. These notes also give the data sources for each column. The first source listed is the main international source for the indicator. When a second agency has published the data in a more convenient form, the original source is given in brackets after the main source. The indicator tables no longer include estimates derived from sources other than the documented sources, except for table 1 (human development index). Short citations of sources are given, corresponding to the full references in the complete list of data sources used in preparing the indicator tables. This list appears after the indicator tables.

Not all countries have been included in the indicator tables, owing to the lack of comparable data.

Unless otherwise stated, the summary measures for the human development, income and regional groups of countries are weighted by population or some other appropriate value. Summary measures are not presented in cases in which there were no data for the majority of countries in a group or appropriate weighting procedures were unavailable. Where appropriate, the summary aggregate is presented as the total for the region, rather than as a weighted average.

In the absence of the phrase “annual”, “annual rate” or “growth rate”, a hyphen between two years indicates that the data were collected during one of the years shown. A slash between two years indicates an average for the years shown. The following signs have been used:

- .. Data not available
- (.) Less than half the unit shown
- (..) Less than one-tenth the unit
- T Total

Improving human development statistics

A major goal of the Report is to encourage national governments, international bodies and policy-makers to participate in improving statistical indicators of human development. There are many areas where data collection urgently needs to be improved because of its importance to the national and international monitoring of human development trends. Age-specific literacy rates in all countries and economic activity outside the expected age ranges (child labour and older workers) are examples of such areas.

The Report has identified many potentially valuable sources of data for monitoring human development that need further coordination and harmonization. One such data source is the OECD Development Assistance Committee (DAC) report, which

monitors official development assistance. Attention to this source is particularly important given the joint call by UNDP, UNESCO, UNFPA, UNICEF and WHO to increase transparency in the allocation of official development assistance to basic social services.

Another such international initiative is the International Comparison Programme. This is an effort to develop internationally comparable measures of real GDP and its components, by converting national currency estimates into a common currency (such as the US dollar) for estimating purchasing power parity (PPP) rates rather than exchange rates. The ICP is increasing its coverage of countries and even of entire regions. Important methodological questions concerning appropriate concepts, classifications and methods to be applied in this and other new initiatives remain unresolved.¹

Very few developing countries can afford to fully participate in an ICP assessment, however, and estimates for non-participating countries increase the bias in the results because of the large weights of industrial and more developed countries. Major lacunae have also developed in the statistical series of countries in transition or in social conflict or war.

The *Human Development Reports* will continue to refine statistical data and to generate pressure on countries and the global community to provide attention and support to the production and analysis of better human and social data.

Notes

The indicator tables are also available in electronic form. For information, please contact the Human Development Report Office, 336 East 45th Street, Uganda House, New York, New York, 10017, USA.

1. See, for example, Wagner 1995; also see OECD 1993a, p. 98, for a review of conceptual problems in estimating aid for social allocation.

1 Human development index

All countries

HDI rank	Life expectancy at birth (years) 1993	Adult literacy rate (%) 1993	Combined first-, second- and third-level gross enrolment ratio (%) 1993	Real GDP per capita (PPP\$) 1993	Adjusted real GDP per capita (PPP\$) 1993	Life expectancy index	Education index	GDP index	Human development index (HDI) value 1993	Real GDP per capita (PPP\$) rank minus HDI rank ^a
High human development	73.8	97.2	79	14,922	5,908	..	..	..	0.901	..
1 Canada	77.5	99.0	100 ^b	20,950	5,947	0.88	0.99	0.98	0.951	6
2 USA	76.1	99.0	96	24,680	5,973	0.85	0.98	0.99	0.940	0
3 Japan	79.6	99.0	78	20,660	5,947	0.91	0.92	0.98	0.938	6
4 Netherlands	77.5	99.0	89	17,340	5,931	0.88	0.96	0.98	0.938	18
5 Norway	77.0	99.0	90	20,370	5,946	0.87	0.96	0.98	0.937	5
6 Finland	75.8	99.0	96	16,320	5,913	0.85	0.98	0.98	0.935	19
7 France	77.0	99.0	88	19,140	5,943	0.87	0.95	0.98	0.935	7
8 Iceland	78.2	99.0	82	18,640	5,941	0.89	0.93	0.98	0.934	9
9 Sweden	78.3	99.0	80	17,900	5,937	0.89	0.93	0.98	0.933	12
10 Spain	77.7	98.0	87	13,660	5,901	0.88	0.94	0.98	0.933	21
11 Australia	77.8	99.0	79	18,530	5,940	0.88	0.92	0.98	0.929	7
12 Belgium	76.5	99.0	85	19,540	5,944	0.86	0.94	0.98	0.929	0
13 Austria	76.3	99.0	85	19,115 ^c	5,942	0.86	0.94	0.98	0.928	2
14 New Zealand	75.6	99.0	89	16,720	5,914	0.84	0.96	0.98	0.927	10
15 Switzerland	78.1	99.0	75	22,720	5,950	0.88	0.91	0.98	0.926	-11
16 United Kingdom	76.3	99.0	83	17,230	5,928	0.86	0.94	0.98	0.924	7
17 Denmark	75.3	99.0	87	20,200	5,946	0.84	0.95	0.98	0.924	-6
18 Germany	76.1	99.0	79	18,840	5,941	0.85	0.92	0.98	0.920	-2
19 Ireland	75.4	99.0	84	15,120	5,909	0.84	0.94	0.98	0.919	10
20 Italy	77.6	97.4	70	18,160	5,938	0.88	0.88	0.98	0.914	0
21 Greece	77.7	93.8	78	8,950	5,825	0.88	0.89	0.96	0.909	19
22 Hong Kong	78.7	91.5	71	21,560	5,948	0.89	0.85	0.98	0.909	-16
23 Cyprus	77.1	94.0	76	14,060	5,904	0.87	0.88	0.98	0.909	7
24 Israel	76.6	95.0	76	15,130	5,909	0.86	0.89	0.98	0.908	4
25 Barbados	75.7	97.1	78	10,570	5,850	0.84	0.91	0.97	0.906	11
26 Bahamas	73.2	98.1	75	16,180	5,913	0.80	0.90	0.98	0.895	0
27 Luxembourg	75.8	99.0	57	25,390	5,975	0.85	0.85	0.99	0.895	-26
28 Malta	76.2	87.0	76	11,570	5,878	0.85	0.83	0.97	0.886	6
29 Korea, Rep. of	71.3	97.6	81	9,710	5,837	0.77	0.92	0.97	0.886	9
30 Argentina	72.2	96.0	80	8,350	5,814	0.79	0.91	0.96	0.885	16
31 Costa Rica	76.4	94.5	68	5,680	5,680	0.86	0.85	0.94	0.884	23
32 Uruguay	72.6	97.0	76	6,550	5,769	0.79	0.90	0.95	0.883	16
33 Chile	73.9	94.7	71	8,900	5,824	0.82	0.87	0.96	0.882	8
34 Singapore	74.9	90.3	68	19,350	5,943	0.83	0.83	0.98	0.881	-21
35 Portugal	74.7	86.2	79	10,720	5,853	0.83	0.84	0.97	0.878	0
36 Brunei Darussalam	74.3	87.0	70	18,414 ^d	5,940	0.82	0.81	0.98	0.872	-17
37 Czech Rep.	71.3	99.0	67	8,430 ^e	5,815	0.77	0.88	0.96	0.872	6
38 Trinidad and Tobago	71.7	97.6	67	8,670	5,820	0.78	0.87	0.96	0.872	4
39 Bahrain	71.7	84.1	84	15,500	5,910	0.78	0.84	0.98	0.866	-12
40 Antigua and Barbuda	74.0	96.0	76	5,369 ^g	5,369	0.82	0.89	0.89	0.866	20
41 Slovakia	70.9	99.0	71	5,620 ^c	5,620	0.77	0.90	0.93	0.864	14
42 United Arab Emirates	73.9	78.2	81	20,940 ^f	5,947	0.82	0.79	0.98	0.864	-34
43 Panama	72.9	90.0	69	5,890	5,738	0.80	0.83	0.95	0.859	9
44 Venezuela	71.8	90.6	69	8,360	5,814	0.78	0.84	0.96	0.859	0
45 Saint Kitts and Nevis	70.0	90.0 ^h	78	9,340	5,831	0.75	0.86	0.96	0.858	-6
46 Hungary	69.0	99.0	67	6,059 ^e	5,748	0.73	0.88	0.95	0.855	5
47 Fiji	71.6	90.6	79	5,530	5,530	0.78	0.87	0.91	0.853	10
48 Mexico	71.0	89.0	65	7,010	5,783	0.77	0.81	0.96	0.845	-1
49 Colombia	69.4	90.6	68	5,790	5,729	0.74	0.83	0.95	0.840	4
50 Qatar	70.6	78.5	74	22,910 ^h	5,962	0.76	0.77	0.99	0.839	-47
51 Kuwait	75.0	77.4	53	21,630 ⁱ	5,949	0.83	0.69	0.98	0.836	-46
52 Thailand	69.2	93.6	54	6,350	5,762	0.74	0.81	0.95	0.832	-3
53 Malaysia	70.9	82.2	61	8,360	5,814	0.77	0.75	0.96	0.826	-9
54 Mauritius	70.4	81.7	60	12,510	5,893	0.76	0.74	0.98	0.825	-21
55 Latvia	69.0	99.0	72	5,010	5,010	0.73	0.90	0.83	0.820	7
56 Poland	71.1	99.0	76	4,702 ^e	4,702	0.77	0.91	0.77	0.819	10
57 Russian Federation	67.4	98.7	79	4,760 ^e	4,760	0.71	0.92	0.78	0.804	8
Medium human development	67.0	80.7	62	3,044	3,044	..	..	..	0.647	..
58 Brazil	66.5	82.4	72	5,500	5,500	0.69	0.79	0.91	0.796	0
59 Libyan Arab Jamahiriya	63.4	73.7	88	6,125 ^j	5,752	0.64	0.78	0.95	0.792	-9
60 Seychelles	71.0	88.0 ^g	61	4,960 ^e	4,960	0.77	0.79	0.82	0.792	3
61 Belarus	69.7	97.9	79	4,244 ^e	4,244	0.74	0.92	0.70	0.787	10
62 Bulgaria	71.2	93.0	65	4,320 ^e	4,320	0.77	0.84	0.71	0.773	8
63 Saudi Arabia	69.9	61.3	55	12,600 ⁱ	5,894	0.75	0.59	0.98	0.771	-31
64 Ecuador	69.0	89.0	72	4,400	4,400	0.73	0.83	0.72	0.764	4
65 Dominica	72.0	94.0 ^g	77	3,810 ^g	3,810	0.78	0.88	0.62	0.764	10
66 Iran, Islamic Rep. of	67.7	66.1	67	5,380	5,380	0.71	0.66	0.89	0.754	-7
67 Belize	73.7	70.0 ^g	68	4,610 ^e	4,610	0.81	0.69	0.76	0.754	0

1 Human development index (continued)

HDI rank		Life expectancy at birth (years) 1993	Adult literacy rate (%) 1993	Combined first-, second- and third-level gross enrolment ratio (%) 1993	Real GDP per capita (PPPS) 1993	Adjusted real GDP per capita (PPPS) 1993	Life expectancy index	Education index	GDP index	Human development index (HDI) value 1993	Real GDP per capita (PPPS) rank minus HDI rank ^a
68	Estonia	69.2	99.0	78	3,610 ^e	3,610	0.74	0.92	0.59	0.749	15
69	Algeria	67.3	58.8	66	5,570	5,570	0.71	0.61	0.92	0.746	-13
70	Jordan	68.1	84.8	66	4,380	4,380	0.72	0.79	0.72	0.741	-1
71	Botswana	65.2	68.0	71	5,220	5,220	0.67	0.69	0.86	0.741	-10
72	Kazakhstan	69.7	97.5	65	3,710	3,710	0.74	0.87	0.61	0.740	7
73	Saint Vincent	71.0	91.0 ^g	78	3,552 ^e	3,552	0.77	0.87	0.58	0.738	11
74	Romania	69.9	96.9	62	3,727 ^c	3,727	0.75	0.85	0.61	0.738	4
75	Suriname	70.5	92.5	71	3,670	3,670	0.76	0.85	0.60	0.737	7
76	Saint Lucia	72.0	82.0 ^g	74	3,795 ^e	3,795	0.78	0.79	0.62	0.733	1
77	Grenada	71.0 ^c	98.0	78	3,118 ^e	3,118	0.77	0.91	0.51	0.729	18
78	Tunisia	68.0	64.1	66	4,950	4,950	0.72	0.65	0.82	0.727	-14
79	Cuba	75.4	95.2	65	3,000 ^h	3,000	0.84	0.85	0.49	0.726	19
80	Ukraine	69.3	95.0	76	3,250 ^c	3,250	0.74	0.89	0.53	0.719	11
81	Lithuania	70.3	98.4	72	3,110	3,110	0.76	0.89	0.51	0.719	15
82	Oman	69.8	35.0	60	10,420	5,848	0.75	0.43	0.97	0.716	-45
83	Korea, Dem. People's Rep. of	71.2	95.0	75	3,000 ⁱ	3,000	0.77	0.88	0.49	0.714	15
84	Turkey	66.7	81.1	62	4,210	4,210	0.69	0.75	0.69	0.711	-12
85	Paraguay	70.1	91.5	62	3,340	3,340	0.75	0.82	0.55	0.704	2
86	Jamaica	73.7	84.1	64	3,180	3,180	0.81	0.78	0.52	0.702	6
87	Dominican Rep.	69.7	81.2	64	3,690	3,690	0.74	0.75	0.60	0.701	-6
88	Samoa (Western)	67.8	98.0	74	3,000 ⁱ	3,000	0.71	0.90	0.49	0.700	10
89	Sri Lanka	72.0	89.6	66	3,030	3,030	0.78	0.82	0.49	0.698	8
90	Turkmenistan	65.1	97.7	77	3,128 ^d	3,128	0.67	0.91	0.51	0.695	3
91	Peru	66.3	87.8	80	3,320	3,320	0.69	0.85	0.54	0.694	-3
92	Syrian Arab Rep.	67.3	68.7	65	4,196 ^d	4,196	0.71	0.68	0.69	0.690	-19
93	Armenia	72.8	98.8	78	2,040	2,040	0.80	0.92	0.33	0.680	31
94	Uzbekistan	69.4	97.2	73	2,510	2,510	0.74	0.89	0.41	0.679	11
95	Philippines	66.5	94.2	77	2,590	2,590	0.69	0.89	0.42	0.665	8
96	Azerbaijan	70.7	96.3	72	2,190	2,190	0.76	0.88	0.35	0.665	22
97	Lebanon	68.7	91.7	74	2,500 ⁱ	2,500	0.73	0.86	0.40	0.664	10
98	Moldova, Rep. of	67.6	96.4 ^g	76	2,370 ^c	2,370	0.71	0.90	0.38	0.663	11
99	Kyrgyzstan	69.2	97.0	70	2,320	2,320	0.74	0.88	0.37	0.663	13
100	South Africa	63.2	81.0	78	3,127 ^e	3,127	0.64	0.80	0.51	0.649	-6
101	Georgia	72.9	94.9 ^g	68	1,750	1,750	0.80	0.86	0.28	0.645	28
102	Indonesia	63.0	82.9	61	3,270	3,270	0.63	0.76	0.53	0.641	-13
103	Guyana	65.4	97.7	70	2,140	2,140	0.67	0.88	0.34	0.633	17
104	Albania	72.0	85.0	59	2,200 ⁱ	2,200	0.78	0.76	0.35	0.633	12
105	Tajikistan	70.4	96.7	69	1,380	1,380	0.76	0.88	0.22	0.616	33
106	Egypt	63.9	49.8	69	3,800	3,800	0.65	0.56	0.62	0.611	-30
107	Maldives	62.4	92.8	70	2,200 ⁱ	2,200	0.62	0.85	0.35	0.610	9
108	China	68.6	80.0	57	2,330	2,330	0.73	0.72	0.38	0.609	3
109	Iraq	66.1	55.7	55	3,413 ⁱ	3,413	0.68	0.55	0.56	0.599	-24
110	Swaziland	57.8	74.9	70	2,940	2,940	0.55	0.73	0.48	0.586	-9
111	Bolivia	59.7	81.5	68	2,510	2,510	0.58	0.77	0.41	0.584	-6
112	Guatemala	65.1	54.6	45	3,400	3,400	0.67	0.52	0.56	0.580	-26
113	Mongolia	63.9	81.7	62	2,090	2,090	0.65	0.75	0.34	0.578	10
114	Honduras	67.9	71.4	61	2,100	2,100	0.72	0.68	0.34	0.576	7
115	El Salvador	66.8	70.4	54	2,360	2,360	0.70	0.65	0.38	0.576	-5
116	Namibia	59.1	40.0	83	3,710	3,710	0.57	0.54	0.61	0.573	-37
117	Nicaragua	67.1	65.0	61	2,280	2,280	0.70	0.64	0.37	0.568	-4
118	Solomon Islands	70.5	62.0	46	2,266 ^d	2,266	0.76	0.57	0.36	0.563	-4
119	Vanuatu	65.4	65.0	52	2,500	2,500	0.67	0.61	0.40	0.562	-12
120	Gabon	53.7	60.3	47	3,861 ^e	3,861	0.48	0.56	0.63	0.557	-46
121	Viet Nam	65.5	92.5	51	1,040 ^h	739	0.68	0.79	0.11	0.523	27
122	Cape Verde	64.9	68.1	62	1,820	1,820	0.67	0.66	0.29	0.539	4
123	Morocco	63.6	41.7	44	3,270	3,270	0.64	0.43	0.53	0.534	-34
124	Zimbabwe	53.4	84.0	70	2,100	2,100	0.47	0.79	0.34	0.534	-3
125	Congo	51.2	72.1	56	2,750	2,750	0.44	0.67	0.45	0.517	-23
126	Papua New Guinea	56.0	70.5	35	2,530	2,530	0.52	0.59	0.41	0.504	-22
Low human development		56.0	48.9	46	1,241	1,241	..	..	..	0.396	..
127	Cameroon	56.3	60.8	48	2,220	2,220	0.52	0.57	0.36	0.481	-12
128	Kenya	55.5	75.7	56	1,400	1,400	0.51	0.69	0.22	0.473	9
129	Ghana	56.2	62.0	45	2,000	2,000	0.52	0.56	0.32	0.467	-4
130	Lesotho	60.8	69.5	55	980	980	0.60	0.65	0.15	0.464	21
131	Equatorial Guinea	48.2	76.4	60	1,800 ⁱ	1,800	0.39	0.71	0.29	0.461	-4
132	São Tomé and Príncipe	67.0	60.0	57	600 ⁱ	600	0.70	0.59	0.08	0.458	39
133	Myanmar	57.9	82.4	49	650 ^e	650	0.55	0.71	0.09	0.451	35
134	Pakistan	61.8	36.4	37	2,160	2,160	0.61	0.37	0.35	0.442	-15
135	India	60.7	50.6	55	1,240	1,240	0.60	0.52	0.19	0.436	7
136	Zambia	48.6	76.2	49	1,110	1,110	0.39	0.67	0.17	0.411	9

HDI rank	Life expectancy at birth (years) 1993	Adult literacy rate (%) 1993	Combined first-, second- and third-level gross enrolment ratio (%) 1993	Real GDP per capita (PPP\$) 1993	Adjusted real GDP per capita (PPP\$) 1993	Life expectancy index	Education index	GDP index	Human development index (HDI) value 1993	Real GDP per capita (PPP\$) rank minus HDI rank ^a	
137	Nigeria	50.6	54.1	52	1,540	1,540	0.43	0.53	0.24	0.400	-2
138	Lao People's Dem. Rep.	51.3	54.6	50	1,458 ^a	1,458	0.44	0.53	0.23	0.400	-2
139	Comoros	56.2	56.2	38	1,130	1,130	0.52	0.50	0.17	0.399	5
140	Togo	55.2	49.2	51	1,020	1,020	0.50	0.50	0.15	0.385	9
141	Zaire	52.0	75.2	39	300 ^d	300	0.45	0.63	0.03	0.371	33
142	Yemen	50.4	47.1	45	1,600 ⁱ	1,600	0.42	0.42	0.25	0.366	-8
143	Bangladesh	55.9	37.0	40	1,290	1,290	0.52	0.38	0.20	0.365	-3
144	Tanzania, U. Rep. of	52.1	65.5	34	630	630	0.45	0.55	0.09	0.364	26
145	Haiti	56.8	43.4	30	1,050	1,050	0.53	0.39	0.16	0.359	1
146	Sudan	53.2	43.8	31	1,350 ⁱ	1,350	0.47	0.40	0.21	0.359	-7
147	Côte d'Ivoire	50.9	37.8	39	1,620	1,620	0.43	0.38	0.26	0.357	-15
148	Central African Rep.	49.5	56.0	37	1,050	1,050	0.41	0.50	0.16	0.355	-2
149	Mauritania	51.7	36.7	35	1,610	1,610	0.45	0.36	0.25	0.353	-16
150	Madagascar	56.8	45.8 ^k	34	700	700	0.53	0.42	0.10	0.349	14
151	Nepal	53.8	26.3	57	1,000	1,000	0.48	0.37	0.15	0.332	-1
152	Rwanda	47.2	58.0	39	740	740	0.37	0.52	0.11	0.332	9
153	Senegal	49.5	31.4	31	1,710	1,710	0.41	0.31	0.27	0.331	-23
154	Benin	47.8	34.3	34	1,650	1,650	0.38	0.34	0.26	0.327	-23
155	Uganda	44.7	59.7	35	910	910	0.33	0.51	0.14	0.326	-3
156	Cambodia	51.9	35.0 ^j	30	1,250 ⁱ	1,250	0.45	0.33	0.19	0.325	-15
157	Malawi	45.5	54.7	47	710	710	0.34	0.52	0.10	0.321	6
158	Liberia	55.6	36.4	17	843 ^e	843	0.51	0.30	0.13	0.311	-3
159	Bhutan	51.0	40.2	31	790	790	0.43	0.37	0.12	0.307	-2
160	Guinea	44.7	33.9	24	1,800 ⁱ	1,800	0.33	0.31	0.29	0.306	-33
161	Guinea-Bissau	43.7	52.8	30	860	860	0.31	0.45	0.13	0.297	-8
162	Gambia	45.2	36.6	34	1,190	1,190	0.34	0.36	0.18	0.292	-19
163	Chad	47.7	46.0	27	690	690	0.38	0.40	0.10	0.291	2
164	Djibouti	48.4	44.2	19	775 ^e	775	0.39	0.36	0.11	0.287	-4
165	Angola	46.8	42.5	32	674 ^d	674	0.36	0.39	0.10	0.283	1
166	Burundi	50.3	33.7	31	670	670	0.42	0.33	0.10	0.282	1
167	Mozambique	46.4	37.9	25	640	640	0.36	0.34	0.09	0.261	2
168	Ethiopia	47.8	33.6	16	420	420	0.38	0.28	0.05	0.237	5
169	Afghanistan	43.7	29.8	18	800 ⁱ	800	0.31	0.26	0.12	0.229	-13
170	Burkina Faso	47.5	18.0	19	780	780	0.38	0.18	0.11	0.225	-11
171	Mali	46.2	28.4	16	530	530	0.35	0.24	0.07	0.223	1
172	Somalia	47.2	24.9 ^k	7	712 ^d	712	0.37	0.19	0.10	0.221	-10
173	Sierra Leone	39.2	29.6 ^k	28	860	860	0.24	0.29	0.13	0.219	-20
174	Niger	46.7	12.8	15	790	790	0.36	0.13	0.12	0.204	-17
All developing countries		61.5	68.8	55	2,696	2,696	..	..	..	0.563	..
Least developed countries		51.0	46.5	34	898	898	..	..	..	0.331	..
Sub-Saharan Africa		50.9	55.0	42	1,288	1,288	..	..	..	0.379	..
Industrial countries		74.3	98.3	82	15,136	5,909	..	..	..	0.909	..
World		63.0	76.3	60	5,428	5,428	..	..	..	0.746	..

Note: Figures in italics are Human Development Report Office estimates. Countries with the same HDI value are ranked on the basis of the fourth decimal place, not shown here.

a. A positive figure shows that the HDI rank is better than the real GDP per capita (PPP\$) rank, a negative the opposite.

b. Capped at 100.

c. Preliminary results of the European Comparison Programme, conducted by the United Nations Economic Commission for Europe, the OECD, Eurostat and the Austrian Statistical Office. See United Nations Economic Commission for Europe 1996.

d. Human Development Report Office estimate based on the latest available update of the Penn World Tables.

e. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991.

f. World Bank 1995f.

g. UNICEF 1996.

h. World Bank 1995d.

i. Human Development Report Office estimate.

j. Figures are from UNDP 1995c. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991.

k. Human Development Report Office estimate based on national sources.

Source: Column 1: calculated on the basis of data from UN 1995e; column 2: calculated on the basis of data from UNESCO 1995b; column 3: UNESCO 1995d; column 4: calculated on the basis of estimates from World Bank 1995h.

2 Gender-related development index

HDI rank	Gender-related development index (GDI) rank	Life expectancy at birth (years) 1993		Adult literacy rate (%) 1993		Combined primary, secondary and tertiary gross enrolment ratio (%) 1993		Earned income share (%) 1993 ^a		GDI value	HDI rank minus GDI rank ^b	
		Female	Male	Female	Male	Female	Male	Female	Male			
High human development	..	77.2	70.4	96.8	97.6	79.6	77.9	34.8	65.2	0.855	..	
1	Canada	2	80.8	74.3	99.0	99.0	100.0 ^c	100.0 ^c	37.1	62.9 ^d	0.927	-1
2	USA	4	79.4	72.6	99.0	99.0	98.3	93.5	40.1	59.9	0.923	-2
3	Japan	12	82.6	76.5	99.0	99.0	77.2	79.3	33.1	66.9 ^d	0.897	-9
4	Netherlands	11	80.5	74.5	99.0	99.0	86.5	91.4	33.2	66.8	0.898	-7
5	Norway	3	80.4	73.7	99.0	99.0	91.0	88.9	41.5	58.5	0.926	2
6	Finland	5	79.7	71.8	99.0	99.0	100.0	91.4	41.2	58.8	0.921	1
7	France	8	80.9	73.1	99.0	99.0	90.2	86.1	38.3	61.7	0.913	-1
8	Iceland	6	80.9	75.9	99.0	99.0	80.1	84.0	39.2	60.8	0.920	2
9	Sweden	1	81.2	75.5	99.0	99.0	81.6	78.8	44.9	55.1	0.929	8
10	Spain	20	80.6	74.7	98.0	98.0	90.3	83.6	28.4	71.6 ^d	0.866	-10
11	Australia	9	80.7	74.9	99.0	99.0	80.6	77.7	38.8	61.2	0.912	2
12	Belgium	15	79.8	73.1	99.0	99.0	85.3	85.2	32.9	67.1	0.885	-3
13	Austria	13	79.3	73.1	99.0	99.0	83.6	86.9	33.8	66.2 ^d	0.887	0
14	New Zealand	10	78.7	72.6	99.0	99.0	91.0	87.9	38.0	62.0	0.906	4
15	Switzerland	19	81.3	74.8	99.0	99.0	71.7	77.5	29.9	70.1	0.869	-4
16	United Kingdom	14	78.8	73.7	99.0	99.0	83.6	82.1	34.2	65.8	0.886	2
17	Denmark	7	78.2	72.5	99.0	99.0	88.3	85.1	41.6	58.4	0.913	-10
18	Germany	17	79.1	72.8	99.0	99.0	77.3	81.1	34.7	65.3	0.883	1
19	Ireland	27	78.2	72.7	99.0	99.0	85.5	82.9	24.8	75.2	0.835	-8
20	Italy	21	80.7	74.3	97.4	97.4	70.8	69.4	30.3	69.7 ^d	0.856	-1
21	Greece	22	80.2	75.1	89.0 ^e	97.0 ^e	78.3	78.0	30.4	69.6	0.853	-1
22	Hong Kong	25	81.9	75.7	87.1	95.8	70.6	70.9	26.9	73.1	0.843	-3
23	Cyprus	..	..	..	..	..	..	..	..	..	..	..
24	Israel	..	..	..	..	..	..	..	..	..	..	..
25	Barbados	16	78.0	73.0	96.4	97.9	76.0	79.2	39.1	60.9 ^d	0.884	7
26	Bahamas	18	78.0	68.9	97.8	98.4	76.4	73.8	39.4	60.6 ^d	0.879	6
27	Luxembourg	..	..	..	..	..	..	..	..	..	..	..
28	Malta	..	..	..	..	..	..	..	..	..	..	..
29	Korea, Rep. of	31	75.0	67.5	96.1	99.1	76.7	84.9	26.9	73.1	0.816	-6
30	Argentina	45	75.8	68.7	95.9	96.0	81.8	78.6	20.3	79.7 ^f	0.766	-19
31	Costa Rica	32	78.7	74.1	94.6	94.4	66.9	68.1	26.1	73.9	0.813	-5
32	Uruguay	26	75.7	69.3	97.4	96.6	81.2	71.0	32.5	67.5 ^f	0.837	2
33	Chile	44	77.5	70.5	94.5	95.0	70.4	71.2	20.7	79.3 ^f	0.767	-15
34	Singapore	29	77.5	72.5	85.0	95.6	66.5	69.3	30.5	69.5	0.833	1
35	Portugal	30	78.1	71.2	81.0 ^e	89.0 ^e	82.5	75.6	33.5	66.5	0.833	1
36	Brunei Darussalam	35	76.4	72.6	81.6	91.7	69.9	69.4	26.1	73.9 ^d	0.808	-3
37	Czech Rep.	23	74.9	67.8	99.0	99.0	67.2	66.2	39.0	61.0	0.853	-10
38	Trinidad and Tobago	34	74.1	69.4	96.6	98.6	67.3	67.0	28.5	71.5 ^d	0.809	0
39	Bahrain	52	74.2	69.9	77.6	88.2	85.9	82.8	13.3	86.7 ^d	0.726	-17
40	Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..
41	Slovakia	24	75.4	66.4	99.0	99.0	72.1	70.6	40.6	59.4 ^d	0.850	12
42	United Arab Emirates	56	75.5	73.0	78.2	78.2	84.8	78.2	8.9	91.1 ^d	0.710	-19
43	Panama	39	75.1	71.1	89.5	90.6	70.6	67.8	26.5	73.5 ^d	0.792	-1
44	Venezuela	41	74.8	69.0	89.9	91.4	71.0	67.6	25.6	74.4 ^d	0.784	-2
45	Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..
46	Hungary	28	73.8	64.4	99.0	99.0	67.5	65.7	39.2	60.8	0.835	12
47	Fiji	50	73.8	69.6	88.1	93.1	78.7	79.7	18.5	81.5 ^d	0.734	-9
48	Mexico	46	74.1	68.0	86.4	91.1	64.3	66.2	23.8	76.2	0.755	-4
49	Colombia	38	72.4	66.5	90.6	90.7	70.6	65.7	32.1	67.9 ^f	0.797	5
50	Qatar	58	74.3	68.9	78.2	78.6	76.0	72.4	8.7	91.3 ^d	0.700	-14
51	Kuwait	55	77.3	73.4	73.6	80.7	52.1	53.0	18.1	81.9 ^d	0.719	-10
52	Thailand	33	72.0	66.4	91.4	95.9	54.9	54.0	37.2	62.8	0.811	13
53	Malaysia	43	73.1	68.8	76.3	88.2	61.5	59.7	29.4	70.6 ^d	0.772	4
54	Mauritius	47	73.9	67.1	77.2	86.3	60.7	59.0	24.7	75.3 ^d	0.740	1
55	Latvia	36	74.9	63.1	99.0	99.0	74.8	69.5	42.4	57.6 ^d	0.806	13
56	Poland	37	75.7	66.7	99.0	99.0	77.2	74.6	38.5	61.5 ^d	0.802	13
57	Russian Federation	40	73.5	61.4	98.7	98.7	82.1	75.8	41.3	58.7 ^d	0.790	11
Medium human development	..	68.9	65.1	72.7	87.1	58.4	63.9	34.2	65.8	0.615	..	
58	Brazil	49	68.9	64.1	82.0	82.6	71.3	72.0	28.6	71.4 ^f	0.739	3
59	Libyan Arab Jamahiriya	73	65.3	61.9	59.3	86.3	87.4	88.7	14.2	85.8 ^d	0.633	-20
60	Seychelles	..	..	..	..	..	..	..	..	..	..	..
61	Belarus	42	75.1	64.3	99.4 ^g	99.7 ^g	81.1	77.8	41.7	58.3 ^d	0.778	12
62	Bulgaria	..	..	..	..	..	..	..	..	..	..	..
63	Saudi Arabia	85	71.6	68.6	47.6	70.4	51.8	57.4	7.5	92.5 ^d	0.551	-30
64	Ecuador	66	71.6	66.6	87.5	91.4	71.1	73.5	17.3	82.7 ^f	0.661	-10
65	Dominica	..	..	..	..	..	..	..	..	..	..	..
66	Iran, Islamic Rep. of	75	68.3	67.2	56.4	75.5	61.3	71.9	16.3	83.7 ^d	0.618	-18
67	Belize	..	..	..	..	..	..	..	..	..	..	..

HDI rank	Gender-related development index (GDI) rank	Life expectancy at birth (years) 1993		Adult literacy rate (%) 1993		Combined primary, secondary and tertiary gross enrolment ratio (%) 1993		Earned income share (%) 1993 ^a		GDI value	HDI rank minus GDI rank ^b	
		Female	Male	Female	Male	Female	Male	Female	Male			
68	Estonia	48	74.8	63.6	99.0	99.0	80.9	74.4	42.3	57.7 ^d	0.740	10
69	Algeria	81	68.5	66.2	45.8	71.6	61.1	70.9	15.7	84.3 ^d	0.596	-22
70	Jordan	..	..	..	..	..	..	..	..	..	..	..
71	Botswana	54	67.0	63.3	57.8	79.4	73.2	69.3	39.3	60.7 ^d	0.723	6
72	Kazakhstan	51	74.0	65.1	99.5 ^g	99.7 ^g	66.2	64.4	39.2	60.8 ^d	0.732	10
73	Saint Vincent	..	..	..	..	..	..	..	..	..	..	..
74	Romania	53	73.4	66.6	96.9 ^g	98.9 ^g	62.1	62.6	37.4	62.6 ^d	0.726	9
75	Suriname	..	..	..	..	..	..	..	..	..	..	..
76	Saint Lucia	..	..	..	..	..	..	..	..	..	..	..
77	Grenada	..	..	..	..	..	..	..	..	..	..	..
78	Tunisia	68	68.9	67.1	51.6	76.4	62.5	69.8	23.5	76.5 ^d	0.647	-5
79	Cuba	59	77.4	73.6	94.6	95.7	67.2	62.2	29.7	70.3 ^d	0.699	5
80	Ukraine	..	..	..	..	..	..	..	..	..	..	..
81	Lithuania	57	76.0	64.7	98.4	98.4	74.7	68.5	40.8	59.2 ^d	0.709	8
82	Oman	..	..	..	..	..	..	..	..	..	..	..
83	Korea, Dem. People's Rep. of	..	..	..	..	..	..	..	..	..	..	..
84	Turkey	61	68.8	64.7	70.9	91.0	54.9	68.9	31.5	68.5	0.680	5
85	Paraguay	67	72.0	68.2	89.9	93.1	61.1	61.9	22.4	77.6	0.649	0
86	Jamaica	60	75.9	71.5	88.3	79.9	65.9	63.1	39.2	60.8 ^d	0.693	8
87	Dominican Rep.	71	71.8	67.7	81.2	81.2	64.9	62.5	22.4	77.6 ^d	0.641	-2
88	Samoa (Western)	..	..	..	..	..	..	..	..	..	..	..
89	Sri Lanka	62	74.3	69.8	86.2	93.1	67.2	65.6	33.1	66.9	0.679	8
90	Turkmenistan	..	..	..	..	..	..	..	..	..	..	..
91	Peru	72	68.2	64.4	81.6	93.9	74.6	85.5	21.6	78.4 ^d	0.634	-1
92	Syrian Arab Rep.	82	69.4	65.4	53.0	84.3	60.4	70.0	18.3	81.7 ^d	0.591	-10
93	Armenia	63	75.8	69.7	99.5 ^g	99.7 ^g	82.6	73.4	40.1	59.9 ^d	0.677	10
94	Uzbekistan	..	..	..	..	..	..	..	..	..	..	..
95	Philippines	70	68.4	64.7	93.9	94.6	78.4	76.2	30.2	69.8 ^d	0.644	4
96	Azerbaijan	65	74.6	66.6	99.5 ^g	99.7 ^g	70.1	73.0	36.4	63.6 ^d	0.661	10
97	Lebanon	77	70.7	66.8	89.4	94.3	74.8	73.0	21.4	78.6 ^d	0.615	-1
98	Moldova, Rep. of	..	..	..	..	..	..	..	..	..	..	..
99	Kyrgyzstan	64	73.0	65.2	99.5 ^g	99.7 ^g	71.5	67.7	39.1	60.9 ^d	0.661	13
100	South Africa	74	66.3	60.3	80.8	81.3	79.6	77.1	30.5	69.5 ^d	0.622	4
101	Georgia	69	76.8	68.6	99.0	99.0	69.6	66.1	39.1	60.9 ^d	0.646	10
102	Indonesia	76	64.8	61.3	76.9	89.1	58.2	63.7	31.9	68.1 ^d	0.616	4
103	Guyana	78	68.2	62.6	97.0	98.4	70.1	69.3	25.4	74.6 ^d	0.604	3
104	Albania	..	..	..	..	..	..	..	..	..	..	..
105	Tajikistan	..	..	..	..	..	..	..	..	..	..	..
106	Egypt	87	65.1	62.7	37.0	62.4	62.0	74.7	23.1	76.9	0.545	-5
107	Maldives	80	61.1	63.7	92.6	93.0	70.3	70.2	35.1	64.9 ^d	0.599	3
108	China	79	70.6	66.8	70.9	88.7	54.1	60.1	37.9	62.1 ^d	0.601	5
109	Iraq	96	67.6	64.6	42.3	68.8	48.0	61.8	12.5	87.5 ^d	0.486	-11
110	Swaziland	84	60.1	55.5	73.6	76.3	68.3	71.9	34.7	65.3	0.566	2
111	Bolivia	86	61.2	58.0	73.9	89.4	62.2	73.1	26.3	73.7 ^d	0.549	1
112	Guatemala	94	67.6	62.7	47.6	61.7	41.5	48.9	18.9	81.1 ^d	0.506	-6
113	Mongolia	83	65.3	62.5	75.6	87.8	65.0	58.4	39.1	60.9 ^d	0.572	6
114	Honduras	90	70.3	65.6	71.2	71.5	61.6	59.6	22.6	77.4 ^d	0.542	0
115	El Salvador	88	69.0	64.5	68.5	72.5	54.4	54.3	26.5	73.5 ^d	0.544	3
116	Namibia	..	..	..	..	..	..	..	..	..	..	..
117	Nicaragua	89	68.8	65.4	65.9	64.0	61.6	60.3	29.5	70.5 ^d	0.544	3
118	Solomon Islands	..	..	..	..	..	..	..	..	..	..	..
119	Vanuatu	..	..	..	..	..	..	..	..	..	..	..
120	Gabon	..	..	..	..	..	..	..	..	..	..	..
121	Viet Nam	91	67.6	63.1	89.5	95.8	49.2	53.2	47.3	52.7	0.539	2
122	Cape Verde	93	65.7	63.7	59.6	78.8	60.3	64.5	32.1	67.9 ^d	0.517	1
123	Morocco	97	65.3	61.9	28.8	54.7	36.8	51.5	27.1	72.9 ^d	0.486	-2
124	Zimbabwe	92	54.7	52.1	78.6	89.6	65.1	74.0	37.5	62.5 ^d	0.525	4
125	Congo	..	..	..	..	..	..	..	..	..	..	..
126	Papua New Guinea	95	56.9	55.4	60.6	79.7	31.1	38.4	34.6	65.4 ^d	0.490	2
..	Low human development	..	56.9	55.5	36.1	61.5	39.0	53.7	27.3	72.7	0.379	..
127	Cameroon	100	57.8	54.8	49.0	73.1	42.7	53.5	29.8	70.2 ^d	0.455	-2
128	Kenya	98	57.1	54.1	66.8	84.7	54.6	57.0	41.6	58.4	0.469	1
129	Ghana	99	58.0	54.4	50.5	73.9	38.8	50.1	43.5	56.5 ^d	0.459	1
130	Lesotho	101	63.3	58.3	60.0	79.7	59.9	50.1	30.4	69.6 ^d	0.454	0
131	Equatorial Guinea	..	..	..	..	..	..	..	..	..	..	..
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..
133	Myanmar	102	59.6	56.3	76.6	88.3	47.8	49.4	36.7	63.3 ^d	0.447	0
134	Pakistan	107	62.9	60.9	23.0	48.6	23.9	49.1	18.6	81.4 ^d	0.383	-4
135	India	103	60.7	60.6	36.0	64.3	46.4	62.8	24.8	75.2 ^d	0.410	1
136	Zambia	104	49.4	47.7	68.7	84.2	44.9	52.5	39.0	61.0	0.405	1

2 Gender-related development index (continued)

All countries

HDI rank	Gender-related development index (GDI) rank	Life expectancy at birth (years) 1993		Adult literacy rate (%) 1993		Combined primary, secondary and tertiary gross enrolment ratio (%) 1993		Earned income share (%) 1993 ^d		GDI value	HDI rank minus GDI rank ^b	
		Female	Male	Female	Male	Female	Male	Female	Male			
137	Nigeria	108	52.2	49.0	43.8	64.7	45.3	57.8	29.6	70.4 ^d	0.380	-2
138	Lao People's Dem. Rep.	106	52.8	49.8	42.1	67.7	42.1	58.9	39.4	60.6 ^d	0.387	1
139	Comoros	105	56.7	55.7	49.1	63.2	35.1	41.6	35.4	64.6 ^d	0.391	3
140	Togo	110	57.0	53.4	34.3	64.7	37.9	63.7	32.3	67.7 ^d	0.364	-1
141	Zaire	109	53.7	50.4	64.9	85.1	30.5	46.4	36.7	63.3 ^d	0.364	1
142	Yemen	122	50.6	50.1	26.0	50.0	22.5	65.2	22.9	77.1 ^d	0.311	-11
143	Bangladesh	116	55.9	55.9	25.0	48.3	34.0	44.8	22.8	77.2	0.336	-4
144	Tanzania, U. Rep. of	111	53.5	50.5	53.9	77.8	33.1	35.1	47.5	52.5	0.359	2
145	Haiti	112	58.5	55.1	40.5	46.5	28.7	30.6	36.1	63.9 ^d	0.354	2
146	Sudan	118	54.6	51.8	32.0	55.7	27.3	35.1	21.2	78.8 ^d	0.327	-3
147	Côte d'Ivoire	117	52.3	49.6	27.4	47.6	31.1	47.5	25.4	74.6 ^d	0.328	-1
148	Central African Rep.	113	52.0	47.0	47.9	64.9	27.3	47.7	38.9	61.1	0.346	4
149	Mauritania	115	53.3	50.1	25.3	48.6	29.5	39.5	37.0	63.0 ^d	0.338	3
150	Madagascar	114	58.3	55.3	41.8	49.8	32.9	34.2	37.8	62.2 ^d	0.346	5
151	Nepal	124	53.3	54.3	13.0	39.4	42.9	70.6	32.2	67.8 ^d	0.308	-4
152	Rwanda	..	..	..	..	..	..	..	..	..	..	..
153	Senegal	120	50.5	48.5	21.5	41.3	25.4	36.4	34.9	65.1 ^d	0.314	1
154	Benin	123	49.5	46.1	23.2	45.9	21.8	45.4	41.1	58.9 ^d	0.311	-1
155	Uganda	119	46.0	43.4	47.7	72.1	30.4	39.7	40.7	59.3 ^d	0.318	4
156	Cambodia	..	..	..	..	..	..	..	..	..	..	..
157	Malawi	121	46.1	44.9	39.8	70.8	43.7	49.2	42.5	57.5 ^d	0.312	3
158	Liberia	..	..	..	..	..	..	..	..	..	..	..
159	Bhutan	..	..	..	..	..	..	..	..	..	..	..
160	Guinea	125	45.2	44.2	20.1	47.8	14.8	32.3	40.4	59.6 ^d	0.286	0
161	Guinea-Bissau	126	45.3	42.1	40.1	66.1	21.1	38.5	32.9	67.1 ^d	0.281	0
162	Gambia	127	46.8	43.6	23.1	50.7	26.9	40.8	37.3	62.7 ^d	0.275	0
163	Chad	128	49.3	46.1	32.4	60.1	16.3	37.9	37.0	63.0 ^d	0.275	0
164	Djibouti	..	..	..	..	..	..	..	..	..	..	..
165	Angola	130	48.4	45.2	28.0	56.0	29.4	34.2	39.3	60.7 ^d	0.270	-1
166	Burundi	129	52.0	48.5	20.9	47.7	27.5	34.7	42.3	57.7 ^d	0.271	1
167	Mozambique	131	48.0	45.0	21.4	55.3	20.7	28.8	42.0	58.0 ^d	0.245	0
168	Ethiopia	132	49.4	46.2	23.5	43.6	12.6	18.3	33.4	66.6 ^d	0.227	0
169	Afghanistan	135	44.2	43.2	13.5	45.2	9.2	26.0	27.4	72.6 ^d	0.196	-2
170	Burkina Faso	134	49.0	45.9	8.4	27.9	14.7	24.0	39.7	60.3 ^d	0.211	0
171	Mali	133	47.8	44.6	20.8	36.6	11.8	19.9	39.4	60.6 ^d	0.215	2
172	Somalia	..	..	..	..	..	..	..	..	..	..	..
173	Sierra Leone	136	40.8	37.7	16.7	43.3	22.4	34.0	28.5	71.5 ^d	0.196	0
174	Niger	137	48.3	45.1	6.1	19.8	10.8	19.0	37.1	62.9 ^d	0.192	0
All developing countries		..	62.9	60.3	59.8	77.6	50.6	59.7	31.0	69.0	0.530	..
Least developed countries		..	52.1	50.0	36.1	57.5	29.5	40.1	32.8	67.2	0.318	..
Sub-Saharan Africa		..	52.5	49.3	45.4	64.7	37.2	45.9	35.6	64.4	0.366	..
Industrial countries		..	78.6	71.2	98.5	98.7	84.3	81.8	37.0	63.0	0.868	..
World		..	64.6	61.4	69.6	82.5	55.6	63.0	32.4	67.6	0.600	..

Note: Figures in italics are Human Development Report Office estimates.

a. 1993 or latest available year.

b. The HDI ranks used in this column are those recalculated for the universe of 137 countries. See table 1.11 in chapter 1. A positive figure indicates that the GDI rank is better than the HDI rank, a negative the opposite.

c. Capped at 100.

d. No wage data available. An estimate of 75%, the mean for all countries with wage data available, was used for the ratio of the female non-agricultural wage to the male non-agricultural wage.

e. World Bank 1994c.

f. Wage data based on Psacharopoulos and Tzannatos 1992.

g. Calculated on the basis of UNESCO 1995c.

Source: Columns 2 and 3: Human Development Report Office calculations based on data from UN 1995e; columns 4 and 5: Human Development Report Office calculations based on estimates from UNESCO 1995b; columns 6 and 7: UNESCO 1995d; columns 8 and 9: Human Development Report Office calculations based on estimates from the following: for real GDP per capita (PPPs), World Bank 1995h; for share of economically active population, ILO 1995a and 1995f; and for female wages as a percentage of male wages, ILO 1995f, UN 1994b and Psacharopoulos and Tzannatos 1992.

3 Gender empowerment measure

All countries

HDI rank	Gender empowerment measure (GEM) rank	Seats held in parliament (% women) ^a	Administrators and managers (% women) ^b	Professional and technical workers (% women) ^b	Earned income share (% to women) ^{b,c}	GEM value	HDI rank minus GEM rank ^d	
High human development								
1	Canada	6	18.0	42.2	56.1	37	0.685	-5
2	USA	9	10.4	42.0	52.7	40	0.645	-7
3	Japan	37	6.7	8.5	41.8	33 ^e	0.445	-34
4	Netherlands	8	28.4	15.0	44.2	33	0.646	-4
5	Norway	1	39.4	30.9	57.5	41	0.786	4
6	Finland	4	33.5	26.4	62.3	41	0.710	2
7	France	40	5.9	9.4	41.4	38	0.437	-33
8	Iceland	..	..	..	..	..	..	..
9	Sweden	2	40.4	38.9	64.4	45	0.779	6
10	Spain	25	14.6	12.0	48.1	28 ^e	0.490	-16
11	Australia	15	13.5	43.3	25.0	39	0.590	-5
12	Belgium	16	15.4	18.8	50.5	33	0.580	-5
13	Austria	10	23.2	19.2	48.6	34 ^e	0.641	2
14	New Zealand	5	21.2	32.3	47.8	38	0.685	8
15	Switzerland	12	16.7	27.8	23.8	30	0.594	2
16	United Kingdom	18	7.8	33.0	43.7	34	0.530	-3
17	Denmark	3	33.0	20.0	62.8	42	0.718	13
18	Germany	7	25.5	19.2	43.0	35	0.654	10
19	Ireland	23	12.8	17.3	48.0	25	0.504	-5
20	Italy	13	13.0	37.6	46.3	30 ^e	0.593	6
21	Greece	60	6.0	12.1	44.2	30	0.370	-40
22	Hong Kong	..	..	..	..	..	..	..
23	Cyprus	64	3.6	10.2	40.8	27	0.359	-43
24	Israel	28	9.2	18.7	54.1	31	0.485	-6
25	Barbados	11	18.4	37.0	52.1	39 ^e	0.597	12
26	Bahamas	19	10.8	26.3	56.9	28 ^e	0.525	5
27	Luxembourg	14	20.0	8.6	37.7	29	0.590	11
28	Malta	..	..	..	..	..	..	..
29	Korea, Rep. of	78	2.0	4.2	45.0	27	0.282	-52
30	Argentina	..	..	..	..	..	..	..
31	Costa Rica	30	14.0	21.1	44.9	26	0.475	-3
32	Uruguay	49	7.0	25.3	62.6	32 ^f	0.413	-21
33	Chile	59	7.2	17.4	34.0	21 ^f	0.380	-30
34	Singapore	44	3.7	34.3	16.1	31	0.427	-14
35	Portugal	24	8.7	36.6	52.4	28	0.491	7
36	Brunei Darussalam	..	..	..	..	..	..	..
37	Czech Rep.	..	..	..	..	..	..	..
38	Trinidad and Tobago	17	20.6	23.3	53.3	28 ^e	0.559	15
39	Bahrain	..	..	..	..	..	..	..
40	Antigua and Barbuda	..	..	..	..	..	..	..
41	Slovakia	..	..	..	..	..	..	..
42	United Arab Emirates	88	0 ^g	1.6	25.1	09 ^e	0.253	-55
43	Panama	38	8.3	27.6	49.2	26 ^e	0.441	-4
44	Venezuela	52	6.3	17.6	55.2	26	0.394	-17
45	Saint Kitts and Nevis	..	..	..	..	..	..	..
46	Hungary	22	11.4	58.2	49.0	39	0.507	14
47	Fiji	70	5.8	9.6	44.7	18 ^e	0.325	-33
48	Mexico	31	13.9	20.0	43.6	24	0.471	7
49	Colombia	36	9.3	27.2	41.8	32 ^f	0.447	3
50	Qatar	..	..	..	..	..	..	..
51	Kuwait	74	0 ^g	5.2	36.8	18 ^e	0.308	-34
52	Thailand	53	4.8	21.8	52.4	37	0.390	-12
53	Malaysia	46	11.1	11.9	44.5	29 ^e	0.425	-4
54	Mauritius	65	2.9	14.3	41.4	25 ^e	0.357	-22
55	Latvia	..	..	..	..	..	..	..
56	Poland	41	13.0	15.6	60.4	38 ^e	0.431	3
57	Russian Federation	..	..	..	..	..	..	..
Medium human development								
58	Brazil	56	7.1	17.3	57.2	29 ^f	0.383	-11
59	Libyan Arab Jamahiriya	..	..	..	..	..	..	..
60	Seychelles	..	..	..	..	..	..	..
61	Belarus	..	..	..	..	..	..	..
62	Bulgaria	26	13.3	28.9	57.0	41	0.486	20
63	Saudi Arabia	..	..	..	..	..	..	..
64	Ecuador	54	4.5	31.5	48.0	17 ^f	0.388	-7
65	Dominica	..	..	..	..	..	..	..
66	Iran, Islamic Rep. of	90	3.4	3.5	32.6	16 ^e	0.239	-42
67	Belize	34	10.3	36.6	38.8	17	0.458	15

3 Gender empowerment measure (continued)

HDI rank	Gender empowerment measure (GEM) rank	Seats held in parliament (% women) ^a	Administrators and managers (% women) ^b	Professional and technical workers (% women) ^b	Earned income share (% to women) ^{b,c}	GEM value	HDI rank minus GEM rank ^d	
68	Estonia	..	..	..	..	..	..
69	Algeria	79	6.7	5.9	27.6	16 ^e	0.280	-29
70	Jordan	..	..	..	..	..	..
71	Botswana	33	10.0	36.1	61.4	29 ^b	0.464	18
72	Kazakhstan	..	..	..	..	..	..
73	Saint Vincent	..	..	..	..	..	..
74	Romania	..	..	..	..	..	..
75	Suriname	67	5.9	21.5	69.9	24	0.347	-15
76	Saint Lucia	..	..	..	..	..	..
77	Grenada	..	..	..	..	..	..
78	Tunisia	84	6.7	7.3	17.6	23 ^e	0.257	-31
79	Cuba	21	22.8	18.5	47.8	30 ^e	0.522	33
80	Ukraine	..	..	..	..	..	..
81	Lithuania	..	..	..	..	..	..
82	Oman	..	..	..	..	..	..
83	Korea, Dem. People's Rep. of	..	..	..	..	..	..
84	Turkey	92	1.8	6.6	29.3	32	0.235	-37
85	Paraguay	68	5.6	14.5	50.9	22	0.340	-12
86	Jamaica	..	..	..	..	..	..
87	Dominican Rep.	48	10.0	21.2	49.5	22 ^b	0.422	9
88	Samoa (Western)	..	..	..	..	..	..
89	Sri Lanka	75	5.3	16.9	24.5	33	0.306	-17
90	Turkmenistan	..	..	..	..	..	..
91	Peru	51	10.0	20.0	41.1	22 ^b	0.407	8
92	Syrian Arab Rep.	..	..	..	..	..	..
93	Armenia	..	..	..	..	..	..
94	Uzbekistan	..	..	..	..	..	..
95	Philippines	39	9.5	33.7	62.7	30 ^b	0.438	21
96	Azerbaijan	..	..	..	..	..	..
97	Lebanon	..	..	..	..	..	..
98	Moldova, Rep. of	..	..	..	..	..	..
99	Kyrgyzstan	..	..	..	..	..	..
100	South Africa	20	23.7	17.4	46.7	30 ^e	0.523	41
101	Georgia	..	..	..	..	..	..
102	Indonesia	61	12.2	6.6	40.8	32 ^e	0.367	1
103	Guyana	32	20.0	12.8	47.5	25 ^e	0.465	31
104	Albania	..	..	..	..	..	..
105	Tajikistan	..	..	..	..	..	..
106	Egypt	80	2.2	16.0	28.7	23	0.280	-16
107	Maldives	71	6.3	14.0	34.6	17 ^e	0.324	-6
108	China	29	21.0	11.6	45.1	38 ^e	0.478	37
109	Iraq	55	10.8	12.7	43.9	17 ^b	0.386	12
110	Swaziland	62	8.4 ^b	14.5	54.3	35	0.366	6
111	Bolivia	58	9.6	16.8	41.9	17 ^f	0.380	11
112	Guatemala	47	7.5	32.4	45.2	19 ^b	0.422	23
113	Mongolia	..	..	..	..	..	..
114	Honduras	50	7.0	30.6	49.8	23 ^e	0.408	21
115	El Salvador	42	10.7	25.3	44.5	26 ^e	0.428	30
116	Namibia	27	18.1	20.8	40.9	19	0.485	46
117	Nicaragua	..	..	..	..	..	..
118	Solomon Islands	99	2.1	2.6	27.4	30	0.196	-25
119	Vanuatu	..	..	..	..	..	..
120	Gabon	..	..	..	..	..	..
121	Viet Nam	..	..	..	..	..	..
122	Cape Verde	57	7.6	23.3	48.4	32 ^b	0.381	18
123	Morocco	76	0.6	25.6	31.3	27 ^b	0.299	0
124	Zimbabwe	45	14.7	15.4	40.0	27 ^b	0.425	32
125	Congo	95	1.6	6.1	28.5	36	0.213	-17
126	Papua New Guinea	94	0 ^b	11.6	29.5	35 ^d	0.230	-15
..	Low human development	..	7.6	4.0	21.7	27	0.235	..
127	Cameroon	69	12.2	10.1	24.4	30 ^b	0.339	11
128	Kenya	..	..	..	..	..	..
129	Ghana	72	8.0	8.8	35.7	32 ^b	0.317	9
130	Lesotho	35	11.2	33.4	56.6	30 ^b	0.448	47
131	Equatorial Guinea	89	7.5	1.6	26.8	28	0.243	-6
132	São Tomé and Príncipe	..	..	..	..	..	..
133	Myanmar	..	..	..	..	..	..
134	Pakistan	101	1.6	3.4	20.1	19 ^e	0.165	-17
135	India	93	8.0	2.3	20.5	25 ^e	0.235	-8
136	Zambia	81	6.7	6.1	31.9	25	0.270	5

HDI rank	Gender empowerment measure (GEM) rank	Seats held in parliament (% women) ^a	Administrators and managers (% women) ^b	Professional and technical workers (% women) ^b	Earned income share (% to women) ^{b,c}	GEM value	HDI rank minus GEM rank ^d	
137	Nigeria	98	2.0 ^g	5.5	26.0	30 ^e	0.198	-11
138	Lao People's Dem. Rep.	..	..	..	..	..	..	..
139	Comoros	103	2.4 ^g	0.1	22.3	35 ^e	0.156	-15
140	Togo	100	1.2	7.9	21.2	32 ^e	0.182	-11
141	Zaire	96	5.0	9.0	16.6	29 ^e	0.209	-6
142	Yemen	..	..	..	..	..	..	..
143	Bangladesh	77	10.6	5.1	23.1	23	0.291	14
144	Tanzania, U. Rep. of	..	..	..	..	..	..	..
145	Haiti	66	3.0 ^g	32.6	39.3	36 ^e	0.349	26
146	Sudan	82	8.2	2.4	28.8	21 ^e	0.260	11
147	Côte d'Ivoire	..	..	..	..	..	..	..
148	Central African Rep.	97	3.5	9.0	18.9	39	0.205	-3
149	Mauritania	102	0 ^g	7.7	20.7	18 ^e	0.163	-7
150	Madagascar	..	..	..	..	..	..	..
151	Nepal	..	..	..	..	..	..	..
152	Rwanda	87	4.3	8.2	32.1	41	0.253	9
153	Senegal	..	..	..	..	..	..	..
154	Benin	..	..	..	..	..	..	..
155	Uganda	..	..	..	..	..	..	..
156	Cambodia	..	..	..	..	..	..	..
157	Malawi	85	5.6	4.8	34.7	33 ^e	0.255	12
158	Liberia	..	..	..	..	..	..	..
159	Bhutan	..	..	..	..	..	..	..
160	Guinea	..	..	..	..	..	..	..
161	Guinea-Bissau	..	..	..	..	..	..	..
162	Gambia	73	7.8 ^g	15.5	23.7	37 ^e	0.310	25
163	Chad	..	..	..	..	..	..	..
164	Djibouti	..	..	..	..	..	..	..
165	Angola	..	..	..	..	..	..	..
166	Burundi	63	12.3	13.4	30.4	42 ^e	0.363	36
167	Mozambique	43	25.2	11.3	20.4	42 ^e	0.427	57
168	Ethiopia	86	5.0	11.2	23.9	33 ^e	0.255	15
169	Afghanistan	..	..	..	..	..	..	..
170	Burkina Faso	83	3.7	13.5	25.8	40 ^e	0.257	19
171	Mali	91	2.3	19.7	19.0	12 ^e	0.237	12
172	Somalia	..	..	..	..	..	..	..
173	Sierra Leone	..	..	..	..	..	..	..
174	Niger	104	3.6	8.3	0.1	37 ^e	0.102	0
All developing countries								..
Least developed countries								..
Sub-Saharan Africa								..
Industrial countries								..
World								..

a. Data are as of 30 June 1995. A value of 0 was converted to 0.001 for purposes of calculation.

b. Data are for latest available year.

c. The manufacturing wage was used for the Central African Republic, Finland, Greece, Ireland, Norway, Sweden and the Syrian Arab Republic.

d. The HDI ranks used in this column are those recalculated for the universe of 104 countries. See table 1.12 in chapter 1. A positive figure indicates that the GDI rank is better than the HDI rank, a negative the opposite.

e. No wage data available. An estimate of 75%, the mean for all countries with wage data available, was used for the ratio of the female non-agricultural wage to the male non-agricultural wage.

f. Wage data based on Psacharopoulos and Tzannatos 1992.

g. Data are as of 30 June 1994.

Source: Column 2: IPU 1995; columns 3 and 4: ILO 1994c and 1995f and UN 1994b; column 5: Human Development Report Office calculations based on estimates from the following: for real GDP per capita (PPP\$), World Bank 1995h; for share of economically active population, ILO 1995a and 1995f; and for female wages as a percentage of male wages, ILO 1995f, UN 1994b and Psacharopoulos and Tzannatos 1992.

4 Profile of human development

HDI rank	Life expectancy at birth (years) 1993	Population with access to			Daily calorie supply per capita 1992	Adult literacy rate (%) 1993	Combined first-, second- and third-level gross enrolment ratio (%) 1993	Daily newspapers (copies per 100 people) 1992	Televisions (per 100 people) 1992	Real GDP per capita (PPP\$) 1993	GNP per capita (US\$) 1993
		Health services (%) 1985-95	Safe water (%) 1990-95	Sanitation (%) 1990-95							
High human development	71.2	83	84	71	2,889	92.7	67	17	17	8,054	4,509
22 Hong Kong	78.7	99 ^a	100	88	3,144	91.5	71	82	28	21,560	18,060
23 Cyprus	77.1	..	..	..	3,782	..	76	11	15	14,060	10,380
25 Barbados	75.7	..	..	..	3,223	97.1	78	16	28	10,570	6,230
26 Bahamas	73.2	..	..	..	..	98.1	75	13	23	16,180	11,420
29 Korea, Rep. of	71.3	100	93	100	3,298	97.6	81	41	21	9,710	7,660
30 Argentina	72.2	71	71	68	2,880	96.0	80	14	22	8,350	7,220
31 Costa Rica	76.4	80 ^a	92	97	2,889	94.5	68	10	14	5,680	2,150
32 Uruguay	72.6	82	75 ^a	61 ^a	2,750	97.0	76	24	23	6,550	3,830
33 Chile	73.9	97	85	83	2,583	94.7	71	..	21	8,900	3,170
34 Singapore	74.9	100	100 ^a	99 ^a	..	90.3	68	34	38	19,350	19,850
36 Brunei Darussalam	74.3	..	..	..	2,745	87.0	70	7	24	..	..
38 Trinidad and Tobago	71.7	100	97	79	2,589	97.6	67	14	..	8,670	3,830
39 Bahrain	71.7	..	..	..	..	84.1	84	8	42	15,500	8,030
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	36	5,369 ^b	6,540
42 United Arab Emirates	73.9	99	95	77	..	78.2	81	20	11	20,940 ^c	21,430
43 Panama	72.9	80 ^a	83	88	2,239	90.0	69	9	17	5,890	2,600
44 Venezuela	71.8	..	79	59	2,622	90.6	69	21	16	8,360	2,840
45 Saint Kitts and Nevis	..	..	..	..	..	90.0 ^d	..	..	21	9,340	4,410
47 Fiji	71.6	..	..	..	3,092	90.6	79	4	2	5,530	2,130
48 Mexico	71.0	78	83	50	3,181	89.0	65	12	15	7,010	3,610
49 Colombia	69.4	60	87	63	2,678	90.6	68	6	12	5,790	1,400
50 Qatar	70.6	..	..	..	..	78.5	74	16	45	22,910 ^e	15,030
51 Kuwait	75.0	100	..	..	2,535	77.4	53	24	31	21,630 ^c	19,360
52 Thailand	69.2	90	86 ^a	74	2,443	93.6	54	7	11	6,350	2,110
53 Malaysia	70.9	..	78	94	2,884	82.2	61	12	15	8,360	3,140
54 Mauritius	70.4	100	99	99	2,696	81.7	60	7	22	12,510	3,030
Medium human development	67.2	89	69	40	2,731	79.5	61	..	6	2,946	900
Excluding China	65.7	83	72	62	2,734	78.7	65	4	10	3,746	1,485
58 Brazil	66.5	..	87	83	2,824	82.4	72	6	21	5,500	2,930
59 Libyan Arab Jamahiriya	63.4	..	97 ^a	98 ^a	3,310	73.7	88	2	10	..	..
60 Seychelles	..	..	..	..	..	88.0 ^d	..	4	9	4,960 ^b	6,280
63 Saudi Arabia	69.9	97	95 ^a	86 ^a	2,751	61.3	55	5	27	..	..
64 Ecuador	69.0	88	71	48	2,587	89.0	72	6	9	4,400	1,200
65 Dominica	..	..	..	..	..	94.0 ^d	..	..	7	3,810 ^b	2,720
66 Iran, Islamic Rep. of	67.7	80	84	67	2,861	66.1	67	2	6	5,380	..
67 Belize	73.7	..	..	..	2,670	70.0 ^d	68	..	17	4,610 ^b	2,450
69 Algeria	67.3	98	79	77	2,897	58.8	66	4	8	5,570	1,780
70 Jordan	68.1	97	89	95	3,031	84.8	..	6	8	4,380	1,190
71 Botswana	65.2	89 ^a	93 ^a	55	2,288	68.0	71	3	2	5,220	2,790
73 Saint Vincent	..	..	..	..	..	91.0 ^d	..	..	14	3,552 ^b	2,120
75 Suriname	70.5	..	..	..	2,548	92.5	..	10	13	3,670	1,180
76 Saint Lucia	..	..	..	..	..	82.0 ^d	..	..	19	3,795 ^b	3,380
77 Grenada	71.0 ^d	..	..	..	2,407	..	..	..	33	3,118 ^b	2,380
78 Tunisia	68.0	90 ^a	99	96	3,333	64.1	66	5	8	4,950	1,720
79 Cuba	75.4	98	93	66	2,833	95.2	65	12	16	..	..
82 Oman	69.8	96	63	78	..	..	60	5	73	10,420	4,850
83 Korea, Dem. People's Rep. of	71.2	..	..	..	2,834	..	..	22	2	..	..
84 Turkey	66.7	..	80	..	3,429	81.1	62	7	18	4,210	2,970
85 Paraguay	70.1	63	35	62	2,670	91.5	62	4	8	3,340	1,510
86 Jamaica	73.7	90	86	89	2,607	84.1	64	7	13	3,180	1,440
87 Dominican Rep.	69.7	80	76	78	..	81.2	64	4	9	3,690	1,230
88 Samoa (Western)	67.8	..	..	..	..	..	74	..	4	..	950
89 Sri Lanka	72.0	93 ^a	53	61	2,275	89.6	66	3	5	3,030	600
91 Peru	66.3	75 ^a	71	57	1,883	87.8	80	7	10	3,320	1,490
92 Syrian Arab Rep.	67.3	90	85	83	3,175	68.7	65	2	6	..	..
95 Philippines	66.5	76	85	69	2,258	94.2	77	5	5	2,590	850
97 Lebanon	68.7	95	94	63	3,319	91.7	74	18	32	..	..
100 South Africa	63.2	..	70	..	2,705	81.0	78	3	10	3,127 ^b	2,980
102 Indonesia	63.0	80	62	51	2,755	82.9	61	2	6	3,270	740
103 Guyana	65.4	..	..	..	2,385	97.7	70	10	4	2,140	350
106 Egypt	63.9	99	80	50	3,336	49.8	69	4	12	3,800	660
107 Maldives	62.4	..	..	..	2,624	92.8	70	1	3	..	820
108 China	68.6	92	67	24	2,729	80.0	57	..	3	2,330	490
109 Iraq	66.1	93	44	70	2,122	55.7	55	3	7	3,413 ^f	..
110 Swaziland	57.8	..	..	..	2,706	74.9	70	2	2	2,940	1,190
111 Bolivia	59.7	67	55	55	2,100	81.5	68	5	10	2,510	760
112 Guatemala	65.1	34	62	60	2,255	54.6	45	2	5	3,400	1,100
113 Mongolia	63.9	95	80	74	1,899	81.7	62	9	..	2,090	390

HDI rank	Life expectancy at birth (years) 1993	Population with access to			Daily calorie supply per capita 1992	Adult literacy rate (%) 1993	Combined first-, second- and third-level gross enrolment ratio (%) 1993	Daily newspapers (copies per 100 people) 1992	Televisions (per 100 people) 1992	Real GDP per capita (PPP\$) 1993	GNP per capita (US\$) 1993	
		Health services (%) 1985-95	Safe water (%) 1990-95	Sanitation (%) 1990-95								
114	Honduras	67.9	64	65	75	2,306	71.4	61	3	7	2,100	600
115	El Salvador	66.8	40	55	81	2,663	70.4	54	9	9	2,360	1,320
116	Namibia	59.1	62	57	34	2,120	..	83	14	2	3,710	1,820
117	Nicaragua	67.1	83	58	60	2,296	65.0	61	2	7	2,280	340
118	Solomon Islands	70.5	..	..	..	2,222	62.0 ^d	46	..	1	..	740
119	Vanuatu	65.4	..	..	..	2,744	..	52	..	1	2,500	1,230
120	Gabon	53.7	90 ^a	68 ^a	..	2,511	60.3	..	2	4	3,861 ^b	4,960
121	Viet Nam	65.5	90	36	22	2,250	92.5	51	1	4	1,040 ^e	170
122	Cape Verde	64.9	..	..	..	..	68.1	62	..	(.)	1,820	920
123	Morocco	63.6	70	55	41	2,985	41.7	44	1	7	3,270	1,040
124	Zimbabwe	53.4	85	77	66	1,989	84.0	70	2	3	2,100	520
125	Congo	51.2	83	38 ^a	..	2,297	72.1	..	1	1	2,750	950
126	Papua New Guinea	56.0	96	28	22	2,615	70.5	35	2	(.)	2,530	1,130
Low human development		57.0	70	68	32	2,250	49.4	47	2	4	1,269	299
Excluding India		53.2	54	55	35	2,097	47.5	38	1	3	1,306	299
127	Cameroon	56.3	70	50	50	1,981	60.8	48	(.)	2	2,220	820
128	Kenya	55.5	77	53	77	2,075	75.7	56	1	1	1,400	270
129	Ghana	56.2	60	56	42	2,206	62.0	45	2	2	2,000	430
130	Lesotho	60.8	80	52	28	2,201	69.5	55	1	1	980	650
131	Equatorial Guinea	48.2	..	..	..	..	76.4	..	(.)	1	..	420
132	São Tomé and Príncipe	67.0	..	..	..	..	..	..	..	..	..	350
133	Myanmar	57.9	60	38	36	2,598	82.4	49	1	(.)	650 ^b	..
134	Pakistan	61.8	55	79	33	2,316	36.4	37	1	2	2,160	430
135	India	60.7	85	81	29	2,395	50.6	55	3	4	1,240	300
136	Zambia	48.6	75 ^a	50	37	1,931	76.2	49	1	3	1,110	380
137	Nigeria	50.6	66	40	35	2,125	54.1	52	2	3	1,540	300
138	Lao People's Dem. Rep.	51.3	67	45	27	2,259	54.6	50	(.)	1	1,458 ^b	280
139	Comoros	56.2	..	..	..	1,897	56.2	38	..	(.)	1,130	560
140	Togo	55.2	61	63	23	2,243	49.2	51	(.)	1	1,020	340
141	Zaire	52.0	26	27	23	2,060	75.2	39	(.)	(.)	..	..
142	Yemen	50.4	38	55	65	2,203	..	45	2	3	..	..
143	Bangladesh	55.9	45	97	34	2,019	37.0	40	1	(.)	1,290	220
144	Tanzania, U. Rep. of	52.1	80	50	64	2,021	65.5	34	1	(.)	630	90
145	Haiti	56.8	50	28	24	1,707	43.4	30	1	(.)	1,050	..
146	Sudan	53.2	70	60	22	2,202	43.8	31	2	8	..	..
147	Côte d'Ivoire	50.9	30 ^a	72	54	2,491	37.8	39	1	6	1,620	630
148	Central African Rep.	49.5	45	18	45	1,691	56.0	37	(.)	(.)	1,050	400
149	Mauritania	51.7	63	66 ^a	..	2,685	36.7	35	(.)	2	1,610	500
150	Madagascar	56.8	65	29	3	2,135	45.8 ^g	34	(.)	2	700	220
151	Nepal	53.8	..	46	21	1,957	26.3	57	1	(.)	1,000	190
152	Rwanda	47.2	80	66	58	1,821	58.0	..	(.)	..	740	210
153	Senegal	49.5	40	52	58	2,265	31.4	31	1	4	1,710	750
154	Benin	47.8	18	50	20	2,532	34.3	34	(.)	1	1,650	430
155	Uganda	44.7	49	34	57	2,162	59.7	35	(.)	1	910	180
156	Cambodia	51.9	53	36	14	2,021	35.0 ^d	..	..	1	..	..
157	Malawi	45.5	80	47 ^a	53	1,827	54.7	47	(.)	..	710	200
158	Liberia	55.6	39	46	30	1,640	36.4	..	1	2	..	..
159	Bhutan	51.0	65	..	..	..	40.2	..	..	..	790	..
160	Guinea	44.7	80	55	21	2,390	33.9	24	..	1	..	500
161	Guinea-Bissau	43.7	40	53	21	2,556	52.8	30	1	..	860	240
162	Gambia	45.2	93	48	38	2,360	36.6	34	(.)	..	1,190	350
163	Chad	47.7	30	24	..	1,989	46.0	27	(.)	(.)	690	210
164	Djibouti	48.4	..	..	..	..	44.2	19	..	5	775 ^b	780
165	Angola	46.8	30 ^a	32	16	1,840	..	32	1	1	..	..
166	Burundi	50.3	80	70 ^a	51	1,941	33.7	31	(.)	(.)	670	180
167	Mozambique	46.4	39	33	20 ^a	1,680	37.9	25	1	(.)	640	90
168	Ethiopia	47.8	46	25	19	1,610	33.6	16	(.)	(.)	420	100
169	Afghanistan	43.7	29	12	..	1,523	29.8	18	1	1	..	..
170	Burkina Faso	47.5	90	78	18	2,387	18.0	19	(.)	1	780	300
171	Mali	46.2	30	37	31	2,279	28.4	16	(.)	(.)	530	270
172	Somalia	47.2	27 ^a	37 ^a	18 ^a	1,505	..	..	(.)	1	..	..
173	Sierra Leone	39.2	38	34	11	1,695	29.6	28	(.)	1	860	150
174	Niger	46.7	32	54	15	2,257	12.8	15	(.)	(.)	790	270
All developing countries		63.3	80	70	39	2,546	70.6	55	5	6	2,703	970
Least developed countries		51.5	50	52	31	2,027	47.3	35	1	3	894	210
Sub-Saharan Africa		51.4	57	45	37	2,096	56.0	42	2	3	1,385	555
Industrial countries		74.5	..	..	..	..	..	82	29	53	15,211	16,394
World		64.8	..	..	..	..	..	60	11	16	5,545	4,570

a. Data refer to a year or period other than that specified in the column heading, differ from the standard definition or refer to only part of the country. b. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991. c. World Bank 1995f. d. UNICEF 1996. e. World Bank 1995d. f. Figures are from UNDP 1995c. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991. g. Based on national census data.

Source: Column 1: UN 1995e; columns 2, 3 and 4: calculated on the basis of data from UNICEF 1996; column 5: FAO 1994; column 6: calculated on the basis of estimates from UNESCO 1995b; column 7: UNESCO 1995d; columns 8 and 9: calculated on the basis of estimates from UNESCO 1994b and UN 1995e; column 10: calculated on the basis of estimates from World Bank 1995h; column 11: World Bank 1995f.

5 Profile of human deprivation

HDI rank	Refugees by country of asylum (thousands) 1993	Population without access to			Illiterate adults (age 15 and above; millions) 1995	Illiterate females (age 15 and above; millions) 1995	Children not in primary school (thousands) 1992	Mal-nourished children under age five (thousands) 1985-95	Children dying before age five (thousands) 1994
		Health services (millions) 1985-95	Safe water (millions) 1990-95	Sanitation (millions) 1990-95					
High human development	223T	50T	53T	99T	20T	10T	..	4,510T	190T
22 Hong Kong	2	0.1 ^a	..	0.7	0.4	0.3	..	..	(.)
23 Cyprus	0	..	..	..	..	..	..	..	(.)
25 Barbados	..	..	..	..	(.)	(.)	3	1	(.)
26 Bahamas	0	..	..	..	(.)	(.)	..	..	(.)
29 Korea, Rep. of	..	..	3.1	..	0.7	0.6	..	..	7
30 Argentina	12	9.8	9.8	10.8	0.9	0.5	..	63	18
31 Costa Rica	25	0.7 ^a	0.3	0.1	0.1	0.1	56	25	1
32 Uruguay	0	0.6	0.8 ^a	1.2 ^a	0.1	(.)	35	19	1
33 Chile	0	0.4	2.1	2.4	0.5	0.3	285	13	4
34 Singapore	(.)	..	..	(.)	0.2	0.2	..	..	(.)
36 Brunei Darussalam	..	..	..	..	(.)	(.)	4	..	(.)
38 Trinidad and Tobago	..	..	(.)	0.3	(.)	(.)	20	9	1
39 Bahrain	..	..	..	..	0.1	(.)	65	..	(.)
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	(.)
42 United Arab Emirates	0	(.)	0.1	0.4	0.3	0.1	..	..	1
43 Panama	1	0.5 ^a	0.4	0.3	0.2	0.1	30	21	1
44 Venezuela	2	..	4.4	8.6	1.2	0.7	461	124	14
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	(.)
47 Fiji	..	..	..	..	(.)	(.)	..	..	(.)
48 Mexico	52	19.8	15.3	45.0	6.2	3.8	..	1,666	79
49 Colombia	1	13.6	4.4	12.6	2.0	1.0	1,010	458	15
50 Qatar	0	..	..	..	0.1	(.)	3	..	(.)
51 Kuwait	24	..	..	..	0.2	0.1	..	..	1
52 Thailand	104	5.8	8.1 ^a	15.0	2.6	1.8	..	1,417	35
53 Malaysia	1	..	4.2	1.2	2.1	1.4	..	665	8
54 Mauritius	..	..	(.)	(.)	0.1	0.1	..	25	1
Medium human development	3,778T	210T	670T	1,240T	300T	200T	..	44,710T	2,760T
Excluding China	3,490T	120T	270T	330T	130T	80T	..	25,400T	1,830T
58 Brazil	6	..	20.3	26.6	18.3	9.3	3,215	1,241	233
59 Libyan Arab Jamahiriya	1	..	0.2 ^a	0.1 ^a	0.7	0.5	..	..	20
60 Seychelles	..	..	..	..	..	..	..	(.)	(.)
63 Saudi Arabia	24	0.5	0.9 ^b	2.4 ^b	3.9	2.1	952	..	22
64 Ecuador	0	1.3	3.2	5.7	0.7	0.4	..	236	18
65 Dominica	..	..	..	..	..	..	..	..	(.)
66 Iran, Islamic Rep. of	2,495	12.8	10.3	21.2	11.9	7.6	200	1,640	114
67 Belize	9	..	..	..	..	..	..	2	(.)
69 Algeria	219	0.5	5.6	6.1	6.6	4.3	534	334	50
70 Jordan	1	0.1	0.5	0.2	0.4	0.3	60	54	5
71 Botswana	1	0.2 ^a	0.1 ^a	0.6	0.3	0.2	9	..	3
73 Saint Vincent	..	..	..	..	..	..	..	..	(.)
75 Suriname	0	..	..	..	(.)	(.)	..	..	(.)
76 Saint Lucia	..	..	..	..	..	..	..	..	(.)
77 Grenada	..	..	..	..	..	..	..	..	(.)
78 Tunisia	0	0.9 ^a	0.1	0.3	1.9	1.3	48	108	7
79 Cuba	4	0.2	0.8	3.7	0.4	0.2	66	..	2
82 Oman	..	0.1	0.7	0.4	..	..	50	93	2
83 Korea, Dem. People's Rep. of	..	..	..	..	..	..	..	..	17
84 Turkey	23	..	11.9	..	7.2	5.5	..	775	88
85 Paraguay	0	1.7	3.1	1.8	0.2	0.1	33	27	5
86 Jamaica	0	0.2	0.3	0.3	0.3	0.1	..	19	1
87 Dominican Rep.	1	1.5	1.8	1.7	0.9	0.4	..	100	9
88 Samoa (Western)	..	..	..	..	..	..	..	..	(.)
89 Sri Lanka	(.)	1.3 ^a	8.4	7.0	1.2	0.8	..	688	7
91 Peru	1	5.7 ^a	6.6	9.8	1.7	1.3	159	305	36
92 Syrian Arab Rep.	12	1.4	2.1	2.3	2.3	1.7	22	306	21
95 Philippines	3	15.6	9.7	20.1	2.2	1.2	..	3,024	112
97 Lebanon	2	0.1	0.2	1.0	0.2	0.1	..	..	3
100 South Africa	250	..	11.9	..	4.7	2.4	..	..	84
102 Indonesia	2	38.3	72.8	93.9	21.5	14.6	516	8,768	518
103 Guyana	..	..	..	..	(.)	(.)	..	21	1
106 Egypt	7	0.6	12.1	30.2	19.0	11.8	..	756	90
107 Maldives	..	..	..	..	(.)	(.)	..	..	1
108 China	288	95.7	394.8	909.2	166.2	119.6	2,375	19,317	925
109 Iraq	108	1.4	10.9	5.8	4.8	3.2	180	392	52
110 Swaziland	46	..	..	..	0.1	0.1	23	13	3
111 Bolivia	1	2.3	3.2	3.2	0.7	0.5	286	172	28
112 Guatemala	5	6.6	3.8	4.0	2.6	1.5	735	575	27
113 Mongolia	..	0.1	0.5	0.6	0.3	0.2	..	38	5

HDI rank	Refugees by country of asylum (thousands) 1993	Population without access to			Illiterate adults (age 15 and above; millions) 1995	Illiterate females (age 15 and above; millions) 1995	Children not in primary school (thousands) 1992	Mal-nourished children under age five (thousands) 1985-95	Children dying before age five (thousands) 1992	
		Health services (millions) 1985-95	Safe water (millions) 1990-95	Sanitation (millions) 1990-95						
114	Honduras	0	1.9	1.9	1.3	0.9	0.4	61	172	11
115	El Salvador	0	3.3	2.5	1.0	1.0	0.5	379	93	10
116	Namibia	1	0.6	0.6	1.0	..	..	50	62	4
117	Nicaragua	6	0.7	1.7	1.6	0.8	0.4	155	88	11
118	Solomon Islands	..	..	..	..	..	..	..	..	(.)
119	Vanuatu	..	..	..	..	..	..	..	..	(.)
120	Gabon	1	0.1 ^a	0.4 ^a	..	0.3	0.2	60	..	7
121	Viet Nam	5	7.1	45.6	55.6	2.9	2.1	..	4,413	101
122	Cape Verde	..	..	..	..	0.1	(..)	3	..	1
123	Morocco	0	7.8	11.7	15.3	9.7	6.0	1,645	306	42
124	Zimbabwe	237	1.6	2.5	3.7	0.9	0.6	..	284	34
125	Congo	14	0.4	1.5 ^a	..	0.4	0.2	..	108	12
126	Papua New Guinea	8	0.2	3.0	3.2	0.7	0.5	165	182	13
Low human development		7,790T	520T	560T	1,190T	530T	330T	..	107,720T	9,220T
Excluding India		7,530T	390T	390T	550T	240T	150T	..	45,940T	6,120T
127	Cameroon	44	3.8	6.3	6.3	2.7	1.8	466	293	55
128	Kenya	302	6.1	12.4	6.1	3.2	2.2	..	1,111	105
129	Ghana	150	6.6	7.2	9.5	3.4	2.3	..	802	89
130	Lesotho	0	0.4	0.9	1.4	0.3	0.2	102	50	11
131	Equatorial Guinea	..	..	..	..	(..)	(..)	..	..	3
132	São Tomé and Príncipe	..	..	..	..	..	..	..	(.)	(.)
133	Myanmar	..	17.8	27.7	28.5	4.9	3.3	..	2,326	158
134	Pakistan	1,480	59.8	27.9	89.1	48.7	28.2	..	9,409	740
135	India	260	135.2	171.3	640.0	290.7	183.1	..	61,775	3,101
136	Zambia	141	2.2 ^a	4.5	5.6	1.1	0.7	301	418	80
137	Nigeria	5	35.8	63.2	68.4	26.1	16.4	..	6,975	913
138	Lao People's Dem. Rep.	..	1.5	2.5	3.4	1.2	0.8	183	..	29
139	Comoros	..	..	..	..	0.1	0.1	..	..	4
140	Togo	1	1.5	1.4	3.0	1.1	0.7	148	176	23
141	Zaire	487	30.5	30.1	31.7	5.2	3.8	722	..	365
142	Yemen	54	8.2	5.9	4.6	..	..	..	769	73
143	Bangladesh	199	63.4	3.5	76.0	45.1	26.1	4,785	10,994	479
144	Tanzania, U. Rep. of	565	5.6	14.0	10.1	5.2	3.6	2,405	1,285	192
145	Haiti	..	3.4	5.0	5.2	2.4	1.3	70	355	31
146	Sudan	745	8.0	10.7	20.8	8.5	5.2	..	..	129
147	Côte d'Ivoire	252	9.3 ^a	3.7	6.1	4.3	2.5	963	336	100
148	Central African Rep.	44	1.7	2.6	1.7	0.8	0.5	216	..	23
149	Mauritania	47	0.8	0.7 ^a	..	0.8	0.5	..	169	17
150	Madagascar	0	4.8	9.8	13.4	..	..	613	990	99
151	Nepal	85	..	11.2	16.4	9.1	5.4	1,100	..	97
152	Rwanda	300	1.5	2.6	3.2	1.7	1.1	511	394	46
153	Senegal	73	4.7	3.8	3.3	3.1	1.8	626	280	39
154	Benin	156	4.2	2.5	4.1	1.8	1.1	366	..	35
155	Uganda	287	10.2	13.2	8.6	4.2	2.8	..	952	191
156	Cambodia	0	4.6	6.2	8.3	..	..	..	..	74
157	Malawi	714	2.1	5.6 ^a	4.9	2.6	1.8	1,060	553	116
158	Liberia	150	1.7	1.5	2.0	1.0	0.6	..	..	29
159	Bhutan	..	0.6	..	..	0.6	0.3	..	97	12
160	Guinea	577	1.3	2.8	5.0	2.3	1.4	693	..	71
161	Guinea-Bissau	16	0.6	0.5	0.8	0.3	0.2	78	..	10
162	Gambia	2	0.1	0.5	0.6	0.4	0.2	67	..	10
163	Chad	0	4.2	4.6	..	1.9	1.2	551	..	53
164	Djibouti	34	..	..	..	0.2	0.1	45	20	3
165	Angola	11	7.2 ^a	7.0	8.6	..	..	..	..	154
166	Burundi	272	1.2	1.8 ^a	3.0	2.2	1.4	437	435	49
167	Mozambique	0	9.2	10.1	12.1 ^a	5.3	3.4	1,045	..	190
168	Ethiopia	248	28.0	38.9	42.0	19.1	10.9	5,660	4,749	504
169	Afghanistan	39	12.6	15.6	..	8.2	4.9	527	..	232
170	Burkina Faso	8	1.0	2.2	8.0	4.6	2.6	980	529	77
171	Mali	15	7.1	6.4	7.0	3.9	2.2	1,165	622	110
172	Somalia	0	6.5 ^a	5.6 ^a	7.3 ^a	..	..	..	..	96
173	Sierra Leone	16	2.7	2.8	3.8	1.7	1.1	..	225	60
174	Niger	9	5.8	3.9	7.3	4.1	2.2	959	628	143
All developing countries		11,790T	790T	1,280T	2,530T	850T	540T	..	156,940T	12,160T
Least developed countries		5,220T	260T	270T	360T	150T	90T	..	26,740T	4,080T
Sub-Saharan Africa		5,440T	210T	290T	290T	120T	80T	..	22,460T	4,120T
Industrial countries		3,790T	..	..	..	..	..	..	..	280T
World		15,580T	..	..	..	..	..	..	..	12,450T

a. Data refer to a year or period other than that specified in the column heading, differ from the standard definition or refer to only part of the country.
 Source: Column 1: UNHCR 1995; columns 2, 3, 4 and 9: calculated on the basis of estimates from UNICEF 1996 and UN 1995e; columns 5 and 6: calculated on the basis of estimates from UNESCO 1995c and UN 1995e; column 7: calculated on the basis of estimates from UNESCO 1993b; column 8: WHO 1995a and UN 1995e.

6 Trends in human development

HDI rank	Life expectancy at birth (years)		Infant mortality rate (per 1,000 live births)		Population with access to safe water (%)		Underweight children under age five (%)		Adult literacy rate (%)		Gross enrolment ratio for all levels (% age 6-23)		Real GDP per capita (PPPS)	
	1960	1993	1960	1993	1975-80	1990-95	1975	1985-95	1970	1993	1980	1990	1960	1993
High human development	56.7	71.1	88	28	58	86	19	14	79	91	60	62	2,188	7,869
22 Hong Kong	66.2	78.7	44	7	99	100	..	..	..	..	59	69	2,323	21,560
23 Cyprus	68.7	77.1	30	8	..	..	..	..	..	..	..	..	2,039	14,060
25 Barbados	64.3	75.7	74	9	..	..	..	..	..	..	67	67	..	..
26 Bahamas	63.2	73.2	..	..	..	..	..	..	..	..	70	74	..	..
29 Korea, Rep. of	53.9	71.3	85	11	66	93	..	..	88	98	66	74	690	9,710
30 Argentina	64.9	72.2	60	24	..	..	3	2	93	96	65	82	3,381	8,350
31 Costa Rica	61.6	76.4	85	13	72	92	10	6	88	95	55	56	2,160	5,680
32 Uruguay	67.7	72.6	51	20	..	..	6	7	93	97	63	73	4,401	6,550
33 Chile	57.1	73.9	114	15	70	85	2	1	89	95	65	66	3,130	8,900
34 Singapore	64.5	74.9	36	6	..	..	..	..	..	..	53	68	2,409	19,350
36 Brunei Darussalam	62.3	74.3	63	8	..	..	..	..	..	..	64	67	..	..
38 Trinidad and Tobago	63.5	71.7	56	17	93	97	14	7	..	..	59	66	4,754	8,670
39 Bahrain	55.5	71.7	130	18	..	..	..	..	..	..	58	75	..	..
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..	..	..	..
42 United Arab Emirates	53.0	73.9	145	18	..	..	..	..	..	..	44	73	..	..
43 Panama	60.7	72.9	69	25	77	83	14	7	81	90	66	62	1,533	5,890
44 Venezuela	59.6	71.8	81	23	79	79	14	5	75	91	58	63	3,899	8,360
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..	..	..	..
47 Fiji	59.0	71.6	71	23	..	..	..	..	..	..	63	70	2,354	5,530
48 Mexico	57.1	71.0	92	35	62	83	19	14	74	89	68	62	2,870	7,010
49 Colombia	56.6	69.4	99	37	64	87	19	12	78	91	53	55	1,874	5,790
50 Qatar	53.0	70.6	145	20	..	..	..	..	..	..	60	78	..	..
51 Kuwait	59.6	75.0	89	18	..	..	..	..	54	77	..	..	..	..
52 Thailand	52.3	69.2	103	36	25	86 ^a	36	26	79	94	49	45	985	6,350
53 Malaysia	53.9	70.9	73	13	..	..	31	25	60	82	54	58	1,783	8,360
54 Mauritius	59.2	70.4	70	18	99	99	32	24	..	..	48	57	2,113	12,510
Medium human development	47.7	66.9	143	48	..	..	29	19	..	..	51	50	902	3,009
Excluding China	48.4	65.6	135	51	45	74	33	22	54	75	52	59	1,217	3,993
58 Brazil	54.7	66.5	116	57	62	87	18	7	66	82	54	60	1,404	5,500
59 Libyan Arab Jamahiriya	46.7	63.4	160	67	87	97 ^a	..	..	37	74	..	..	..	..
60 Seychelles	..	..	..	..	..	..	..	..	..	..	..	..	..	..
63 Saudi Arabia	44.4	69.9	170	28	64	95 ^a	..	..	9	61	36	50	..	..
64 Ecuador	53.1	69.0	124	49	36	71	20	17	72	89	69	68	1,461	4,400
65 Dominica	..	..	..	..	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	49.6	67.7	169	34	51	84	43	16	29	66	46	61	1,985	5,380
67 Belize	..	..	..	..	..	..	..	..	..	..	..	..	..	..
69 Algeria	47.0	67.3	168	54	77	79	23	9	25	59	52	60	1,676	5,570
70 Jordan	47.0	68.1	135	35	..	..	18	6	47	85	75	73	1,328	4,380
71 Botswana	45.5	65.2	116	42	..	..	..	..	41	68	51	64	474	5,220
73 Saint Vincent	..	..	..	..	..	..	..	..	..	..	..	..	..	..
75 Suriname	60.2	70.5	70	27	..	..	..	..	..	..	61	69	2,234	3,670
76 Saint Lucia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..	..	..	..	..
78 Tunisia	48.4	68.0	159	43	35	99	17	10	31	64	50	62	1,394	4,950
79 Cuba	63.8	75.4	65	12	..	..	..	..	87	95	72	63	..	..
82 Oman	40.1	69.8	214	29	..	..	..	..	..	..	28	61	2,040	10,420
83 Korea, Dem. People's Rep. of	53.9	71.2	85	24	..	..	..	..	..	..	..	..	..	..
84 Turkey	50.1	66.7	190	64	68	80	15	10	52	81	44	52	1,669	4,210
85 Paraguay	63.8	70.1	66	38	13	35	9	4	80	92	49	52	1,220	3,340
86 Jamaica	62.8	73.7	63	14	86	86	14	7	97	84	67	61	1,829	3,180
87 Dominican Rep.	51.8	69.7	125	41	55	76	17	10	67	81	60	66	1,227	3,690
88 Samoa (Western)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
89 Sri Lanka	62.0	72.0	71	17	19	53	58	38	77	90	58	68	1,389	3,030
91 Peru	47.7	66.3	142	64	..	..	17	11	71	88	65	74	2,130	3,320
92 Syrian Arab Rep.	49.8	67.3	135	39	..	..	20	12	40	69	60	66	..	..
95 Philippines	52.8	66.5	80	43	..	..	39	33	83	94	61	64	1,183	2,590
97 Lebanon	59.6	68.7	68	34	..	..	..	..	69	92	67	65	..	..
100 South Africa	49.0	63.2	89	52	..	..	..	..	..	..	..	..	2,984	3,127 ^b
102 Indonesia	41.2	63.0	139	56	11	62	51	40	54	83	51	58	490	3,270
103 Guyana	56.1	65.4	100	47	..	..	23	22	..	..	61	65	1,630	2,140
106 Egypt	46.2	63.9	179	66	75	80	17	9	35	50	51	66	557	3,800
107 Maldives	43.6	62.4	158	58	..	..	..	..	..	..	..	..	..	..
108 China	47.1	68.6	150	44	..	..	26	17	..	..	50	43	723	2,330
109 Iraq	48.5	66.1	139	58	66	44	19	12	34	56	67	62	..	..
110 Swaziland	40.2	57.8	157	74	..	..	14	10	..	..	59	64	1,182	2,940
111 Bolivia	42.7	59.7	167	74	34	55	17	16	57	82	54	55	1,142	2,510
112 Guatemala	45.6	65.1	125	48	39	62	30	34	44	55	35	41	1,667	3,400
113 Mongolia	46.7	63.9	128	59	..	..	..	..	..	..	60	56	..	..

HDI rank	Life expectancy at birth (years)		Infant mortality rate (per 1,000 live births)		Population with access to safe water (%)		Underweight children under age five (%)		Adult literacy rate (%)		Gross enrolment ratio for all levels (% age 6-23)		Real GDP per capita (PPP\$)		
	1960	1993	1960	1993	1975-80	1990-95	1975	1985-95	1970	1993	1980	1990	1960	1993	
114	Honduras	46.5	67.9	160	42	41	65	23	19	53	71	47	50	901	2,100
115	El Salvador	50.5	66.8	130	44	53	55	22	11	57	70	47	51	1,305	2,360
116	Namibia	42.5	59.1	146	59	..	..	..	..	..	..	..	..	..	..
117	Nicaragua	47.0	67.1	140	50	46	58	20	12	..	..	53	53	1,756	2,280
118	Solomon Islands	50.3	70.5	..	..	..	..	..	..	..	..	..	..	..	..
119	Vanuatu	..	..	..	..	..	..	..	..	..	..	..	..	..	..
120	Gabon	40.8	53.7	171	93	..	..	..	..	33	60	..	..	1,373	3,861 ^b
121	Viet Nam	44.2	65.5	147	42	..	..	55	45	..	..	52	52	..	..
122	Cape Verde	52.0	64.9	110	49	..	..	..	..	..	..	45	49	..	..
123	Morocco	46.7	63.6	163	67	..	..	19	9	22	42	38	37	854	3,270
124	Zimbabwe	45.3	53.4	110	67	..	..	25	16	55	84	41	66	937	2,100
125	Congo	41.7	51.2	143	84	38	38 ^a	43	24	35	72	..	..	1,092	2,750
126	Papua New Guinea	40.7	56.0	165	68	20	28	39	30	32	71	28	30	1,136	2,530
Low human development Excluding India		41.9	56.0	168	92	..	..	..	48	31	49	37	41	656	1,270
		39.8	52.8	172	100	22	50	44	40	26	48	33	32	716	1,307
127	Cameroon	39.3	56.3	163	62	..	..	19	14	33	61	48	52	736	2,220
128	Kenya	44.7	55.5	124	69	17	53	25	22	32	76	62	58	635	1,400
129	Ghana	45.0	56.2	132	80	35	56	35	27	31	62	48	46	1,049	2,000
130	Lesotho	42.9	60.8	149	78	17	52	20	16	..	..	52	58	346	980
131	Equatorial Guinea	36.8	48.2	188	116	..	..	..	..	..	..	57	64	..	..
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..	..	..	..
133	Myanmar	43.8	57.9	158	82	17	38	41	37	71	82	39	39	341	650 ^b
134	Pakistan	43.1	61.8	163	89	25	79	47	40	21	36	19	24	820	2,160
135	India	44.0	60.7	165	81	..	..	71	53	34	51	40	50	617	1,240
136	Zambia	41.6	48.6	135	103	42	50	17	25	52	76	46	47	1,172	1,110
137	Nigeria	39.5	50.6	190	84	..	..	30	36	25	54	50	37	1,133	1,540
138	Lao People's Dem. Rep.	40.4	51.3	155	96	..	..	..	..	..	..	44	42	..	..
139	Comoros	42.5	56.2	165	88	..	..	..	..	..	..	45	34	..	..
140	Togo	39.3	55.2	182	85	16	63	25	24	17	49	61	54	411	1,020
141	Zaire	41.3	52.0	158	92	19	27	..	..	42	75	46	38	..	..
142	Yemen	36.4	50.4	214	119	..	..	33	30	..	..	..	..	..	..
143	Bangladesh	39.6	55.9	156	106	..	..	84	66	24	37	30	32	621	1,290
144	Tanzania, U. Rep. of	40.5	52.1	147	85	39	50	25	25	..	..	44	32	272	630
145	Haiti	42.2	56.8	182	85	12	28	26	34	22	43	..	..	921	1,050
146	Sudan	38.7	53.2	170	77	..	..	..	..	17	44	25	27	..	..
147	Côte d'Ivoire	39.2	50.9	166	91	..	..	18	12	18	38	39	37	1,021	1,620
148	Central African Rep.	38.5	49.5	175	101	..	..	..	..	16	56	33	35	806	1,050
149	Mauritania	35.3	51.7	191	100	..	..	39	48	..	..	19	25	930	1,610
150	Madagascar	40.7	56.8	220	91	..	..	30	39	..	..	60	40	1,013	700
151	Nepal	38.4	53.8	187	98	8	46	..	..	13	26	28	41	584	1,000
152	Rwanda	42.3	47.2	150	110	68	66	37	29	32	58	33	39	538	740
153	Senegal	37.3	49.5	172	67	36	52	19	20	12	31	24	30	1,136	1,710
154	Benin	35.0	47.8	185	86	34	50	..	..	16	34	34	30	1,075	1,650
155	Uganda	43.0	44.7	133	115	35	34	28	23	41	60	25	41	371	910
156	Cambodia	42.4	51.9	146	115	..	..	..	..	..	..	..	..	..	..
157	Malawi	37.8	45.5	207	142	51	47 ^a	19	27	..	..	33	38	423	710
158	Liberia	41.3	55.6	184	124	..	..	..	..	18	36	..	..	..	..
159	Bhutan	37.3	51.0	203	122	..	..	..	..	..	..	7	11	..	..
160	Guinea	33.6	44.7	203	133	14	55	..	..	14	34	21	19	..	..
161	Guinea-Bissau	34.0	43.7	201	139	10	53	..	..	..	..	27	25	..	..
162	Gambia	32.3	45.2	213	131	..	..	..	..	..	..	23	29	411	1,190
163	Chad	34.8	47.7	195	121	..	..	..	..	11	46	16	29	785	690
164	Djibouti	36.0	48.4	186	114	..	..	..	..	..	..	19	24	..	..
165	Angola	33.0	46.8	208	123	17	32	..	..	..	..	54	32	..	..
166	Burundi	41.3	50.3	153	101	29	70 ^a	27	38	20	34	11	30	473	670
167	Mozambique	37.3	46.4	190	147	..	..	..	..	22	38	29	24	1,368	640
168	Ethiopia	36.0	47.8	175	118	8	25	45	48	..	..	16	17	262	420
169	Afghanistan	33.4	43.7	215	163	9	12	..	..	8	30	20	13	..	..
170	Burkina Faso	36.2	47.5	205	129	25	78	34	30	8	18	8	17	290	780
171	Mali	34.8	46.2	210	158	..	..	36	31	8	28	..	..	541	530
172	Somalia	36.0	47.2	175	121	38	37 ^a	..	..	..	..	..	..	..	..
173	Sierra Leone	31.5	39.2	219	165	14	34	22	29	13	30	30	29	871	860
174	Niger	35.3	46.7	192	123	..	..	50	36	4	13	12	14	604	790
All developing countries		46.0	61.5	150	70	40	68	40	30	43	61	46	47	915	2,709
Least developed countries		38.8	51.1	173	110	21	38	51	45	28	47	31	31	561	887
Sub-Saharan Africa		40.1	51.0	167	97	25	43	31	31	27	55	39	36	990	1,379
Industrial countries		..	..	..	..	..	..	..	..	..	..	..	..	..	..
World		..	..	..	..	..	..	..	..	..	..	..	..	..	..

a. Data refer to a year or period other than that specified in the column heading, differ from the standard definition or refer to only part of the country.

b. Figures are for 1992. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991.

Source: Columns 1-4: calculated on the basis of estimates from UN 1995e; columns 5 and 6: calculated on the basis of data from UNICEF 1996, UN 1995e and WHO 1993b; columns 7 and 8: WHO 1995a; columns 9 and 10: calculated on the basis of estimates from UNESCO 1995b; columns 11 and 12: UNESCO 1993b; columns 13 and 14: calculated on the basis of estimates from World Bank 1995h.

7 South-North gaps

Index: North=100 (see note)

HDI rank	Life expectancy at birth		Adult literacy		Daily calorie supply per capita		Access to safe water		Under-five mortality	
	1960	1993	1970	1993	1965	1992	1975-80	1990-95	1960	1994
High human development	83	95	86	96	83	91	..	..	36	74
22 Hong Kong	96	100+	..	..	..	..	99	100+	79	100+
23 Cyprus	99	100+	..	..	..	..	..	..	..	..
25 Barbados	93	100+	..	..	..	..	..	..	..	..
26 Bahamas	91	98	..	..	..	..	..	..	..	..
29 Korea, Rep. of	78	96	95	100+	77	100+	66	96	33	100+
30 Argentina	94	97	100+	100+	96	92	..	..	60	67
31 Costa Rica	89	100+	95	99	84	93	72	95	36	100+
32 Uruguay	98	97	100+	100+	85	88	..	..	87	86
33 Chile	83	99	96	99	87	83	70	88	30	100+
34 Singapore	93	100+	..	..	..	..	..	..	100+	100+
36 Brunei Darussalam	90	100	..	..	..	..	..	..	..	..
38 Trinidad and Tobago	92	96	..	..	83	83	93	100	56	90
39 Bahrain	80	96	..	..	..	..	..	..	..	..
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..
42 United Arab Emirates	77	99	..	..	..	..	..	..	17	90
43 Panama	88	98	88	94	79	72	77	86	39	90
44 Venezuela	86	96	81	95	76	84	..	..	58	75
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..
47 Fiji	85	96	..	..	..	..	..	..	..	..
48 Mexico	83	95	80	93	90	100+	..	..	28	56
49 Colombia	82	93	84	95	76	86	64	90	31	95
50 Qatar	77	95	..	..	..	..	..	..	..	..
51 Kuwait	86	100+	58	81	..	..	..	..	32	100+
52 Thailand	76	93	85	98	77	78	25	89	28	56
53 Malaysia	78	95	65	86	81	93	..	..	39	100+
54 Mauritius	86	94	..	..	83	87	99	100+	49	78
Medium human development	69	90	..	..	71	87	..	..	21	37
Excluding China	70	88	58	80	74	87	..	..	23	32
58 Brazil	79	89	71	86	81	91	62	90	23	30
59 Libyan Arab Jamahiriya	68	85	40	77	67	100+	87	100	15	19
60 Seychelles	..	..	..	..	..	..	..	..	..	..
63 Saudi Arabia	64	94	10	64	64	88	64	98	14	50
64 Ecuador	77	93	78	93	67	83	36	73	23	32
65 Dominica	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	72	91	31	69	70	92	51	87	18	35
67 Belize	..	..	..	..	..	..	..	..	..	..
69 Algeria	68	90	27	62	58	93	77	81	17	28
70 Jordan	68	91	51	89	75	97	..	..	27	72
71 Botswana	66	88	44	71	71	73	..	..	24	33
73 Saint Vincent	..	..	..	..	..	..	..	..	..	..
75 Suriname	87	95	..	..	..	..	..	..	..	..
76 Saint Lucia	..	..	..	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..
78 Tunisia	70	91	33	67	76	100+	35	100+	17	53
79 Cuba	92	100+	94	100	82	91	..	..	82	100+
82 Oman	58	94	..	..	..	..	..	..	14	67
83 Korea, Dem. People's Rep. of	78	96	..	..	80	91	..	..	34	58
84 Turkey	73	90	56	85	85	100+	..	..	19	33
85 Paraguay	92	94	86	96	90	86	13	36	45	53
86 Jamaica	91	99	100+	88	81	84	86	89	54	100+
87 Dominican Rep.	75	94	72	85	..	..	55	78	27	40
88 Samoa (Western)	..	..	..	..	..	..	..	..	..	..
89 Sri Lanka	90	97	83	94	81	73	19	55	31	95
91 Peru	69	89	77	92	79	60	..	..	17	31
92 Syrian Arab Rep.	72	90	43	72	72	100+	..	..	20	47
95 Philippines	76	89	90	99	66	73	..	..	40	32
97 Lebanon	86	92	75	96	80	100+	..	..	48	45
100 South Africa	71	85	..	..	86	87	..	..	32	26
102 Indonesia	60	85	58	87	65	88	11	64	19	16
103 Guyana	81	88	..	..	..	..	..	..	..	..
106 Egypt	67	86	38	52	78	100+	75	82	16	35
107 Maldives	63	84	..	..	..	..	..	..	..	..
108 China	68	92	..	..	69	88	..	..	20	42
109 Iraq	70	89	37	58	72	68	66	45	24	25
110 Swaziland	58	78	..	..	..	..	..	..	..	..
111 Bolivia	62	80	62	85	62	67	34	57	16	16
112 Guatemala	66	87	48	57	75	72	39	64	20	26
113 Mongolia	68	86	..	..	85	61	..	..	22	24

Index: North=100 (see note)											
HDI rank	Life expectancy at birth		Adult literacy		Daily calorie supply per capita		Access to safe water		Under-five mortality		
	1960	1993	1970	1993	1965	1992	1975-80	1990-95	1960	1994	
114	Honduras	67	91	57	75	70	74	41	67	20	3
115	El Salvador	73	90	62	74	65	86	53	57	19	32
116	Namibia	61	79	..	..	..	..	..	..	20	23
117	Nicaragua	68	90	..	..	86	74	46	60	20	26
118	Solomon Islands	73	95	..	..	..	..	..	..	..	..
119	Vanuatu	..	..	..	..	..	..	..	..	..	..
120	Gabon	59	72	36	63	65	81	..	..	14	12
121	Viet Nam	64	88	..	..	78	72	..	..	19	39
122	Cape Verde	75	87	..	..	..	..	..	..	..	..
123	Morocco	68	85	24	44	74	96	..	..	19	32
124	Zimbabwe	65	72	59	88	70	64	..	..	23	22
125	Congo	60	69	38	75	81	74	38	39	19	17
126	Papua New Guinea	59	75	35	74	58	84	20	29	16	19
	Low human development	60	75	34	52	72	72	..	..	17	13
	Excluding India	57	71	29	50	71	67	..	..	16	12
127	Cameroon	57	76	38	64	81	64	..	..	15	17
128	Kenya	65	74	35	79	79	67	17	55	20	20
129	Ghana	65	75	33	65	70	71	35	58	19	14
130	Lesotho	62	82	..	..	72	71	17	54	20	12
131	Equatorial Guinea	53	65	..	..	..	..	..	..	..	..
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..
133	Myanmar	63	78	77	86	72	83	17	39	17	17
134	Pakistan	62	83	23	38	61	74	25	81	18	13
135	India	64	81	37	53	72	77	..	..	17	15
136	Zambia	60	65	56	80	73	62	42	52	19	9
137	Nigeria	57	68	27	57	77	68	..	..	20	9
138	Lao People's Dem. Rep.	58	69	..	..	69	73	..	..	18	13
139	Comoros	62	75	..	..	..	..	..	..	..	..
140	Togo	57	74	18	52	81	72	16	65	15	14
141	Zaire	60	70	45	79	79	66	19	28	14	10
142	Yemen	53	68	..	..	..	..	..	..	12	16
143	Bangladesh	57	75	26	39	73	65	..	..	17	15
144	Tanzania, U. Rep. of	59	70	..	..	69	65	39	52	16	11
145	Haiti	61	76	24	45	71	55	12	29	16	14
146	Sudan	56	71	18	46	64	71	..	..	14	15
147	Côte d'Ivoire	57	68	19	40	82	80	..	..	14	12
148	Central African Rep.	56	66	17	59	73	54	..	..	14	10
149	Mauritania	51	69	..	..	71	86	..	..	13	9
150	Madagascar	59	76	..	..	87	69	..	..	11	11
151	Nepal	55	72	14	28	70	63	8	47	14	15
152	Rwanda	61	63	35	61	59	58	68	68	21	13
153	Senegal	54	66	13	33	84	73	36	54	13	16
154	Benin	51	64	17	36	71	81	34	52	13	13
155	Uganda	62	60	44	63	77	69	35	35	19	10
156	Cambodia	61	70	..	..	79	65	..	..	19	10
157	Malawi	55	61	..	..	73	59	..	..	11	8
158	Liberia	60	75	19	38	76	53	..	..	14	8
159	Bhutan	54	68	..	..	..	..	..	..	13	9
160	Guinea	49	60	15	35	65	77	14	57	12	8
161	Guinea-Bissau	49	59	..	..	..	..	10	55	12	8
162	Gambia	47	61	..	..	..	..	..	..	11	8
163	Chad	50	64	12	48	80	64	..	..	13	9
164	Djibouti	52	65	..	..	..	..	..	..	..	..
165	Angola	48	63	..	..	65	59	17	33	12	6
166	Burundi	60	68	22	35	83	62	29	72	16	10
167	Mozambique	54	62	24	40	69	54	..	..	12	6
168	Ethiopia	52	64	..	..	62	52	8	26	14	9
169	Afghanistan	48	59	9	31	73	49	9	12	11	7
170	Burkina Faso	52	64	9	19	73	77	25	80	13	11
171	Mali	50	62	9	30	67	73	..	..	10	8
172	Somalia	52	63	..	..	74	48	..	..	14	9
173	Sierra Leone	46	53	14	31	64	54	..	..	11	6
174	Niger	51	63	4	13	69	72	..	..	13	6
	All developing countries	65	82	48	66	72	81	..	..	20	28
	Least developed countries	56	68	32	50	72	65	..	..	15	12
	Sub-Saharan Africa	58	68	30	57	75	67	..	..	17	12
	Industrial countries	100	100	100	100	100	100	..	..	100	100
	World	..	..	..	..	..	..	..	..	..	..

Note: North refers to the industrial countries. All figures are expressed in relation to the North average, which is indexed to equal 100. The smaller the figure the bigger the gap, the closer the figure to 100 the smaller the gap, and a figure of 100+ indicates that the country is better than the North average.

Source: Columns 1 and 2: calculated on the basis of data from UN 1995e; columns 3 and 4: calculated on the basis of data from UNESCO 1995b; columns 5 and 6: calculated on the basis of data from FAO 1994; columns 7-10: calculated on the basis of data from UNICEF 1996.

8 Rural-urban gaps

HDI rank	Rural population (as % of total) 1993	Population with access to services (%)						Rural-urban disparity in services (100=rural-urban parity; see note)		
		Health		Safe water		Sanitation		Health 1985-95	Safe water 1990-95	Sanitation 1990-95
		Rural 1985-95	Urban 1985-95	Rural 1990-95	Urban 1990-95	Rural 1990-95	Urban 1990-95			
High human development	33	..	..	74	91	55	78	..	81	50
22 Hong Kong	5	..	..	96	100	50	90	..	96	56
23 Cyprus	47	..	..	..	..	..	..	..	..	..
25 Barbados	54	..	..	..	..	..	..	..	..	..
26 Bahamas	15	..	..	..	..	..	..	..	..	..
29 Korea, Rep. of	21	100	100	76	100	100	100	100	76	100
30 Argentina	13	21	80	29	77	37	73	26	38	51
31 Costa Rica	51	63 ^a	100 ^a	99	85	94	100	63 ^a	116	94
32 Uruguay	10	..	..	5 ^a	85 ^a	65 ^a	60 ^a	..	6 ^a	108 ^a
33 Chile	16	..	..	37	94	5	84	..	39	6
34 Singapore	0	..	100	..	100 ^a	..	99 ^a	..	..	..
36 Brunei Darussalam	42	..	..	..	..	..	..	..	..	..
38 Trinidad and Tobago	29	99	100	91	99	98	99	99	92	99
39 Bahrain	11	..	..	..	..	..	..	..	..	..
40 Antigua and Barbuda	64	..	..	..	..	..	..	..	..	..
42 United Arab Emirates	17	..	..	..	..	22	93	..	..	24
43 Panama	47	64 ^a	95 ^a	..	..	73	99	67 ^a	..	74
44 Venezuela	8	..	..	75	80	30	64	..	94	47
45 Saint Kitts and Nevis	59	..	..	..	..	..	..	..	..	..
47 Fiji	60	..	..	..	..	..	..	..	..	..
48 Mexico	26	60	80	62	91	17	70	75	68	24
49 Colombia	28	..	..	74	98	33	76	..	76	43
50 Qatar	9	..	..	..	..	..	..	..	..	..
51 Kuwait	4	..	..	..	..	..	100	..	..	..
52 Thailand	81	90	90	87 ^a	98 ^a	72	80	100	89 ^a	90
53 Malaysia	48	..	..	66	96	..	..	..	69	..
54 Mauritius	60	100	100	100	95	99	99	100	105	100
Medium human development	61	86	98	55	92	17	76	86	60	31
Excluding China	48	..	..	54	88	39	78	..	61	54
58 Brazil	23	..	..	..	..	..	..	..	..	..
59 Libyan Arab Jamahiriya	15	..	..	80 ^a	100 ^a	85 ^a	100 ^a	..	80 ^a	85 ^a
60 Seychelles	47	..	..	..	..	..	..	..	..	..
63 Saudi Arabia	21	88	100	74 ^a	100 ^a	30 ^a	100 ^a	88	74 ^a	30 ^a
64 Ecuador	43	20	70	55	82	38	56	29	67	68
65 Dominica	0	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	42	65	95	77	89	38	89	68	87	43
67 Belize	53	..	..	..	..	..	..	..	..	..
69 Algeria	46	95	100	60	96	61	93	95	63	66
70 Jordan	30	95	98	..	..	..	..	97	..	..
71 Botswana	74	85 ^a	100 ^a	91 ^a	100 ^a	41	91	85 ^a	91 ^a	45
73 Saint Vincent	55	..	..	..	..	..	..	..	..	..
75 Suriname	51	..	..	..	..	..	..	..	..	..
76 Saint Lucia	53	..	..	..	..	..	..	..	..	..
77 Grenada	0	..	..	..	..	..	..	..	..	..
78 Tunisia	44	80 ^a	100 ^a	89	100	94	98	80 ^a	89	96
79 Cuba	25	96	99	85	96	51	71	97	89	72
82 Oman	88	94	100	..	..	..	..	94	..	..
83 Korea, Dem. People's Rep. of	39	..	..	..	..	..	..	..	..	..
84 Turkey	34	..	..	59	91	..	..	..	65	..
85 Paraguay	49	38	90	24	50	67	56	42	48	120
86 Jamaica	47	..	..	..	..	80	100	..	..	80
87 Dominican Rep.	37	67	84	46	96	83	76	80	48	109
88 Samoa (Western)	79	..	..	..	..	..	..	..	..	..
89 Sri Lanka	78	..	..	49	87	60	67	..	56	90
91 Peru	29	..	..	28	88	25	58	..	32	43
92 Syrian Arab Rep.	49	84	96	78	92	82	84	88	85	98
95 Philippines	48	74	77	77	93	62	79	96	83	78
97 Lebanon	14	85	98	88	96	8	81	87	92	10
100 South Africa	50	..	..	..	..	..	..	..	..	..
102 Indonesia	67	..	..	54	79	40	73	..	68	55
103 Guyana	65	..	..	..	..	..	..	..	..	..
106 Egypt	56	99	100	61	97	26	80	99	63	33
107 Maldives	74	..	..	..	..	..	..	..	..	..
108 China	71	89	100	56	97	7	74	89	58	9
109 Iraq	27	78	97	..	..	37	85	80	..	44
110 Swaziland	71	..	..	..	..	..	..	..	..	..
111 Bolivia	41	52	77	22	78	32	72	68	28	44
112 Guatemala	59	25	47	43	92	52	72	53	47	72
113 Mongolia	40	..	..	58	100	47	100	..	58	47

HDI rank	Rural population (as % of total) 1993	Population with access to services (%)						Rural-urban disparity in services (100=rural-urban parity; see note)			
		Health		Safe water		Sanitation		Health 1985-95	Safe water 1990-95	Sanitation 1990-95	
		Rural 1985-95	Urban 1985-95	Rural 1990-95	Urban 1990-95	Rural 1990-95	Urban 1990-95				
114	Honduras	57	56	80	53	81	61	96	70	65	64
115	El Salvador	56	40	80	38	78	65	91	50	49	71
116	Namibia	65	47	87	42	87	12	77	54	48	16
117	Nicaragua	38	60	100	23	81	34	77	60	28	44
118	Solomon Islands	84	..	..	..	..	..	..	..	..	..
119	Vanuatu	81	..	..	..	..	..	..	..	..	..
120	Gabon	52	..	..	50 ^a	90 ^a	..	..	..	56 ^a	..
121	Viet Nam	80	80	100	32	53	16	47	80	60	34
122	Cape Verde	50	..	..	..	..	..	..	..	..	..
123	Morocco	53	50	100	18	94	18	69	50	19	26
124	Zimbabwe	69	80	96	64	99	48	99	83	65	48
125	Congo	43	70	97	2 ^a	92 ^a	..	..	72	2 ^a	..
126	Papua New Guinea	84	..	..	17	84	11	82	..	20	13
	Low human development	74	66	95	64	78	20	64	68	82	34
	Excluding India	74	44	86	49	71	27	58	52	69	48
127	Cameroon	57	39	44	43	57	36	64	89	75	56
128	Kenya	74	40	..	49	67	81	69	..	73	117
129	Ghana	65	45	92	49	70	36	53	49	70	68
130	Lesotho	78	..	..	64	14	25	42	..	..	60
131	Equatorial Guinea	60	..	..	..	..	..	..	..	..	..
132	São Tomé and Príncipe	55	..	..	..	..	..	..	..	..	..
133	Myanmar	75	47	100	39	36	35	39	47	108	90
134	Pakistan	66	35	99	71	96	19	62	35	74	31
135	India	74	80	100	79	85	14	70	80	93	20
136	Zambia	57	50 ^a	100 ^a	11	91	12	75	50 ^a	12	16
137	Nigeria	62	62	85	26	63	30	40	73	41	75
138	Lao People's Dem. Rep.	80	..	..	43	57	14	97	..	75	14
139	Comoros	71	..	..	..	..	..	..	..	..	..
140	Togo	70	60	90	58	74	10	56	67	78	18
141	Zaire	71	17	40	23	37	11	46	43	62	24
142	Yemen	68	32	81	47	89	60	87	40	53	69
143	Bangladesh	83	..	..	97	99	30	75	..	98	40
144	Tanzania, U. Rep. of	77	73	94	46	67	62	74	78	69	84
145	Haiti	70	..	..	23	37	16	42	..	62	38
146	Sudan	76	40	90	41	84	4	79	44	49	5
147	Côte d'Ivoire	58	11 ^a	61 ^a	81	59	51	59	18 ^a	137	86
148	Central African Rep.	62	..	..	18	18	..	..	..	100	..
149	Mauritania	49	33	72	65 ^a	67 ^a	..	34	46	97 ^a	..
150	Madagascar	74	65	65	10	83	3	12	100	12	25
151	Nepal	88	..	..	43	90	16	70	..	48	23
152	Rwanda	94	..	..	62	75	56	77	..	83	73
153	Senegal	59	..	..	28	85	40	83	..	33	48
154	Benin	70	..	..	53	41	6	54	..	129	11
155	Uganda	88	42	99	32	47	52	94	42	68	55
156	Cambodia	81	50	80	33	65	8	81	63	51	10
157	Malawi	87	..	..	42 ^a	91 ^a	51	71	..	46 ^a	72
158	Liberia	56	30	50	13	79	4	56	60	16	7
159	Bhutan	94	..	..	..	..	..	..	..	..	..
160	Guinea	72	70	100	56	50	10	84	70	112	12
161	Guinea-Bissau	79	..	..	57	38	17	32	..	150	53
162	Gambia	76	..	..	..	67	28	54	..	..	52
163	Chad	79	..	64	17	48	..	..	..	35	..
164	Djibouti	18	..	..	..	..	..	..	..	..	..
165	Angola	69	..	..	15	69	8	34	..	22	24
166	Burundi	93	79	100	69 ^a	100 ^a	51	60	79	69 ^a	85
167	Mozambique	69	30	100	40	17	11 ^a	61 ^a	30	235	18 ^a
168	Ethiopia	87	..	..	19	91	7	97	..	21	7
169	Afghanistan	81	17	80	5	39	..	13	21	13	..
170	Burkina Faso	77	89	100	..	..	11	42	89	..	26
171	Mali	74	..	..	38	36	21	58	..	106	36
172	Somalia	75	15 ^a	50 ^a	29 ^a	50 ^a	5 ^a	44 ^a	30 ^a	58 ^a	11 ^a
173	Sierra Leone	65	20	90	21	58	8	17	22	36	47
174	Niger	84	30	99	55	46	4	71	30	120	6
	All developing countries	64	76	96	60	87	20	72	78	69	35
	Least developed countries	79	..	..	48	65	24	61	..	74	38
	Sub-Saharan Africa	70	50	81	35	63	30	56	63	56	55
	Industrial countries	27	..	..	85	..	..	..	..	85	..
	World	56	..	..	61	..	..	..	..	69	..

Note: The figures in the last three columns are expressed in relation to the urban average, which is indexed to equal 100. The smaller the figure the bigger the gap, the closer the figure to 100 the smaller the gap, and a figure above 100 indicates that the rural average is higher than the urban average.

a. Data refer to a year or period other than that specified in the column heading, differ from the standard definition or refer to only part of the country.

Source: Column 1: calculated on the basis of estimates from UN 1995h; columns 2-7: UNICEF 1996; columns 8, 9 and 10: calculated on the basis of data from UNICEF 1996.

9 Women and capabilities

HDI rank	Female net enrolment				Female tertiary students		Female life expectancy at birth		Total fertility		Maternal mortality rate
	Primary		Secondary		Per 100,000 people	Index (1980=100)	Years	Index (1970=100)	Rate	Index (1970=100)	(per 100,000 live births)
	Ratio 1992	Index (1980=100) 1992	Ratio 1992	Index (1980=100) 1992							
High human development	94	102	62	118	1,022	198	74	116	2.6	52	119
22 Hong Kong	..	..	..	..	1,320	182	82	110	1.2	35	7
23 Cyprus	99	99	96	109	859	336	79	109	2.5	95	5
25 Barbados	88	91	75	88	1,885	114	78	110	1.8	58	43
26 Bahamas	96	..	89	..	..	..	78	113	2.0	64	100
29 Korea, Rep. of	100	100	85	131	2,866	338	75	120	1.7	39	130
30 Argentina	95	..	62	..	..	..	76	108	2.8	90	100
31 Costa Rica	88	98	38	88	..	..	79	114	3.1	61	60
32 Uruguay	93	..	..	..	..	..	76	105	2.3	79	85
33 Chile	84	..	55	..	..	..	78	119	2.5	62	65
34 Singapore	..	..	..	..	..	..	78	109	1.7	56	10
36 Brunei Darussalam	86	105	64	119	..	..	76	112	3.1	55	60
38 Trinidad and Tobago	88	95	67	105	440	99	74	110	2.4	66	90
39 Bahrain	100	132	87	171	2,011	371	74	116	3.8	59	60
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..
42 United Arab Emirates	99	132	79	..	1,185	268	76	121	4.2	64	26
43 Panama	92	103	53	108	..	..	75	112	2.9	55	55
44 Venezuela	90	..	24	150	..	..	75	111	3.3	61	120
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..
47 Fiji	100	109	..	..	..	..	74	113	3.0	65	90
48 Mexico	..	..	..	..	1,333	146	74	116	3.2	49	110
49 Colombia	..	..	..	..	1,578	174	72	116	2.7	49	100
50 Qatar	78	94	72	138	3,072	183	74	119	4.3	63	..
51 Kuwait	..	..	..	..	1,569	118	77	114	3.1	43	29
52 Thailand	..	..	..	..	2,138	..	72	119	2.1	38	200
53 Malaysia	..	..	..	..	640	197	73	116	3.6	65	80
54 Mauritius	94	119	..	..	313	482	74	115	2.4	64	120
Medium human development	92	116	39	62	378	238	69	119	2.7	48	185
Excluding China	88	116	39	62	845	241	67	123	3.6	62	306
58 Brazil	..	..	..	..	1,220	107	69	113	2.9	58	220
59 Libyan Arab Jamahiriya	96	..	..	..	1,486	417	65	123	6.4	85	220
60 Seychelles	..	..	..	..	..	..	..	..	..	..	..
63 Saudi Arabia	57	154	30	188	1,215	310	72	134	6.4	88	130
64 Ecuador	..	..	..	..	..	..	72	121	3.5	56	150
65 Dominica	..	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	93	..	..	..	764	398	68	126	5.0	74	120
67 Belize	95	..	37	..	..	..	75	112	4.2	67	..
69 Algeria	89	125	50	208	844	307	69	127	3.9	52	160
70 Jordan	89	98	37	62	1,906	161	70	126	5.6	71	150
71 Botswana	100	122	45	265	280	354	67	125	4.9	73	250
73 Saint Vincent	..	..	..	..	..	..	..	..	..	..	..
75 Suriname	..	..	..	..	1,127	..	73	111	2.7	48	..
76 Saint Lucia	..	..	..	..	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..	..
78 Tunisia	93	129	40	222	869	290	69	127	3.2	49	170
79 Cuba	98	103	..	..	2,134	139	77	108	1.8	46	95
82 Oman	71	222	..	..	413	..	72	150	7.2	100	190
83 Korea, Dem. Rep. of	..	..	..	..	..	..	74	120	2.4	38	70
84 Turkey	..	..	..	..	1,111	380	69	118	3.4	64	180
85 Paraguay	96	112	29	..	832	..	72	107	4.3	71	160
86 Jamaica	100	103	68	100	663	..	76	109	2.4	45	120
87 Dominican Rep.	83	114	29	..	..	..	72	119	3.1	50	110
88 Samoa (Western)	..	..	..	..	..	..	69	118	4.5	60	35
89 Sri Lanka	..	..	..	..	402	158	74	113	2.5	58	140
91 Peru	..	..	..	..	..	..	68	124	3.4	54	280
92 Syrian Arab Rep.	92	115	39	130	1,419	147	69	122	5.9	76	180
95 Philippines	..	..	..	..	3,140	111	68	117	3.9	68	280
97 Lebanon	..	..	..	..	2,482	118	71	107	3.1	57	300
100 South Africa	93	..	49	..	1,168	..	66	119	4.1	72	230
102 Indonesia	95	114	34	..	751	331	65	133	2.9	54	650
103 Guyana	..	..	..	..	499	178	68	111	2.6	47	..
106 Egypt	82	..	60	..	1,056	101	65	125	3.9	64	170
107 Maldives	..	..	..	..	..	..	61	126	6.8	97	..
108 China	95	..	..	..	132	236	71	114	2.0	37	95
109 Iraq	74	79	30	97	..	..	68	121	5.7	80	310
110 Swaziland	93	..	..	..	311	120	60	125	4.9	75	560
111 Bolivia	87	118	27	193	..	..	61	127	4.8	74	650
112 Guatemala	..	..	..	..	..	..	68	127	5.4	83	200
113 Mongolia	..	..	..	..	..	..	65	121	3.6	62	65

HDI rank	Female net enrolment				Female tertiary students		Female life expectancy at birth		Total fertility		Maternal mortality rate (per 100,000 live births) 1993	
	Primary		Secondary		Per 100,000 people 1992	Index (1980=100) 1992	Years 1993	Index (1970=100) 1993	Rate 1992	Index (1970=100) 1992		
	Ratio 1992	Index (1980=100) 1992	Ratio 1992	Index (1980=100) 1992								
114	Honduras	91	117	..	..	726	132	70	129	4.9	68	220
115	El Salvador	71	..	..	..	1,281	564	69	116	4.0	63	300
116	Namibia	93	..	35	..	382	..	60	124	5.3	88	370
117	Nicaragua	81	109	28	112	819	80	69	125	5.0	72	160
118	Solomon Islands	..	..	..	..	..	..	73	118	5.4	78	..
119	Vanuatu	..	..	..	..	..	..	68	125	4.7	71	280
120	Gabon	..	..	..	..	225	239	55	121	5.3	126	500
121	Viet Nam	..	..	..	..	..	..	68	131	3.9	66	160
122	Cape Verde	99	113	..	..	..	..	66	113	4.3	61	..
123	Morocco	53	113	24	150	715	262	65	123	3.8	54	610
124	Zimbabwe	..	..	..	..	320	198	55	105	5.0	68	570
125	Congo	..	..	..	..	190	151	54	111	6.3	101	890
126	Papua New Guinea	..	..	..	..	..	..	57	123	5.1	83	930
	Low human development Excluding India	50	122	10	108	68	198	57	123	4.9	78	717
		50	122	10	108	68	198	54	120	6.0	89	886
127	Cameroon	71	111	..	..	..	..	58	126	5.7	92	550
128	Kenya	..	..	..	..	102	340	57	110	6.3	78	650
129	Ghana	..	..	..	..	54	92	58	114	6.0	89	740
130	Lesotho	75	96	22	129	209	111	63	123	5.2	91	610
131	Equatorial Guinea	..	..	..	..	41	..	50	120	5.9	104	820
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..
133	Myanmar	..	..	..	..	..	..	60	119	4.2	71	580
134	Pakistan	..	..	..	..	149	139	63	128	6.2	89	340
135	India	..	..	..	..	..	..	61	126	3.8	68	570
136	Zambia	..	..	..	..	..	..	49	103	6.0	89	940
137	Nigeria	..	..	..	..	192	..	52	118	6.5	101	1,000
138	Lao People's Dem. Rep.	57	..	13	..	60	214	53	126	6.7	109	650
139	Comoros	46	..	..	..	14	..	57	121	7.1	101	950
140	Togo	58	97	..	..	60	113	57	124	6.6	100	640
141	Zaire	47	78	12	..	..	..	54	115	6.7	108	870
142	Yemen	..	..	..	..	147	..	51	123	7.6	100	1,400
143	Bangladesh	66	138	12	200	132	169	56	129	4.4	63	850
144	Tanzania, U. Rep. of	51	78	..	..	..	..	54	114	5.9	87	770
145	Haiti	26	70	..	..	..	..	59	120	4.8	82	1,000
146	Sudan	..	..	..	..	245	292	55	124	5.7	85	660
147	Côte d'Ivoire	..	..	..	..	..	..	52	114	7.4	100	810
148	Central African Rep.	46	112	..	..	55	458	52	116	5.7	100	700
149	Mauritania	..	..	..	..	104	..	53	121	5.4	83	930
150	Madagascar	..	..	..	..	278	..	58	125	6.1	92	490
151	Nepal	..	..	..	..	270	267	53	128	5.4	90	1,500
152	Rwanda	71	125	7	..	19	380	49	106	6.6	81	1,300
153	Senegal	42	140	..	..	117	130	51	125	6.1	87	1,200
154	Benin	35	..	..	..	60	102	50	122	7.1	101	990
155	Uganda	..	..	..	..	63	315	46	96	7.3	106	1,200
156	Cambodia	..	..	..	..	..	..	53	120	5.3	90	900
157	Malawi	48	126	2	..	37	109	46	113	7.2	99	560
158	Liberia	..	..	..	..	..	..	57	120	6.8	100	560
159	Bhutan	..	..	..	..	..	..	53	129	5.9	100	1,600
160	Guinea	..	..	..	..	28	18	45	122	7.0	100	1,600
161	Guinea-Bissau	..	..	..	..	..	..	45	121	5.8	109	910
162	Gambia	46	139	12	..	..	..	47	125	5.6	86	1,100
163	Chad	..	..	..	..	..	..	49	125	5.9	98	1,500
164	Djibouti	26	..	..	..	..	..	50	120	5.8	86	570
165	Angola	..	..	..	..	..	..	48	126	7.2	111	1,500
166	Burundi	47	294	4	200	38	173	52	115	6.8	100	1,300
167	Mozambique	37	112	5	250	16	320	48	111	6.5	100	1,500
168	Ethiopia	..	..	..	..	25	227	49	119	7.0	103	1,400
169	Afghanistan	14	127	..	..	102	232	44	119	6.9	97	1,700
170	Burkina Faso	24	218	5	250	28	280	49	117	6.5	101	930
171	Mali	14	..	3	..	19	136	48	122	7.1	100	1,200
172	Somalia	..	..	..	..	..	..	49	117	7.0	100	1,600
173	Sierra Leone	..	..	..	..	..	..	41	114	6.5	101	1,800
174	Niger	18	..	3	150	18	180	48	121	7.4	93	1,200
	All developing countries	84	118	33	86	365	227	63	121	3.5	60	384
	Least developed countries	50	122	10	116	70	214	52	120	5.8	88	1,015
	Sub-Saharan Africa	54	113	18	51	236	228	53	116	6.3	95	929
	Industrial countries	97	101	87	50	3,515	133	78	106	1.8	76	28
	World	87	112	52	72	1,139	208	65	119	3.1	63	307

Source: Columns 1, 3 and 5: UNESCO 1995c; columns 2, 4 and 6: calculated on the basis of data from UNESCO 1995c; columns 7-10: calculated on the basis of data from UN 1995c; column 11: WHO and UNICEF 1996.

10 Women and political and economic participation

HDI rank	Administrators and managers		Professional and technical workers		Clerical and sales workers		Service workers		Women in government		
	Female (%)	Female as % of male	Female (%)	Female as % of male	Female (%)	Female as % of male	Female (%)	Female as % of male	Total ^a	At ministerial level ^a	At sub-ministerial level ^a
	1990	1990	1990	1990	1990	1990	1990	1990	1995	1995	1995
High human development	18	23	46	87	47	93	56	135	9.5	10.7	10.1
22 Hong Kong	16	19	42	72	51	104	41	70	..	..	..
23 Cyprus	10	11	41	69	50	100	45	83	4.5	7.7	3.2
25 Barbados	37	59	52	109	65	184	57	132	22.9	33.3	24.1
26 Bahamas	26	36	57	132	70	235	62	162	33.9	20.0	38.3
29 Korea, Rep. of	4	4	45	82	44	79	61	156	1.5	3.4	1.2
30 Argentina	..	..	..	..	..	..	..	..	3.2	0	3.6
31 Costa Rica	21	27	45	82	40	68	59	146	20.8	14.8	24.0
32 Uruguay	25	34	63	167	46	85	68	210	2.9	0	5.0
33 Chile	17	21	34	52	46	86	73	263	12.2	15.8	10.0
34 Singapore	34	52	16	19	..	..	41	69	5.1	0	7.1
36 Brunei Darussalam	11	13	35	54	52	109	40	67	2.3	0	3.2
38 Trinidad and Tobago	23	30	53	114	59	144	53	112	13.6	20.0	9.8
39 Bahrain	..	..	..	..	..	..	..	..	0	0	0
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	30.0	0	47.4
42 United Arab Emirates	2	2	25	34	8	8	25	32	0	0	0
43 Panama	28	38	49	97	58	135	56	126	10.7	11.1	10.5
44 Venezuela	18	21	55	123	46	84	58	136	6.0	3.6	9.1
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	21.4	10.0	27.8
47 Fiji	10	11	45	81	38	62	48	93	9.8	8.7	10.7
48 Mexico	20	25	44	77	42	71	45	82	6.7	14.3	3.7
49 Colombia	27	37	42	72	46	84	70	229	24.7	10.5	29.0
50 Qatar	1	1	27	37	6	7	27	36	1.7	0	2.5
51 Kuwait	5	6	37	58	19	23	46	85	6.0	0	9.4
52 Thailand	22	28	52	110	57	134	56	128	4.4	3.8	4.5
53 Malaysia	12	14	45	80	..	..	..	..	5.8	7.7	4.7
54 Mauritius	14	17	41	71	31	44	41	70	7.4	4.0	8.2
Medium human development	13	15	44	83	38	66	48	105	7.8	6.3	9.0
Excluding China	14	18	43	85	..	..	..	..	8.1	6.3	9.5
58 Brazil	17	21	57	133	..	..	..	..	13.1	3.6	14.7
59 Libyan Arab Jamahiriya	..	..	..	..	..	..	..	..	0	0	0
60 Seychelles	29	40	58	139	59	143	59	141	21.3	30.8	19.4
63 Saudi Arabia	..	..	..	..	..	..	..	..	0	0	0
64 Ecuador	32	46	48	92	41	70	64	174	9.8	6.7	10.4
65 Dominica	36	56	57	130	..	..	69	200	31.4	8.3	38.5
66 Iran, Islamic Rep. of	4	4	33	48	5	5	7	8	0.4	0	0.5
67 Belize	37	58	39	63	..	..	..	..	9.8	0	13.5
69 Algeria	6	6	28	38	11	13	19	23	1.6	0	3.0
70 Jordan	..	..	..	..	..	..	..	..	1.6	3.2	0
71 Botswana	36	57	61	159	60	151	70	238	10.9	0	15.4
73 Saint Vincent	..	..	..	..	..	..	..	..	25.0	10.0	50.0
75 Suriname	22	27	70	232	49	96	60	150	13.6	0	20.5
76 Saint Lucia	..	..	..	..	..	..	..	..	4.5	7.7	0
77 Grenada	32	46	53	113	64	178	58	140	19.4	10.0	23.8
78 Tunisia	7	8	18	21	..	..	..	..	5.3	3.4	6.5
79 Cuba	19	23	48	91	..	..	..	..	8.4	3.6	9.7
82 Oman	..	..	..	..	..	..	..	..	3.7	0	4.2
83 Korea, Dem. People's Rep. of	..	..	..	..	..	..	..	..	0.8	1.2	0.6
84 Turkey	7	7	29	42	16	20	10	11	5.2	2.9	5.9
85 Paraguay	15	17	51	104	46	86	72	255	3.3	0	4.4
86 Jamaica	..	..	60	147	..	..	72	255	13.4	5.6	16.3
87 Dominican Rep.	21	27	50	98	..	..	..	..	11.5	3.4	15.5
88 Samoa (Western)	12	14	47	88	53	113	54	118	7.1	6.7	7.4
89 Sri Lanka	17	20	25	33	22	28	38	61	8.7	12.5	7.9
91 Peru	20	25	41	70	52	109	38	60	9.7	5.6	11.4
92 Syrian Arab Rep.	..	..	..	..	..	..	..	..	3.7	6.8	1.6
95 Philippines	34	51	63	168	63	168	58	138	23.9	8.3	26.3
97 Lebanon	..	..	..	..	..	..	..	..	0	0	0
100 South Africa	17	21	47	88	..	..	66	196	7.0	9.4	5.9
102 Indonesia	7	7	41	69	44	79	58	135	1.8	3.6	1.4
103 Guyana	13	15	48	90	..	..	..	..	16.2	11.1	21.1
106 Egypt	16	19	29	40	29	40	8	9	2.2	3.2	1.7
107 Maldives	14	16	35	53	25	33	12	14	10.1	5.3	11.0
108 China	12	13	45	82	39	65	52	107	4.0	6.4	3.5
109 Iraq	13	15	44	78	7	7	16	19	0	0	0
110 Swaziland	15	17	54	119	54	116	45	82	7.1	0	13.0
111 Bolivia	17	20	42	72	65	183	73	263	9.4	0	10.3
112 Guatemala	32	48	45	82	54	118	72	261	18.2	18.8	17.9
113 Mongolia	..	..	..	..	..	..	..	..	4.7	0	8.7

HDI rank	Administrators and managers		Professional and technical workers		Clerical and sales workers		Service workers		Women in government			
	Female (%)	Female as % of male	Female (%)	Female as % of male	Female (%)	Female as % of male	Female (%)	Female as % of male	Total ^a	At ministerial level ^a	At sub-ministerial level ^a	
	1990	1990	1990	1990	1990	1990	1990	1990	1995	1995	1995	
114	Honduras	31	44	50	99	60	147	72	263	17.0	10.5	21.4
115	El Salvador	25	34	45	80	60	148	72	261	18.4	5.9	25.0
116	Namibia	21	26	41	69	..	..	..	..	6.6	9.5	5.7
117	Nicaragua	..	..	..	..	..	..	..	..	10.5	10.5	10.4
118	Solomon Islands	3	3	27	38	27	37	40	65	0	0	0
119	Vanuatu	13	15	35	54	..	..	..	..	0	0	0
120	Gabon	..	..	..	..	..	..	..	..	6.0	3.2	10.5
121	Viet Nam	..	..	..	..	..	..	..	..	3.9	6.5	2.4
122	Cape Verde	23	30	48	94	63	170	57	134	11.5	12.5	10.0
123	Morocco	26	34	31	46	..	..	..	..	1.2	0	1.9
124	Zimbabwe	15	18	40	67	34	52	30	42	10.8	3.0	18.8
125	Congo	6	7	29	40	..	..	..	..	4.3	6.3	0
126	Papua New Guinea	12	13	30	42	..	..	..	..	1.6	0	3.1
Low human development		4	5	22	30	..	..	..	..	6.4	7.9	7.0
Excluding India		7	9	24	36	..	..	..	..	6.4	8.0	7.0
127	Cameroon	10	11	24	32	37	59	31	46	5.4	2.7	6.8
128	Kenya	..	..	..	..	..	..	..	..	4.7	0	6.0
129	Ghana	9	10	36	56	..	..	..	..	10.5	10.7	10.4
130	Lesotho	33	50	57	130	59	144	68	209	13.8	6.7	16.3
131	Equatorial Guinea	2	2	27	37	..	..	..	..	2.5	3.8	0
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	4.3	0	11.1
133	Myanmar	..	..	..	..	..	..	..	..	0	0	0
134	Pakistan	3	4	20	25	3	3	14	16	1.6	3.7	1.0
135	India	2	2	21	26	..	..	..	..	6.1	4.2	6.3
136	Zambia	6	7	32	47	58	136	22	29	8.5	7.4	8.8
137	Nigeria	6	6	26	35	58	140	11	13	4.1	3.7	4.3
138	Lao People's Dem. Rep.	..	..	..	..	..	..	..	..	2.7	0	4.1
139	Comoros	..	..	22	29	..	..	..	..	2.5	6.7	0
140	Togo	8	9	21	27	..	..	..	..	2.7	4.2	0
141	Zaire	9	10	17	20	..	..	..	..	1.7	3.4	0
142	Yemen	..	..	..	..	..	..	..	..	0	0	0
143	Bangladesh	5	5	23	30	4	4	46	87	3.4	4.5	3.0
144	Tanzania, U. Rep. of	..	..	..	..	..	..	..	..	9.1	15.6	5.4
145	Haiti	33	48	39	65	88	752	65	188	13.8	17.4	11.4
146	Sudan	2	3	29	40	..	..	..	..	0.8	0	1.2
147	Côte d'Ivoire	..	..	..	..	..	..	..	..	2.9	8.0	0
148	Central African Rep.	9	10	19	23	59	146	12	13	4.9	5.3	4.5
149	Mauritania	8	8	21	26	25	33	45	81	4.7	3.6	5.0
150	Madagascar	..	..	..	..	..	..	..	..	0	0	0
151	Nepal	..	..	..	..	..	..	..	..	0	0	0
152	Rwanda	8	9	32	47	32	48	26	35	10.2	7.7	13.0
153	Senegal	..	..	..	..	..	..	..	..	2.3	3.6	0
154	Benin	..	..	..	..	..	..	..	..	10.3	15.0	5.3
155	Uganda	..	..	..	..	..	..	..	..	9.8	12.5	8.0
156	Cambodia	..	..	..	..	..	..	..	..	5.1	0	6.6
157	Malawi	5	5	35	53	33	58	28	39	6.1	4.5	7.4
158	Liberia	..	..	..	..	..	..	..	..	8.8	9.5	7.7
159	Bhutan	..	..	..	..	..	..	..	..	5.0	12.5	0
160	Guinea	..	..	..	..	..	..	..	..	4.8	14.8	0
161	Guinea-Bissau	..	..	..	..	..	..	..	..	11.6	8.3	15.8
162	Gambia	16	18	24	31	..	..	..	..	6.7	22.2	1.8
163	Chad	..	..	..	..	..	..	..	..	2.5	5.0	0
164	Djibouti	2	2	20	25	..	..	..	..	1.4	0	1.7
165	Angola	..	..	..	..	..	..	..	..	6.2	7.4	5.6
166	Burundi	13	16	30	44	..	..	..	..	4.3	7.7	0
167	Mozambique	11	13	20	26	..	..	..	..	13.2	3.6	14.9
168	Ethiopia	11	13	24	31	..	..	..	..	10.5	11.5	10.2
169	Afghanistan	..	..	..	..	..	..	..	..	0	0	0
170	Burkina Faso	14	16	26	35	63	168	22	28	9.6	11.1	9.3
171	Mali	20	25	19	23	57	130	41	71	6.9	9.5	0
172	Somalia	..	..	..	..	..	..	..	..	0	0	0
173	Sierra Leone	8	9	32	47	66	191	15	18	4.9	3.8	5.2
174	Niger	8	9	..	..	..	..	..	..	9.1	9.5	9.0
All developing countries		10	12	36	65	..	..	..	..	7.6	7.7	8.5
Least developed countries		9	..	24	..	..	..	..	..	7.0	8.6	7.7
Sub-Saharan Africa		10	12	28	42	..	..	..	..	7.7	7.9	9.0
Industrial countries		27	44	48	95	..	..	..	..	10.8	12.6	11.3
World		14	18	39	71	..	..	..	..	8.7	9.1	9.6

a. Including elected heads of state and governors of central banks. For countries for which the value is zero, no women ministers were reported by the United Nations Division for the Advancement of Women, this information could not be reconfirmed by the Human Development Report Office.
Source: Columns 1-8: UN 1994b; columns 9, 10 and 11: calculations by the United Nations Division for the Advancement of Women, based on data from Worldwide Government Directories 1995.

11 Child survival and development

HDI rank	Pregnant women aged 15-49 with anaemia (%) 1975-91	Births attended by trained health personnel (%) 1983-94	Low-birth-weight infants (%) 1990	Maternal mortality rate (per 100,000 live births) 1993	Infant mortality rate (per 1,000 live births) 1993	Under-five mortality rate (per 1,000 live births) 1994	Mothers breast-feeding at 6 months (%) 1980-92	Oral rehydration therapy use rate (%) 1990-94	Under-weight children under age five (%) 1985-95
High human development	..	81	10	119	28	25	54	70	14
22 Hong Kong	..	100	8	7	7	6	..	..	..
23 Cyprus	..	..	..	5	8	10	..	..	..
25 Barbados	29	..	..	43	9	10	17	..	6
26 Bahamas	12	..	..	100	23	28	..	..	..
29 Korea, Rep. of	..	89	9	130	11	9	..	..	..
30 Argentina	..	87 ^a	6	100	24	27	36	80	2
31 Costa Rica	..	93	6	60	13	16	38	78	6
32 Uruguay	..	96	8	85	20	21	33	96	7
33 Chile	32	98	7	65	15	15	18 ^a	90	1
34 Singapore	57	100	7	10	6	6	..	..	..
36 Brunei Darussalam	..	..	..	60	8	10	..	..	..
38 Trinidad and Tobago	..	98	10	90	17	20	49 ^a	75	7
39 Bahrain	..	..	..	60	18	20	..	..	..
40 Antigua and Barbuda	..	..	..	..	..	23	..	..	..
42 United Arab Emirates	..	99	6	26	18	20	..	81	..
43 Panama	..	96	10	55	25	20	53	70	7
44 Venezuela	52 ^a	69	9	120	23	24	..	80	5
45 Saint Kitts and Nevis	57	..	..	..	..	41	3	..	..
47 Fiji	40	..	..	90	23	27	..	..	..
48 Mexico	..	77	12	110	35	32	50 ^a	81	14
49 Colombia	8	81	10	100	37	19	65 ^a	40	12
50 Qatar	..	..	..	..	20	24	..	..	..
51 Kuwait	..	99	7	29	18	14	..	10	..
52 Thailand	48	71	13	200	36	32	80	65	26
53 Malaysia	36	87	10	80	13	15	..	47	25
54 Mauritius	..	85	9	120	18	23	55	..	24
Medium human development	..	82	11	185	48	55	67	75	20
Excluding China	..	65	12	306	51	65	75	63	22
58 Brazil	..	95	11	220	57	61	43 ^a	63	7
59 Libyan Arab Jamahiriya	..	76	..	220	67	95	..	80	..
60 Seychelles	..	..	..	..	..	20	55	..	6
63 Saudi Arabia	23	90	7	130	28	36	57	90	..
64 Ecuador	..	84	11	150	49	57	73 ^a	70	17
65 Dominica	28	..	..	..	..	21	..	..	..
66 Iran, Islamic Rep. of	..	70	9	120	34	51	..	85	16
67 Belize	65	..	..	..	32	41	..	..	6
69 Algeria	..	15	9	160	54	65	..	27	9
70 Jordan	..	87	7	150	35	25	72 ^a	53	6
71 Botswana	..	78	8	250	42	54	90 ^a	64	..
73 Saint Vincent	20	..	..	..	..	23	..	..	..
75 Suriname	..	..	..	..	27	33	..	..	..
76 Saint Lucia	22	..	..	..	..	22	..	..	..
77 Grenada	63	..	..	..	..	34	..	..	..
78 Tunisia	38	69	8	170	43	34	..	22	10
79 Cuba	..	90	9	95	12	10	33	80	..
82 Oman	..	60	10	190	29	27	..	72	24
83 Korea, Dem. People's Rep. of	..	100	..	70	24	31	..	85	..
84 Turkey	..	76	8	180	64	55	91	57	10
85 Paraguay	..	66	8	160	38	34	69 ^a	52	4
86 Jamaica	62	82	11	120	14	13	82	10	7
87 Dominican Rep.	..	92	16	110	41	45	45 ^a	37	10
88 Samoa (Western)	..	..	..	35	63	55	..	..	..
89 Sri Lanka	..	94	25	140	17	19	81	76	38
91 Peru	..	52	11	280	64	58	87 ^a	31	11
92 Syrian Arab Rep.	..	61	11	180	39	38	..	95	12
95 Philippines	48	53	15	280	43	57	..	63	33
97 Lebanon	..	45 ^a	10	300	34	40	40	45	..
100 South Africa	..	..	..	230	52	68	..	..	..
102 Indonesia	74	36	14	650	56	111	95 ^a	78	40
103 Guyana	58	..	..	..	47	61	..	..	22
106 Egypt	75 ^a	41	10	170	66	52	83 ^a	34	9
107 Maldives	..	..	..	..	58	78	..	..	..
108 China	..	94	9	95	44	43	60 ^a	84	17
109 Iraq	..	50	15	310	58	71	45	70	12
110 Swaziland	..	..	..	560	74	107	87 ^a	..	10
111 Bolivia	..	47	12	650	74	110	84	63	16
112 Guatemala	..	51	14	200	48	70	79 ^a	24	34
113 Mongolia	..	99	10	65	59	76	..	65	12

HDI rank	Pregnant women aged 15-49 with anaemia (%) 1975-91	Births attended by trained health personnel (%) 1983-94	Low-birth-weight infants (%) 1990	Maternal mortality rate (per 100,000 live births) 1993	Infant mortality rate (per 1,000 live births) 1993	Under-five mortality rate (per 1,000 live births) 1994	Mothers breast-feeding at 6 months (%) 1980-92	Oral rehydration therapy use rate (%) 1990-94	Under-weight children under age five (%) 1985-95
114 Honduras	..	81	9	220	42	54	28	70	19
115 El Salvador	14	66	11	300	44	56	77 ^a	45	11
116 Namibia	..	68	16	370	59	78	86 ^a	75	26
117 Nicaragua	..	73	15	160	50	68	25	40	12
118 Solomon Islands	30	..	..	..	26	32	..	..	..
119 Vanuatu	87	..	..	280	46	59	..	..	..
120 Gabon	..	80	..	500	93	151	..	25	..
121 Viet Nam	..	95	17	160	42	46	88	52	45
122 Cape Verde	48 ^a	..	..	..	49	73	..	..	..
123 Morocco	..	31	9	610	67	56	..	48	9
124 Zimbabwe	..	70	14	570	67	81	92 ^a	82	16
125 Congo	..	..	16	890	84	109	98 ^a	67	24
126 Papua New Guinea	..	20	23	930	68	95	99	51	30
Low human development Excluding India	..	33	27	717	92	144	84	45	46
	..	33	22	886	100	163	93	54	38
127 Cameroon	..	64	13	550	62	109	95	84	14
128 Kenya	40 ^a	54	16	650	69	90	92 ^a	76	22
129 Ghana	..	59	17	740	80	131	92	44	27
130 Lesotho	..	40	11	610	78	156	..	78	16
131 Equatorial Guinea	..	..	..	820	116	177	..	..	..
132 São Tomé and Príncipe	..	..	..	..	..	82	..	..	17
133 Myanmar	60	57	16	580	82	109	..	37	37
134 Pakistan	..	35	25	340	89	137	88 ^a	59	40
135 India	88	33	33	570	81	119	75 ^a	37	53
136 Zambia	..	51	13	940	103	203	99 ^a	90	25
137 Nigeria	65 ^a	37	16	1,000	84	191	99 ^a	35	36
138 Lao People's Dem. Rep.	..	..	18	650	96	138	98	55	..
139 Comoros	..	..	..	950	88	126	..	..	..
140 Togo	47	54	20	640	85	132	87 ^a	33	24
141 Zaire	..	15	..	870	92	186	99	46	..
142 Yemen	..	16	19	1,400	119	112	..	30	30
143 Bangladesh	58	10	50	850	106	117	97	91	66
144 Tanzania, U. Rep. of	..	53	14	770	85	159	90	76	25
145 Haiti	..	20	15	1,000	85	127	..	20	34
146 Sudan	50	69	15	660	77	122	90	47	..
147 Côte d'Ivoire	34 ^a	45	14 ^a	810	91	150	81	15	12
148 Central African Rep.	..	46	15	700	101	175	..	24	..
149 Mauritania	24	40	11	930	100	199	82	54	48
150 Madagascar	..	56	17	490	91	164	95	29	39
151 Nepal	..	6	..	1,500	98	118	..	49	..
152 Rwanda	..	26	17	1,300	110	139	97	47	29
153 Senegal	53	46	11	1,200	67	115	91 ^a	18	20
154 Benin	46	45	..	990	86	142	89	77	..
155 Uganda	..	38	..	1,200	115	185	88 ^a	45	23
156 Cambodia	..	47	..	900	115	177	93	6	..
157 Malawi	..	55	20	560	142	221	..	50	27
158 Liberia	78 ^a	58	..	560	124	217	75 ^a	15	..
159 Bhutan	30 ^a	7	..	1,600	122	193	..	85	38
160 Guinea	..	36	21	1,600	133	223	70	82	..
161 Guinea-Bissau	..	27	20	910	139	231	100	26	..
162 Gambia	..	80	..	1,100	131	213	..	51	..
163 Chad	..	15	..	1,500	121	202	..	15	..
164 Djibouti	..	..	..	570	114	158	..	..	23
165 Angola	..	15	19	1,500	123	292	..	48	..
166 Burundi	..	19	..	1,300	101	176	92 ^a	49	38
167 Mozambique	58 ^a	25	20	1,500	147	277	93	60	..
168 Ethiopia	..	14	16	1,400	118	200	..	68	48
169 Afghanistan	..	9	20	1,700	163	257	..	26	..
170 Burkina Faso	55	42	21 ^a	930	129	169	98	15	30
171 Mali	50 ^a	32	17	1,200	158	214	95 ^a	10	31
172 Somalia	..	2	16	1,600	121	211	78	78	..
173 Sierra Leone	45	25	17	1,800	165	284	..	60	29
174 Niger	57	15	15	1,200	123	320	..	17	36
All developing countries	..	63	19	384	70	97	76	63	32
Least developed countries	..	29	23	1,015	110	171	..	57	43
Sub-Saharan Africa	..	39	16	929	97	174	94	49	31
Industrial countries	..	99	6	28	13	18	..	..	4
World	..	69	18	307	63	86	..	..	31

a. Data refer to a year or period other than that specified in the column heading, differ from the standard definition or refer to only part of the country.
Source: Columns 1 and 7: UN 1994b; columns 2, 3, 6 and 8: UNICEF 1996; column 4: WHO and UNICEF 1996; column 5: UN 1995e; column 9: WHO 1995a.

12 Health profile

HDI rank	One-year-olds fully immunized against		AIDS cases (per 100,000 people) ^a 1994	Malaria cases (per 100,000 people) 1992	Population per doctor 1988-91	Population per nurse 1988-91	People with disabilities (as % of total population) 1985-92	Public expenditure on health	
	Tuberculosis (%) 1990-94	Measles (%) 1990-94						As % of GNP 1960	As % of GDP 1990
High human development	95	91	6.4	..	1,661	1,782	..	1.2	2.0
22 Hong Kong	99	77	0.6	..	..	..	0.8	..	1.1
23 Cyprus	..	..	1.2	..	585	..	2.3	0.6	..
25 Barbados	..	..	44.1	..	..	..	..	3.0	..
26 Bahamas	..	..	131.4	..	..	..	..	..	..
29 Korea, Rep. of	72	93	(.)	..	1,205	1,538	..	0.2	2.7
30 Argentina	100	95	5.6	2	329	1,786	..	1.3	2.5
31 Costa Rica	97	88	4.7	218	1,136	2,222	..	3.0	..
32 Uruguay	99	80	3.7	..	..	..	..	2.6	2.5
33 Chile	96	96	1.5	..	943	3,846	..	2.0	3.4
34 Singapore	98	87	1.7	..	725	..	0.4	1.0	1.1
36 Brunei Darussalam	..	..	(.)	..	..	..	..	..	..
38 Trinidad and Tobago	..	79	19.7	..	1,370	..	1.1	1.7	..
39 Bahrain	..	..	0.9	..	775	..	1.0	..	..
40 Antigua and Barbuda	..	..	7.3	..	..	..	..	..	..
42 United Arab Emirates	98	90	(.)	204	1,042	568	..	..	..
43 Panama	95	84	7.2	29	562	1,064	1.4	3.0	..
44 Venezuela	95	94	2.4	105	..	..	3.8	2.6	2.0
45 Saint Kitts and Nevis	..	..	10.9	..	..	..	..	..	..
47 Fiji	..	..	0.3	..	..	..	0.9	..	..
48 Mexico	98	94	4.2	18	621	..	..	1.9	1.6
49 Colombia	99	87	3.3	551	1,064	2,632	1.2	0.4	1.8
50 Qatar	..	..	1.4	..	..	..	0.2	..	..
51 Kuwait	..	96	0.2	..	..	..	0.4	..	..
52 Thailand	98	86	17.5	296	4,762	1,064	0.7	0.4	1.1
53 Malaysia	97	81	0.4	196	2,564	..	..	1.1	1.3
54 Mauritius	87	85	0.8	..	1,176	398	2.6	1.5	..
Medium human development	93	87	5.0	..	..	..	..	..	..
Excluding China	93	86	5.0	..	3,454	2,679	..	0.7	2.3
58 Brazil	92	76	7.3	396	847	3,448	1.8	0.6	2.8
59 Libyan Arab Jamahiriya	99	89	0.1	..	962	328	..	1.3	..
60 Seychelles	..	..	7.6	..	..	..	..	..	..
63 Saudi Arabia	94	92	0.2	117	704	310	..	0.6	3.1
64 Ecuador	100	100	1.0	383	671	1,818	..	0.4	..
65 Dominica	..	..	5.7	..	..	..	..	..	..
66 Iran, Islamic Rep. of	100	97	(.)	123	..	..	..	0.8	1.5
67 Belize	..	..	4.5	2,684	..	..	6.6	..	..
69 Algeria	92	65	0.3	..	1,064	..	..	1.2	5.4
70 Jordan	..	91	0.1	..	649	641	0.5	0.6	1.8
71 Botswana	92	71	65.6	..	4,762	469	4.0	1.5	..
73 Saint Vincent	..	..	7.1	..	..	..	..	..	..
75 Suriname	..	..	4.7	343	..	..	..	..	..
76 Saint Lucia	..	..	9.1	..	..	..	..	..	..
77 Grenada	..	..	6.7	..	..	..	..	..	..
78 Tunisia	80	93	0.5	..	1,852	407	0.9	1.6	3.3
79 Cuba	99	..	0.8	..	332	180	1.7	3.0	..
82 Oman	96	97	0.8	777	..	..	..	..	..
83 Korea, Dem. People's Rep. of	100	99	(.)	..	..	..	..	0.5	..
84 Turkey	72	76	0.1	32	1,176	..	1.4	0.8	1.5
85 Paraguay	97	79	0.5	28	1,587	7,143	..	0.5	1.2
86 Jamaica	100	82	13.5	..	7,143	..	..	2.0	..
87 Dominican Rep.	64	87	4.0	9	935	9,091	..	1.3	2.1
88 Samoa (Western)	..	..	(.)	..	..	..	..	..	..
89 Sri Lanka	86	84	(.)	2,260	7,143	1,754	0.4	2.0	1.8
91 Peru	91	75	1.7	245	1,031	..	0.2	1.1	1.9
92 Syrian Arab Rep.	100	84	(.)	3	1,220	1,031	1.0	0.4	0.4
95 Philippines	89	87	0.1	174	8,333	..	1.1	0.4	1.0
97 Lebanon	..	73	0.4	..	413	2,174	..	..	..
100 South Africa	95	76	9.1	..	..	..	..	0.5	3.2
102 Indonesia	100	92	(.)	7	7,143	2,857	1.1	0.3	0.7
103 Guyana	..	..	9.5	4,914	..	..	3.9	..	..
106 Egypt	95	90	(.)	..	..	..	1.6	0.6	1.0
107 Maldives	..	..	0.5	..	..	..	..	..	..
108 China	94	89	(.)	6	..	..	4.9	1.3	2.1
109 Iraq	90	98	0.1	97	1,667	1,370	0.9	1.0	..
110 Swaziland	..	..	13.2	..	9,091	595	..	..	..
111 Bolivia	91	86	0.2	355	2,564	7,692	2.6	0.4	2.4
112 Guatemala	70	66	1.1	591	4,000	7,143	3.8	0.6	2.1
113 Mongolia	90	80	(.)	..	389	209	..	..	..

Developing countries

HDI rank	One-year-olds fully immunized against		AIDS cases (per 100,000 people) ^a 1994	Malaria cases (per 100,000 people) 1992	Population per doctor 1988-91	Population per nurse 1988-91	People with disabilities (as % of total population) 1985-92	Public expenditure on health		
	Tuberculosis (%) 1990-94	Measles (%) 1990-94						As % of GNP 1960	As % of GDP 1990	
114	Honduras	95	94	13.7	1,368	1,266	4,545	..	1.0	2.9
115	El Salvador	83	81	6.7	84	1,563	3,333	..	0.9	2.6
116	Namibia	100	68	(.)	(.)	4,545	339	..	..	..
117	Nicaragua	89	74	0.8	679	2,000	3,125	..	0.4	6.7
118	Solomon Islands	..	..	(.)	44,711	..	..	..	..	..
119	Vanuatu	..	..	(.)	8,490	..	..	..	..	..
120	Gabon	97	65	15.3	..	2,500	1,471	..	0.5	..
121	Viet Nam	95	96	0.1	304	247	1,149	5.7	..	1.1
122	Cape Verde	..	..	2.3	..	..	..	4.3	..	..
123	Morocco	93	..	0.3	2	..	..	1.6	1.0	0.9
124	Zimbabwe	90	77	96.7	..	7,692	1,639	..	1.2	3.2
125	Congo	94	70	58.4	..	3,571	1,370	..	1.6	..
126	Papua New Guinea	91	39	0.6	..	..	1,587	..	..	2.8
	Low human development	80	70	8.7	..	7,642	5,869	..	0.6	1.5
	Excluding India	69	58	8.7	..	14,053	9,319	..	0.7	1.7
127	Cameroon	46	31	11.3	..	12,500	1,852	..	1.0	1.0
128	Kenya	92	73	24.8	..	20,000	9,091	..	1.5	2.7
129	Ghana	61	49	13.7	..	25,000	3,704	..	1.1	1.7
130	Lesotho	59	74	1.8	..	25,000	2,000	..	1.0	..
131	Equatorial Guinea	..	..	3.3	..	..	..	..	..	..
132	São Tomé and Príncipe	..	..	0.9	..	..	..	..	..	..
133	Myanmar	83	77	0.5	288	12,500	..	0.4	0.7	..
134	Pakistan	78	65	(.)	80	2,000	3,448	4.9	0.3	1.8
135	India	96	86	(.)	240	2,439	3,333	0.2	0.5	1.3
136	Zambia	100	88	17.3	..	11,111	5,000	1.6	1.0	2.2
137	Nigeria	46	41	0.5	..	5,882	1,639	..	0.3	1.2
138	Lao People's Dem. Rep.	69	73	0.1	935	4,545	..	..	0.5	1.0
139	Comoros	..	..	0.3	..	10,000	3,448	..	..	3.3
140	Togo	73	58	32.8	..	11,111	3,030	..	1.3	2.5
141	Zaire	43	33	8.3	..	14,286	1,351	..	..	0.8
142	Yemen	61	45	(.)	234	4,348	1,818	..	..	1.5
143	Bangladesh	95	95	(.)	103	12,500	20,000	0.8	..	1.4
144	Tanzania, U. Rep. of	86	75	8.7	..	..	..	..	0.5	3.2
145	Haiti	42	24	(.)	199	7,143	9,091	..	1.0	3.2
146	Sudan	78	76	0.7	..	..	..	5.3	1.0	0.5
147	Côte d'Ivoire	49	49	44.6	..	11,111	3,226	..	1.5	1.7
148	Central African Rep.	82	44	1.6	..	25,000	11,111	..	1.3	2.6
149	Mauritania	93	53	1.1	..	16,667	2,273	..	0.5	..
150	Madagascar	81	54	0.1	..	8,333	3,846	..	1.4	1.3
151	Nepal	61	57	(.)	115	16,667	33,333	3.0	0.2	2.2
152	Rwanda	32	25	(.)	..	25,000	8,333	..	0.5	1.9
153	Senegal	71	49	6.5	..	16,667	12,500	..	1.5	2.3
154	Benin	90	75	6.0	..	14,286	3,226	..	1.5	2.8
155	Uganda	100	77	23.2	..	25,000	7,143	..	0.7	1.6
156	Cambodia	78	53	0.1	968	..	..	..	..	..
157	Malawi	99	98	49.2	..	50,000	33,333	2.9	0.2	2.9
158	Liberia	84	44	(.)	..	..	..	..	0.8	..
159	Bhutan	96	81	(.)	1,827	11,111	6,667	..	..	..
160	Guinea	75	70	7.1	..	7,692	..	..	1.0	2.3
161	Guinea-Bissau	95	65	23.5	..	..	..	..	..	..
162	Gambia	98	87	5.5	..	..	..	..	..	..
163	Chad	43	23	20.2	..	33,333	50,000	..	0.5	4.7
164	Djibouti	..	..	42.7	..	..	..	..	..	..
165	Angola	48	44	1.4	..	25,000	..	..	..	..
166	Burundi	62	43	2.4	..	16,667	..	..	0.8	1.7
167	Mozambique	78	65	3.1	..	33,333	5,000	..	..	4.4
168	Ethiopia	50	29	10.7	..	33,333	14,286	3.8	0.7	2.3
169	Afghanistan	44	40	(.)	..	7,692	11,111	..	..	..
170	Burkina Faso	63	45	(.)	..	33,333	10,000	..	0.6	7.0
171	Mali	67	46	5.8	..	20,000	5,882	2.8	1.0	2.8
172	Somalia	48	35	(.)	..	..	..	..	0.6	0.9
173	Sierra Leone	60	46	0.5	..	..	..	..	..	1.7
174	Niger	32	19	5.8	..	50,000	3,846	..	0.2	3.4
	All developing countries	86	78	6.7	..	5,767	4,715	..	0.9	2.0
	Least developed countries	71	60	8.3	..	18,496	13,790	..	0.8	1.8
	Sub-Saharan Africa	64	51	12.4	..	18,488	6,504	..	0.7	2.4
	Industrial countries	87	83	9.2	..	344	..	..	..	..
	World	86	79	7.7	..	4,968	..	..	..	..

a. The number of reported AIDS cases in adults and children.

Source: Columns 1 and 2: UNICEF 1996; column 3: WHO 1996; column 4: WHO 1993a; columns 5 and 6: calculated on the basis of estimates from WHO 1993b; column 7: UN 1993a; columns 8 and 9: World Bank 1993c and UNDP 1994a.

13 Food security

HDI rank	Food production per capita index (1979-81=100)	Agricultural production (as % of GDP)	Food consumption (as % of total household consumption)	Daily calorie supply per capita	Food imports (as % of merchandise imports)		Cereal imports (thousands of metric tons)	Food aid in cereals (thousands of metric tons)
	1993	1993	1980-85	1992	1970	1993	1993	1992/93 ^a
High human development	105	8	..	2,889	16	7	29,980T	230T
22 Hong Kong	87	(.)	..	3,144	20	6	640	..
23 Cyprus	94	..	..	3,782	..	..	..	..
25 Barbados	64	..	..	3,223	..	..	..	..
26 Bahamas	..	..	..	..	..	..	..	..
29 Korea, Rep. of	94	7	35	3,298	17	6	11,271	..
30 Argentina	94	6	35	2,880	6	5	8	..
31 Costa Rica	104	15	33	2,889	11	8	535	95
32 Uruguay	113	9	31	2,750	13	8	110	..
33 Chile	118	..	29	2,583	15	6	983	3
34 Singapore	47	(.)	..	..	16	6	798	..
36 Brunei Darussalam	100	..	..	2,745	..	..	..	..
38 Trinidad and Tobago	85	3	19	2,589	11	15	232	..
39 Bahrain	..	..	..	..	..	..	..	..
40 Antigua and Barbuda	..	..	..	..	..	..	..	..
42 United Arab Emirates	..	2	..	..	16	..	583	..
43 Panama	87	10	38	2,239	10	10	159	3
44 Venezuela	101	5	23	2,622	10	11	2,314	..
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..
47 Fiji	97	..	..	3,092	..	..	..	..
48 Mexico	94	8	35 ^{b,c}	3,181	7	8	6,223	45
49 Colombia	114	16	29	2,678	8	8	1,702	17
50 Qatar	..	..	..	..	..	..	..	..
51 Kuwait	..	(.)	..	2,535	20	13	251	..
52 Thailand	102	10	30	2,443	5	5	638	60
53 Malaysia	203	..	23 ^b	2,884	22	7	3,288	4
54 Mauritius	99	10	24	2,696	36	13	240	5
Medium human development	133	15	..	2,731	..	..	62,510T	4,120T
Excluding China	118	13	..	2,734	13	10	55,180T	4,010T
58 Brazil	114	11	35	2,824	11	10	7,848	11
59 Libyan Arab Jamahiriya	81	..	..	3,310	..	..	..	..
60 Seychelles	..	..	..	..	..	..	..	..
63 Saudi Arabia	340	..	..	2,751	33	..	5,186	..
64 Ecuador	110	12	30	2,587	8	5	428	14
65 Dominica	..	..	..	..	..	..	..	1
66 Iran, Islamic Rep. of	126	24	37	2,861	7	..	4,840	31
67 Belize	95	..	..	2,670	..	..	..	..
69 Algeria	119	13	..	2,897	13	29	5,821	15
70 Jordan	121	8	35	3,031	31	20	1,596	254
71 Botswana	69	6	25	2,288	..	..	133	10
73 Saint Vincent	..	..	..	..	..	..	..	..
75 Suriname	81	..	..	2,548	..	..	..	28
76 Saint Lucia	..	..	..	..	..	..	..	..
77 Grenada	78	..	..	2,407	..	..	..	3
78 Tunisia	123	18	37	3,333	28	8	1,044	100
79 Cuba	65	..	..	2,833	..	..	..	5
82 Oman	..	3	..	..	2	19	369	..
83 Korea, Dem. People's Rep. of	76	..	..	2,834	..	..	..	..
84 Turkey	102	15	40	3,429	8	6	2,107	2
85 Paraguay	109	26	30	2,670	19	11	82	..
86 Jamaica	111	8	36	2,607	18	14	429	206
87 Dominican Rep.	104	15	46	..	14	..	961	7
88 Samoa (Western)	..	..	..	..	..	..	..	1
89 Sri Lanka	81	25	43	2,275	47	16	1,149	248
91 Peru	..	11	35	1,883	20	20	1,920	378
92 Syrian Arab Rep.	89	..	..	3,175	..	..	..	15
95 Philippines	88	22	51	2,258	11	8	2,036	53
97 Lebanon	186	..	..	3,319	..	..	..	5
100 South Africa	74	5	34	2,705	6	6	2,275	..
102 Indonesia	145	19	48	2,755	9 ^b	7	3,105	40
103 Guyana	94	..	..	2,385	..	..	..	58
106 Egypt	114	18	49	3,336	23	24	7,206	482
107 Maldives	84	..	..	2,624	..	..	..	2
108 China	145	19	61 ^{b,c}	2,729	..	3	7,332	107
109 Iraq	87	..	..	2,122	..	..	..	80
110 Swaziland	82	..	..	2,706	..	..	..	40
111 Bolivia	107	..	33 ^b	2,100	20	9	298	227
112 Guatemala	94	25	36	2,255	11	11	486	109
113 Mongolia	63	21	..	1,899	..	..	182	9

HDI rank	Food production per capita index (1979-81=100)	Agricultural production (as % of GDP)	Food consumption (as % of total household consumption)	Daily calorie supply per capita	Food imports (as % of merchandise imports)		Cereal imports (thousands of metric tons)	Food aid in cereals (thousands of metric tons)	
	1993	1993	1980-85	1992	1970	1993	1993	1992/93 ^a	
114	Honduras	89	20	39	2,306	12	11	197	64
115	El Salvador	95	9	33	2,663	14	15	286	131
116	Namibia	72	10	..	2,120	..	..	141	26
117	Nicaragua	64	30	..	2,296	10	23	125	85
118	Solomon Islands	88	..	..	2,222	..	..	..	..
119	Vanuatu	80	..	..	2,744	..	..	..	..
120	Gabon	78	8	..	2,511	14	..	77	..
121	Viet Nam	133	29	..	2,250	..	..	289	84
122	Cape Verde	..	..	..	..	..	..	..	45
123	Morocco	106	14	38	2,985	21	17	3,653	234
124	Zimbabwe	78	15	40	1,989	..	18	538	900
125	Congo	79	11	37	2,297	20	..	148	7
126	Papua New Guinea	103	26	..	2,615	20	..	227	..
Low human development		112	35	..	2,250	18	8	14,230T	5,570T
Excluding India		100	39	..	2,097	14	14	13,530T	5,290T
127	Cameroon	79	29	24	1,981	..	..	281	1
128	Kenya	83	29	38	2,075	6	8	569	287
129	Ghana	115	48	50 ^b	2,206	21	..	396	75
130	Lesotho	70	10	..	2,201	..	..	131	45
131	Equatorial Guinea	..	..	..	..	..	..	..	3
132	São Tomé and Príncipe	..	..	..	..	..	..	..	6
133	Myanmar	107	63	..	2,598	7	..	..	..
134	Pakistan	118	25	37	2,316	21	14	2,893	188
135	India	123	31	52	2,395	21	4	694	276
136	Zambia	99	34	36	1,931	11	..	353	535
137	Nigeria	129	34	48	2,125	8	..	1,584	..
138	Lao People's Dem. Rep.	..	51	..	2,259	..	..	8	8
139	Comoros	83	..	..	1,897	..	..	..	6
140	Togo	106	49	..	2,243	23	23	63	3
141	Zaire	100	..	..	2,060	..	..	..	27
142	Yemen	75	21	..	2,203	63	..	1,843	21
143	Bangladesh	97	30	59	2,019	..	15	1,175	719
144	Tanzania, U. Rep. of	76	56	64	2,021	7	..	215	35
145	Haiti	67	..	..	1,707	..	..	..	74
146	Sudan	76	..	60 ^b	2,202	..	..	..	238
147	Côte d'Ivoire	89	37	39	2,491	16	..	590	41
148	Central African Rep.	94	50	..	1,691	17	..	32	5
149	Mauritania	81	28	..	2,685	23	..	286	42
150	Madagascar	86	34	59	2,135	12	11	111	58
151	Nepal	114	43	57	1,957	..	..	27	15
152	Rwanda	70	41	29	1,821	19	..	115	82
153	Senegal	111	20	49	2,265	29	29	579	71
154	Benin	119	36	37	2,532	18	..	134	19
155	Uganda	109	53	..	2,162	7	..	76	59
156	Cambodia	141	..	..	2,021	..	..	..	82
157	Malawi	70	39	30	1,827	18	..	514	635
158	Liberia	58	..	..	1,640	..	..	..	156
159	Bhutan	..	..	..	..	..	..	..	3
160	Guinea	98	24	..	2,390	..	..	335	30
161	Guinea-Bissau	110	45	..	2,556	31	..	70	9
162	Gambia	76	28	..	2,360	32	..	87	6
163	Chad	99	44	..	1,989	21	..	59	3
164	Djibouti	..	..	..	..	..	..	..	21
165	Angola	72	..	..	1,840	..	..	..	111
166	Burundi	92	52	..	1,941	21	..	22	4
167	Mozambique	77	33	..	1,680	..	..	507	958
168	Ethiopia	86	60	49	1,610	9	6	..	..
169	Afghanistan	59	..	..	1,523	..	..	..	172
170	Burkina Faso	132	..	..	2,387	20	..	121	30
171	Mali	91	42	57	2,279	29	..	83	34
172	Somalia	53	..	..	1,505	..	..	..	318
173	Sierra Leone	86	38	56	1,695	26	..	136	29
174	Niger	77	39	..	2,257	14	..	136	26
All developing countries		122	15	..	2,546	13	7	106,710T	9,920T
Least developed countries		92	48	..	2,027	8	15	6,640T	4,680T
Sub-Saharan Africa		97	19	..	2,096	7	7	11,140T	4,460T
Industrial countries		96	3	..	..	17	11	99,370T	..
World		117	6	..	..	16	10	206,080T	13,970T

a. The time reference for food aid is the crop year, July to June.

b. Data refer to a year or period other than that specified in the column heading.

c. Includes beverages and tobacco.

Source: Columns 1 and 4: FAO 1994; columns 2 and 5-8: World Bank 1995f; column 3: World Bank 1993c.

14 Education imbalances

HDI rank	Pupil-teacher ratio		Secondary technical enrolment (as % of total secondary) 1988-91	Tertiary natural and applied science enrolment (as % of total tertiary) 1992	Tertiary students abroad (as % of those at home) 1985-92	R & D scientists and technicians (per 1,000 people) 1988-92	Public expenditure on				
	Primary 1992	Secondary 1992					Education (as % of GNP)		Education (as % of total government expenditure) 1992	Primary and secondary education (as % of all levels) 1992	Higher education (as % of all levels) 1992
							1980	1992			
High human development	25	17	16.0	32	2.7	0.6	3.6	4.2	16.3	77	15
22 Hong Kong	27	..	10.0	35	50.2	..	..	..	18.1	66	30
23 Cyprus	19	13	6.6	26	..	0.4	3.5	4.0	12.5	88	6
25 Barbados	17	20	..	8	11.2	..	6.5	7.0	16.9	75	19
26 Bahamas	21	16	..	..	41.1	..	4.4	3.6	..	..	..
29 Korea, Rep. of	33	24	18.6	40	2.7	2.3	3.7	4.2	14.8	83	7
30 Argentina	16	8	..	..	0.4	0.5 ^a	2.7	3.1	15.7	77	18
31 Costa Rica	32	22	22.2	18	1.6	..	7.8	4.4	21.4	60	36
32 Uruguay	21	..	16.3	22	1.1	..	2.3	2.8	15.4	66	25
33 Chile	25	17	37.5	41	3.7	0.6 ^b	4.6	2.9	12.9	71	21
34 Singapore	26	22	..	..	25.0	1.8 ^b	2.8	..	..	..	..
36 Brunei Darussalam	16	13	4.6	..	..	0.5 ^b	1.2	..	..	50	10
38 Trinidad and Tobago	26	20	0.8	45	38.0	0.4	4.0	4.0	11.6	79	12
39 Bahrain	18	15	12.7	39	20.3	..	2.9	..	..	..	..
40 Antigua and Barbuda	..	15	..	..	..	..	3.0	..	..	..	..
42 United Arab Emirates	17	13	0.8	13	23.8	..	1.3	2.0	15.2	..	..
43 Panama	..	..	25.6	21	3.5	..	4.8	5.5	18.9	52	26
44 Venezuela	23	8	17.6	..	1.1	0.2 ^a	4.4	5.3	23.5	..	..
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	3.3	..	80	12
47 Fiji	31	20	9.1	25	21.6	0.2 ^b	5.1	5.6	18.6	88	9
48 Mexico	30	17	12.2	34	0.8	0.5	4.7	4.9	..	..	..
49 Colombia	28	21	21.5	31	0.6	0.1	1.9	3.1	10.9	81	19
50 Qatar	10	7	2.7	24	12.0	0.6 ^b	2.6	3.4	..	..	..
51 Kuwait	16	11	0.3	29	14.0	1.0 ^b	2.4	6.1	11.4	..	..
52 Thailand	17	18	18.5	19	1.1	0.2 ^b	3.4	4.0	19.6	76	16
53 Malaysia	20	19	2.2	27	28.3	0.4	6.0	5.5	16.9	76	16
54 Mauritius	21	21	1.4	16	78.9	0.5	5.3	3.7	11.8	81	7
Medium human development	24	17	10.2	30	3.1	1.3	4.0	3.9	16.7	68	20
Excluding China	27	19	11.8	25	2.4	..	4.2	4.7	19.7	67	21
58 Brazil	23	13	..	22	0.1	..	3.6	4.6	..	56	26
59 Libyan Arab Jamahiriya	12	12	17.2	..	2.1	0.6	3.4	..	..	..	..
60 Seychelles	18	13	29.0	..	..	0.3	5.8	8.5	12.9	69	10
63 Saudi Arabia	14	12	2.8	16	3.4	..	4.1	6.4	17.0	80	20
64 Ecuador	31	13	33.8	21	2.7	0.4	5.6	2.7	19.2	66	23
65 Dominica	29	..	1.1	42	..	..	..	5.8	10.6	87	3
66 Iran, Islamic Rep. of	32	28	4.6	37	10.5	0.1	7.5	4.6	28.2	75	15
67 Belize	27	15	1.3	..	..	..	..	5.7	15.5	..	..
69 Algeria	27	17	7.0	50	7.1	..	7.8	8.1	27.0	..	..
70 Jordan	22	20	23.3	29	17.5	0.1	..	6.5	13.3	64	33
71 Botswana	29	20	4.6	28	14.5	..	7.0	8.3	18.7	80	12
73 Saint Vincent	20	25	2.8	26	16.4	..	..	6.7	13.8	..	..
75 Suriname	23	..	27.1	6	..	..	6.7	7.3	..	75	9
76 Saint Lucia	27	18	..	..	70.7	1.0	7.7	..	..	72	13
77 Grenada	23	27	..	..	..	..	..	..	..	..	..
78 Tunisia	26	18	3.5	27	12.2	0.5 ^a	5.4	6.1	13.5	79	19
79 Cuba	12	9	32.2	23	0.4	2.2	7.2	6.6	12.3	65	14
82 Oman	27	17	2.2	21	21.1	..	2.1	3.8	16.2	93	6
83 Korea, Dem. People's Rep. of	..	..	..	..	0.2	..	..	..	..	..	..
84 Turkey	28	27	24.5	23	3.2	0.2	2.8	..	..	..	..
85 Paraguay	24	11	6.9	25	1.4	0.2 ^b	1.5	2.6	11.9	67	19
86 Jamaica	33	22	3.5	22	12.9	(.)	7.0	4.7	11.8	63	21
87 Dominican Rep.	34	21	..	..	0.9	..	2.2	1.6	8.9	..	..
88 Samoa (Western)	..	..	..	..	..	..	..	4.2	10.7	..	..
89 Sri Lanka	29	20	..	34	10.0	0.2	2.7	3.3	8.8	82	14
91 Peru	28	19	..	29	0.7	..	3.1	..	..	..	..
92 Syrian Arab Rep.	24	18	5.9	29	5.1	..	4.6	4.2	14.2	74	23
95 Philippines	34	33	(.)	26	0.3	0.1 ^b	1.7	2.9	10.5	..	..
97 Lebanon	21	..	..	..	14.2	0.1	..	1.9	12.5	..	..
100 South Africa	27	26	..	..	1.0	0.4	..	7.0	22.1	83	14
102 Indonesia	23	14	12.0	22	1.0	..	1.7	2.2	9.4	..	..
103 Guyana	..	..	3.4	45	14.9	0.3	9.7	7.8	8.9	..	..
106 Egypt	22	19	20.9	18	0.8	0.8	5.7	5.0	11.0	64	37
107 Maldives	..	..	1.0	..	..	..	..	6.6	..	..	..
108 China	22	15	9.1	47	5.7	1.6	2.5	2.0	12.2	69	19
109 Iraq	22	20	13.7	..	1.5	..	3.0	..	..	..	..
110 Swaziland	33	18	1.4	43	10.3	..	6.1	6.0	22.5	62	21
111 Bolivia	25	18	..	32	2.0	0.4	4.4	..	..	..	..
112 Guatemala	32	16	..	..	1.8	0.2	1.8	1.5	11.6	45	17
113 Mongolia	28	19	..	..	6.7	..	..	8.5	..	78	22

HDI rank	Pupil-teacher ratio		Secondary technical enrolment (as % of total secondary) 1988-91	Tertiary natural and applied science enrolment (as % of total tertiary) 1992	Tertiary students abroad (as % of those at home) 1985-92	R & D scientists and technicians (per 1,000 people) 1988-92	Public expenditure on				
	Primary 1992	Secondary 1992					Education (as % of GNP)		Education (as % of total government expenditure) 1992	Primary and secondary education (as % of all levels) 1992	Higher education (as % of all levels) 1992
							1980	1992			
114 Honduras	37	28	30.2	25	2.6	..	3.2	4.1	15.9	66	18
115 El Salvador	38	..	..	19	1.2	0.3	3.9	1.6	..	..	..
116 Namibia	32	..	1.9	3	..	..	1.6	..	..	..	..
117 Nicaragua	37	30	9.1	40	4.5	0.3 ^b	3.4	..	..	..	..
118 Solomon Islands	21	17	17.3	..	..	..	5.6	4.2	7.9	86	14
119 Vanuatu	19	19	6.9	..	..	..	..	4.5	18.8	87	3
120 Gabon	44	25	20.6	..	38.1	0.2 ^b	2.7	..	..	..	..
121 Viet Nam	36	21	5.6	..	2.7	..	..	..	..	..	..
122 Cape Verde	33	30	7.5	..	..	..	..	4.2	19.9	72	3
123 Morocco	28	15	1.5	34	13.9	..	6.1	5.8	26.7	84	16
124 Zimbabwe	38	28	1.7	25	3.7	..	6.6	9.1	19.4	84	12
125 Congo	63	31	6.7	12	32.3	1.0 ^b	7.0	8.6	..	..	..
126 Papua New Guinea	31	24	11.6	..	9.4	..	4.7	..	..	..	..
Low human development	46	29	3.0	26	3.3	..	3.4	3.5	..	..	..
Excluding India	43	24	4.5	26	7.9	..	4.1	3.1	14.5	77	14
127 Cameroon	51	29	18.0	28	25.2	..	3.2	3.1	16.9	87	13
128 Kenya	31	17	1.6	22	20.3	1.3	6.8	5.4	16.1	77	17
129 Ghana	29	18	2.5	32	38.8	..	3.1	3.1	24.3	64	11
130 Lesotho	51	21	3.6	16	5.5	..	5.1	6.0	17.6	81	16
131 Equatorial Guinea	..	..	..	4	..	..	..	1.8	..	..	..
132 São Tomé and Príncipe	35	23	1.4	..	..	..	8.0	..	..	..	..
133 Myanmar	36	19	1.2	..	0.4	..	1.7	2.4	..	..	..
134 Pakistan	41	19	1.6	..	3.9	0.1	2.0	2.7	..	..	..
135 India	48	33	1.6	26	1.0	0.3 ^a	2.8	3.7	11.9	65	15
136 Zambia	..	..	2.8	25	9.5	..	4.5	2.6	8.7	66	17
137 Nigeria	39	27	3.9	36	1.7	0.1	6.4	..	..	..	..
138 Lao People's Dem. Rep.	29	12	2.9	45	24.9	..	..	2.3	..	86	4
139 Comoros	39	24	1.4	29	..	..	..	4.1	22.0	73	16
140 Togo	53	43	6.7	16	22.4	..	5.6	6.7	21.6	60	12
141 Zaire	42	22	27.4	..	9.9	..	2.6	..	..	..	..
142 Yemen	..	..	3.6	8	15.9	..	..	..	..	..	..
143 Bangladesh	63	28	0.7	25	1.3	..	1.5	2.3	7.8	88	8
144 Tanzania, U. Rep. of	36	20	..	..	42.3	..	4.4	5.0	11.4	74	17
145 Haiti	29	20	..	..	22.9	..	1.5	1.8	20.0	72	9
146 Sudan	34	23	4.1	16	13.3	..	4.8	..	..	..	..
147 Côte d'Ivoire	37	22	9.8	..	15.4	..	7.2	..	..	..	..
148 Central African Rep.	90	38	7.1	9	27.7	0.1 ^b	3.8	2.8	..	67	22
149 Mauritania	51	20	2.6	9	50.2	..	5.0	..	..	76	20
150 Madagascar	40	20	5.0	23	8.8	0.1 ^b	4.4	..	..	..	..
151 Nepal	39	34	..	14	3.2	(.)	1.8	2.9	13.2	62	28
152 Rwanda	58	14	..	21	35.6	(.)	2.7	3.8	25.4	82	16
153 Senegal	59	23	3.3	20	21.0	0.6	4.4	4.2	27.4	70	24
154 Benin	40	29	6.1	16	19.1	0.2	4.2	..	..	..	..
155 Uganda	32	15	2.5	15	6.9	..	1.2	2.0	15.0	..	..
156 Cambodia	..	..	..	..	..	..	..	..	..	..	..
157 Malawi	68	27	2.4	36	12.8	..	3.4	3.3	10.3	66	19
158 Liberia	..	..	..	..	12.4	..	5.7	..	..	..	..
159 Bhutan	31	13	..	..	..	..	..	..	..	..	..
160 Guinea	49	29	9.5	46	19.8	0.3	..	2.4	..	65	18
161 Guinea-Bissau	..	..	10.3	..	..	..	..	..	..	..	..
162 Gambia	30	29	..	..	..	..	3.3	2.7	12.9	64	9
163 Chad	64	35	4.8	..	24.1	..	..	2.3	..	68	8
164 Djibouti	43	23	15.9	..	..	..	..	3.8	11.1	75	14
165 Angola	32	..	5.9	30	38.5	..	..	..	10.7	96	4
166 Burundi	63	25	12.8	32	17.4	0.1 ^b	3.0	3.7	11.9	73	25
167 Mozambique	53	40	6.0	39	34.3	..	4.4	6.2	12.0	66	10
168 Ethiopia	27	32	0.5	43	20.4	..	3.3	5.1	12.9	80	12
169 Afghanistan	..	..	..	12	12.8	..	2.0	..	..	88	12
170 Burkina Faso	60	39	7.6	20	28.3	..	2.6	2.7	17.5	68	32
171 Mali	47	16	13.4	43	30.1	..	3.8	2.8	..	..	..
172 Somalia	..	..	..	..	9.4	..	..	..	..	..	..
173 Sierra Leone	34	18	5.3	15	19.0	..	3.8	1.4	..	..	..
174 Niger	38	35	1.1	21	27.0	..	3.1	..	..	..	..
All developing countries	33	22	7.3	30	3.1	0.8	3.8	3.9	15.7	71	18
Least developed countries	45	26	5.1	23	8.8	..	3.2	3.0	12.1	78	14
Sub-Saharan Africa	39	25	6.6	30	12.8	..	5.1	5.7	19.9	79	15
Industrial countries	18	14	..	21	1.2	4.6	5.4	5.4	13.7	72	22
World	30	20	..	25	2.1	..	5.0	5.1	14.0	72	21

a. UNESCO estimate.

b. Full-time plus part-time research and development personnel.

Source: Columns 1, 2, 7 and 8: UNESCO 1995c; column 3: UNESCO 1993b; column 4: calculated on the basis of data from UNESCO 1995c; columns 5 and 6: calculated on the basis of data from UNESCO 1994b; columns 9, 10 and 11: calculated on the basis of data from UNESCO 1995c.

15 Communication profile

HDI rank	Radios (per 1,000 people) 1992	Televisions (per 1,000 people) 1992	Registered public library users (thousands) 1986-92	Book titles published (per 100,000 people) 1990-92	Printing and writing paper consumed (metric tons per 1,000 people) 1992	Post offices (per 100,000 people) 1991	Main telephone lines (per 100 people) 1991	Inter- national telephone calls (minutes per person) 1990-92	Fax machines (per 100 people) 1992	Mobile cellular telephone subscribers (per 100 people) 1992
High human development	419	165	30,010T	16	9.9	..	11.7	..	0.3	0.6
22 Hong Kong	668	281	2,226	..	32.2	..	45.9	..	3.4	4.0
23 Cyprus	293	149	..	74	22.2	..	39.2	..	0.8	1.3
25 Barbados	876	280	..	7	8.5	..	30.2	81	0.6	0.3
26 Bahamas	542	225	..	6	5.7	..	23.8	75	0.2	1.0
29 Korea, Rep. of	1,002	211	26,369	57	22.3	7.7	33.3	..	0.7	0.6
30 Argentina	683	221	..	17	8.2	..	9.8	9	0.1	0.1
31 Costa Rica	258	141	294	7	4.5	..	9.8	..	0.1	0.1
32 Uruguay	604	232	..	25	7.9	..	14.5	..	0.2	0.1
33 Chile	344	210	27	11	6.0	8.4	7.4	24	0.1	0.5
34 Singapore	646	379	..	..	66.5	24.2	40.2	..	1.7	4.3
36 Brunei Darussalam	270	237	..	9	4.4	4.6	14.8	92	0.4	1.5
38 Trinidad and Tobago	494	..	..	..	2.5	19.6	14.1	..	0.1	0.1
39 Bahrain	538	416	..	..	6.0	..	19.4	47	0.7	1.8
40 Antigua and Barbuda	417	356	..	..	..	17.3	28.8	36	..	..
42 United Arab Emirates	326	111	..	17	..	10.0	29.5	..	1.3	2.7
43 Panama	224	167	..	..	4.4	..	9.3	..	..	..
44 Venezuela	448	163	37	16	6.7	..	8.1	..	..	..
45 Saint Kitts and Nevis	648	206	..	..	..	18.2	..	..	..	..
47 Fiji	616	16	25	..	9.2	..	6.2	10	0.3	..
48 Mexico	255	149	..	3	8.1	..	7.0	..	0.2	0.3
49 Colombia	177	117	..	4	6.0	..	8.0	54	0.2	..
50 Qatar	444	452	5	70	5.5	..	21.9	..	0.8	0.8
51 Kuwait	365	310	..	11	5.7	..	16.1	..	..	2.9
52 Thailand	192	114	..	13	3.0	7.3	2.8	..	0.1	0.4
53 Malaysia	430	150	1,015	19	14.5	12.4	9.9	..	0.2	1.1
54 Mauritius	360	218	8	5	7.5	9.4	6.0	..	0.2	0.3
Medium human development	205	63	10,100T	6	4.4	..	2.2	..	..	..
Excluding China	232	102	10,100T	..	3.7	..	3.9	..	..	..
58 Brazil	386	208	..	..	5.6	7.9	6.6	224	0.1	(.)
59 Libyan Arab Jamahiriya	226	100	..	..	2.2	..	..	..	..	..
60 Seychelles	472	85	17	..	..	7.1	11.8	..	0.6	..
63 Saudi Arabia	304	268	..	..	5.4	..	8.4	..	0.3	0.1
64 Ecuador	318	85	..	7	1.8	4.9	4.5	..	0.2	..
65 Dominica	589	72	..	..	..	..	19.4	6	0.4	..
66 Iran, Islamic Rep. of	232	63	7,062	8	3.4	..	4.1	..	(.)	..
67 Belize	584	166	20	21	2.0	..	10.4	41	0.2	..
69 Algeria	234	76	..	2	2.4	10.6	3.4	..	(.)	(.)
70 Jordan	256	82	7	16	8.9	..	6.4	..	0.1	(.)
71 Botswana	122	17	..	7	..	12.8	2.6	91	(.)	..
73 Saint Vincent	698	144	..	..	1.8	..	13.9	..	0.3	0.1
75 Suriname	639	132	..	..	6.8	..	9.4	..	0.1	..
76 Saint Lucia	759	190	..	..	..	..	12.7	..	..	..
77 Grenada	598	331	..	..	..	..	17.8	..	0.3	0.2
78 Tunisia	200	80	..	14	3.8	..	4.1	..	0.1	(.)
79 Cuba	345	162	334	7	4.6	..	3.2	28	(.)	(.)
82 Oman	637	730	..	1	3.8	..	7.6	..	0.1	0.2
83 Korea, Dem. People's Rep. of	122	18	..	..	(.)	..	3.6	..	..	..
84 Turkey	161	176	719	10	3.3	..	14.3	..	0.1	0.1
85 Paraguay	171	82	..	..	1.5	7.2	2.7	..	(.)	(.)
86 Jamaica	421	134	..	..	3.2	..	4.7	..	0.1	0.3
87 Dominican Rep.	171	87	..	..	4.2	..	5.6	..	(.)	0.1
88 Samoa (Western)	481	40	..	..	0.7	..	2.5	..	0.1	..
89 Sri Lanka	200	49	98	8	1.3	23.0	0.7	..	(.)	(.)
91 Peru	254	98	..	3	4.5	..	2.6	..	(.)	0.1
92 Syrian Arab Rep.	255	61	..	4	1.3	..	3.9	..	..	..
95 Philippines	139	45	1,595	1	2.8	4.0	1.0	..	(.)	0.1
97 Lebanon	835	324	..	..	8.0	..	11.1	..	0.1	0.1
100 South Africa	304	98	..	8	11.7	..	8.8	..	0.1	(.)
102 Indonesia	147	60	..	3	3.1	5.4	0.7	..	(.)	(.)
103 Guyana	493	40	..	..	0.4	..	2.0	..	..	0.1
106 Egypt	328	119	2	..	3.8	12.4	3.6	..	(.)	(.)
107 Maldives	119	25	..	..	0.9	..	3.5	..	..	..
108 China	182	31	..	6	5.0	..	0.7	..	(.)	(.)
109 Iraq	216	73	..	..	1.7	..	3.6	..	..	..
110 Swaziland	163	20	..	..	..	8.3	1.9	..	0.1	..
111 Bolivia	613	103	..	..	..	2.8	2.5	35	..	(.)
112 Guatemala	66	52	..	..	2.7	6.5	2.1	..	(.)	(.)
113 Mongolia	132	..	..	8	0.2	..	3.0	..	..	..

HDI rank	Radios		Registered public library users		Book titles published		Printing and writing paper consumed		Post offices	Main telephone lines	International telephone calls	Fax machines	Mobile cellular telephone subscribers
	(per 1,000 people) 1992	(per 1,000 people) 1992	(thousands) 1986-92	(per 100,000 people) 1990-92	(metric tons per 1,000 people) 1992	(per 100,000 people) 1991	(per 100 people) 1991	(minutes per person) 1990-92	(per 100 people) 1992	(per 100 people) 1992	(per 100 people) 1992	(per 100 people) 1992	
114	Honduras	387	73	..	..	3.2	..	1.8	..	..	..	..	..
115	El Salvador	413	93	22	..	2.5	5.2	2.5	..	..	..	..	..
116	Namibia	127	21	..	9	..	..	3.8	..	..	..	..	..
117	Nicaragua	262	66	..	..	0.3	..	1.3	..	..	..	..	..
118	Solomon Islands	120	6	..	..	..	..	1.4	..	..	0.1	..	..
119	Vanuatu	287	10	..	..	..	..	2.0	..	..	..	..	..
120	Gabon	143	37	..	..	1.2	8.5	1.8	1	..	..	(.)	(.)
121	Viet Nam	104	42	..	..	0.9	..	0.1	..	..	(.)	(.)	(.)
122	Cape Verde	164	3	..	..	..	16.8	2.3	24	..	..	(.)	(.)
123	Morocco	210	74	..	..	1.5	..	1.9	..	..	(.)	(.)	(.)
124	Zimbabwe	84	27	152	1	0.7	2.8	1.2	..	..	(.)	(.)	(.)
125	Congo	114	6	22	..	0.2	..	0.7	7	..	(.)	(.)	(.)
126	Papua New Guinea	73	3	46	1	..	..	0.9	..	..	(.)	(.)	(.)
Low human development	94	26	160T	1	0.9	13.8	0.6	..	..	..	..	..	..
Excluding India	108	15	160T	..	0.4	..	0.4	..	..	..	..	..	..
127	Cameroon	146	24	..	..	0.4	..	0.3	47	..	..	..	..
128	Kenya	87	10	..	1	1.6	..	0.8	..	..	(.)	(.)	(.)
129	Ghana	269	16	56	..	0.3	6.5	0.3	6	..	(.)	(.)	(.)
130	Lesotho	33	6	1	..	..	..	0.6	..	..	(.)	(.)	(.)
131	Equatorial Guinea	420	10	..	..	..	..	0.4	..	..	..	..	..
132	São Tomé and Príncipe	269	..	..	..	..	9.1	1.8	..	..	0.1	..	..
133	Myanmar	82	2	..	..	0.1	..	0.2	..	..	..	..	..
134	Pakistan	91	18	..	(.)	0.7	11.5	0.9	..	..	(.)	(.)	(.)
135	India	80	37	..	1	1.2	17.6	0.7	..	..	(.)	(.)	(.)
136	Zambia	82	26	..	..	0.5	..	0.8	..	..	(.)	(.)	(.)
137	Nigeria	173	33	47	1	0.3	4.0	0.2	..	..	..	..	..
138	Lao People's Dem. Rep.	125	6	..	2	0.2	4.9	0.1	..	..	(.)	(.)	(.)
139	Comoros	128	0	..	..	..	..	0.7	14	..	(.)	(.)	(.)
140	Togo	211	6	8	..	0.3	..	0.3	..	..	(.)	(.)	(.)
141	Zaire	97	1	..	..	(.)	1.3	0.1	..	..	..	..	..
142	Yemen	28	28	..	..	(.)	..	1.1	..	..	(.)	(.)	(.)
143	Bangladesh	44	5	..	..	0.4	..	0.2	80	..	(.)	(.)	(.)
144	Tanzania, U. Rep. of	25	2	..	1	0.3	3.7	0.3	..	..	(.)	(.)	(.)
145	Haiti	47	5	..	..	0.3	2.0	0.8	1	..	..	..	..
146	Sudan	250	77	..	..	0.1	..	0.2	..	..	..	..	..
147	Côte d'Ivoire	142	59	..	..	..	3.0	0.6	..	..	..	..	..
148	Central African Rep.	69	5	..	..	..	..	0.2	23	..	..	..	..
149	Mauritania	144	23	..	..	..	..	0.4	..	..	..	..	..
150	Madagascar	200	20	..	(.)	0.4	8.0	0.3	..	..	..	..	..
151	Nepal	34	2	..	..	(.)	..	0.3	..	..	..	..	..
152	Rwanda	64	..	..	..	0.4	..	0.2	..	..	(.)	(.)	(.)
153	Senegal	115	37	1	..	0.4	1.9	0.6	..	..	..	..	..
154	Benin	90	5	1	13	(.)	3.9	0.3	18	..	(.)	(.)	(.)
155	Uganda	109	10	6	..	0.1	..	0.2	..	..	(.)	(.)	(.)
156	Cambodia	112	8	..	..	..	..	0.1	..	..	..	..	..
157	Malawi	221	..	5	..	(.)	..	0.3	..	..	(.)	(.)	(.)
158	Liberia	226	18	..	..	(.)	..	5.7	..	..	..	..	..
159	Bhutan	16	..	..	..	..	5.5	0.2	79	..	(.)	(.)	(.)
160	Guinea	42	7	..	..	..	..	0.2	..	..	..	..	..
161	Guinea-Bissau	40	..	..	..	..	..	0.6	..	..	..	..	..
162	Gambia	171	..	1	1	..	..	1.6	..	..	(.)	(.)	(.)
163	Chad	244	1	..	..	(.)	0.6	0.1	23	..	(.)	(.)	(.)
164	Djibouti	88	54	..	..	..	..	1.4	18	..	(.)	(.)	(.)
165	Angola	29	6	..	..	0.4	0.7	0.8	25	..	..	..	..
166	Burundi	62	1	20	..	0.1	0.6	0.2	82	..	..	..	..
167	Mozambique	47	3	..	..	0.1	1.6	0.4	..	..	(.)	(.)	(.)
168	Ethiopia	187	3	12	(.)	0.1	..	0.3	..	..	(.)	(.)	(.)
169	Afghanistan	107	8	..	10	(.)	..	0.2	..	..	..	..	..
170	Burkina Faso	22	5	..	..	..	..	0.2	44	..	..	..	..
171	Mali	44	1	..	..	(.)	..	0.1	..	..	..	..	..
172	Somalia	38	12	..	..	(.)	..	0.2	..	..	..	..	..
173	Sierra Leone	224	10	..	..	..	2.0	0.4	..	..	(.)	(.)	(.)
174	Niger	61	5	..	(.)	0.1	0.8	0.1	..	..	(.)	(.)	(.)
All developing countries	176	56	40,260T	5	3.5	..	..	2.3	..	..	..	..	..
Least developed countries	94	9	50T	..	..	..	..	0.3	..	..	..	..	..
Sub-Saharan Africa	144	23	360T	..	1.5	..	..	1.0	..	..	..	..	..
Industrial countries	1,048	533	84,160T	43	61.9	..	..	37.2	..	..	1.7	2.5	..
World	349	151	124,420T	13	14.1	..	..	9.9	..	..	..	..	..

Source: Columns 1, 2, 3 and 5: UNESCO 1994b; column 4: calculated on the basis of estimates from UNESCO 1994b and UN 1995e; columns 6 and 7: ITU 1995; columns 8, 9 and 10: UN 1995b.

16 Employment

HDI rank	Labour force (as % of total population) 1990	Women's share of adult labour force (age 15 and above) 1990	Percentage of labour force in						Real earnings per employee annual growth rate (%)	
			Agriculture		Industry		Services		1970-80	1980-92
			1960	1990	1960	1990	1960	1990		
High human development	43	36	54	32	17	24	28	44	..	..
22 Hong Kong	51	37	8	1	52	37	41	62	..	4.8
23 Cyprus	48	38	42	14	27	30	31	56	..	..
25 Barbados	51	46	26	7	27	23	46	70	..	..
26 Bahamas	50	46	20	5	25	15	55	79	..	..
29 Korea, Rep. of	46	39	61	18	10	35	28	47	10.0	8.4
30 Argentina	38	28	21	12	34	32	45	55	-2.1	-2.2
31 Costa Rica	38	28	51	26	18	27	30	47	..	..
32 Uruguay	44	39	21	14	29	27	50	59	..	-2.3
33 Chile	38	30	30	19	30	25	39	56	8.1	-0.3
34 Singapore	49	38	7	0	23	36	70	64	3.0	5.1
36 Brunei Darussalam	41	32	34	2	35	24	31	74	..	..
38 Trinidad and Tobago	39	35	22	11	34	32	44	57	..	..
39 Bahrain	45	17	14	2	45	30	42	68	..	..
40 Antigua and Barbuda	47	46	81	75	6	8	12	17	..	..
42 United Arab Emirates	51	12	29	8	29	27	42	65	..	..
43 Panama	39	32	51	26	14	16	35	58	0.2	2.0
44 Venezuela	37	31	33	12	22	27	44	61	4.9	-5.4
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..
47 Fiji	34	23	60	46	17	15	23	39	..	..
48 Mexico	37	29	55	28	19	24	25	48	..	..
49 Colombia	40	36	50	27	19	23	30	50	-0.2	1.0
50 Qatar	57	11	17	3	24	32	59	65	..	..
51 Kuwait	42	23	1	1	34	25	64	74	7.0	-1.6
52 Thailand	57	47	84	64	4	14	12	22	..	..
53 Malaysia	39	36	63	27	12	23	25	50	2.0	2.3
54 Mauritius	41	30	40	17	26	43	35	40	1.8	0.4
Medium human development	51	41	77	62	9	17	14	22	..	..
Excluding China	40	35	65	42	13	20	21	38	..	-1.2
58 Brazil	44	35	52	23	18	23	30	54	5.0	-2.4
59 Libyan Arab Jamahiriya	29	18	53	11	17	23	30	66	..	..
60 Seychelles	..	..	..	..	..	..	..	..	..	..
63 Saudi Arabia	34	10	71	19	10	20	19	61	..	..
64 Ecuador	35	25	59	33	18	19	23	48	3.3	-0.7
65 Dominica	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	29	21	54	39	23	23	23	39	..	-6.8
67 Belize	31	21	42	34	24	19	34	48	..	..
69 Algeria	28	20	67	26	12	31	21	43	-1.3	..
70 Jordan	27	18	45	15	26	23	29	61	..	-3.3
71 Botswana	44	46	93	46	2	20	5	33	..	..
73 Saint Vincent	..	..	..	..	..	..	..	..	..	..
75 Suriname	34	30	29	21	22	18	49	61	..	..
76 Saint Lucia	..	..	..	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..
78 Tunisia	35	29	56	28	18	33	26	39	..	..
79 Cuba	45	36	36	18	24	30	41	51	..	..
82 Oman	26	12	67	45	12	24	20	32	..	..
83 Korea, Dem. People's Rep. of	50	45	64	38	19	31	17	31	..	..
84 Turkey	45	33	79	53	10	18	11	29	6.1	3.0
85 Paraguay	37	28	57	39	19	22	24	39	..	..
86 Jamaica	49	46	42	25	22	23	37	52	-0.2	-1.5
87 Dominican Rep.	40	28	64	25	13	29	24	46	-1.1	..
88 Samoa (Western)	..	..	..	..	..	..	..	..	..	..
89 Sri Lanka	40	34	57	48	13	21	30	31	..	1.4
91 Peru	35	27	52	36	20	18	28	46	..	..
92 Syrian Arab Rep.	28	23	54	33	19	24	27	43	..	..
95 Philippines	40	37	64	46	14	15	22	39	-3.7	5.2
97 Lebanon	31	27	38	7	23	31	39	62	..	..
100 South Africa	39	37	38	14	27	32	35	55	2.7	0.2
102 Indonesia	44	39	75	55	8	14	18	31	5.2	4.3
103 Guyana	40	31	38	22	27	25	35	53	..	..
106 Egypt	35	27	58	40	13	22	29	38	4.1	-3.6
107 Maldives	41	42	70	32	17	31	13	37	..	..
108 China	59	45	83	72	6	15	10	13	..	..
109 Iraq	26	16	53	16	18	18	29	66	..	..
110 Swaziland	34	37	75	39	9	22	16	38	..	..
111 Bolivia	40	36	55	47	24	18	21	36	1.7	-0.8
112 Guatemala	35	24	67	52	13	17	20	30	-3.2	-1.6
113 Mongolia	47	46	61	32	19	23	20	45	..	..

HDI rank	Labour force (as % of total population) 1990	Women's share of adult labour force (age 15 and above) 1990	Percentage of labour force in						Real earnings per employee annual growth rate (%)		
			Agriculture		Industry		Services		1970-80	1980-92	
			1960	1990	1960	1990	1960	1990			
114	Honduras	34	28	70	41	11	20	19	39	..	..
115	El Salvador	36	33	62	36	17	21	21	43	2.4	..
116	Namibia	42	41	71	49	13	15	16	36	..	..
117	Nicaragua	34	36	62	28	16	26	22	46	-2.0	..
118	Solomon Islands	51	46	85	77	4	7	12	16	..	..
119	Vanuatu	..	..	..	68	..	8	..	24	..	..
120	Gabon	49	44	85	52	6	16	8	33	..	..
121	Viet Nam	51	50	82	71	5	14	14	15	..	..
122	Cape Verde	37	39	57	31	22	30	21	40	..	..
123	Morocco	38	33	66	45	12	25	22	31	..	-2.5
124	Zimbabwe	46	45	81	68	10	8	9	24	1.6	0.1
125	Congo	42	43	68	49	10	15	21	37	..	..
126	Papua New Guinea	49	41	90	79	4	7	6	14	2.9	..
	Low human development	44	35	78	66	9	13	13	21	..	..
	Excluding India	45	39	82	68	7	10	11	22	..	..
127	Cameroon	40	36	89	70	4	9	7	21	..	..
128	Kenya	48	46	88	80	5	7	8	13	-3.4	-2.1
129	Ghana	47	51	63	59	14	13	23	28	-14.8	..
130	Lesotho	40	37	47	40	33	28	19	32	..	..
131	Equatorial Guinea	..	..	..	77	..	2	..	21	..	..
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..
133	Myanmar	51	44	81	73	5	10	14	17	..	..
134	Pakistan	35	23	61	52	18	19	21	30	3.4	..
135	India	43	31	74	64	11	16	15	20	0.4	2.5
136	Zambia	42	45	85	75	6	8	10	17	-3.2	3.8
137	Nigeria	40	36	73	43	10	7	17	50	-0.8	..
138	Lao People's Dem. Rep.	50	46	82	78	4	6	14	16	..	..
139	Comoros	44	42	86	77	6	9	8	13	..	..
140	Togo	42	39	80	66	8	10	12	24	..	..
141	Zaire	43	44	79	68	9	13	11	19	..	..
142	Yemen	30	28	76	61	8	17	16	22	..	..
143	Bangladesh	49	41	86	65	5	16	9	18	-3.0	-0.7
144	Tanzania, U. Rep. of	52	50	93	84	2	5	5	11	..	..
145	Haiti	45	43	80	68	6	9	14	23	..	..
146	Sudan	36	26	86	69	4	8	10	22	..	..
147	Côte d'Ivoire	37	31	84	60	4	10	12	30	-0.9	..
148	Central African Rep.	49	47	93	80	2	4	5	16	..	..
149	Mauritania	46	44	92	55	2	10	6	34	..	..
150	Madagascar	48	45	86	78	4	7	10	15	-0.8	..
151	Nepal	47	39	95	94	2	0	3	6	..	..
152	Rwanda	52	48	95	92	2	3	3	5	..	..
153	Senegal	45	42	84	77	5	8	11	16	..	..
154	Benin	46	48	85	64	4	8	11	28	..	..
155	Uganda	51	48	93	85	2	5	5	11	..	..
156	Cambodia	50	54	83	74	3	8	14	19	..	..
157	Malawi	..	..	94	87	3	5	4	8	..	..
158	Liberia	41	39	83	72	9	6	9	22	..	..
159	Bhutan	51	39	95	94	2	1	3	5	..	..
160	Guinea	49	48	94	87	1	2	6	11	..	..
161	Guinea-Bissau	48	40	91	85	1	2	8	13	..	..
162	Gambia	50	44	94	82	5	8	1	11	..	..
163	Chad	49	44	96	83	2	4	3	13	..	..
164	Djibouti	..	..	..	..	..	..	..	..	..	..
165	Angola	..	..	..	..	..	..	..	..	..	..
166	Burundi	54	49	95	92	2	3	3	6	-7.5	..
167	Mozambique	53	49	88	83	5	8	7	9	..	..
168	Ethiopia	44	40	93	86	2	2	5	12	..	..
169	Afghanistan	41	34	72	70	10	11	18	19	..	..
170	Burkina Faso	54	47	92	92	3	2	6	6	..	..
171	Mali	50	46	94	86	1	2	5	12	..	..
172	Somalia	44	43	84	75	5	8	11	16	..	..
173	Sierra Leone	37	35	81	67	9	15	9	17	..	..
174	Niger	49	44	94	90	2	4	4	6	..	..
	All developing countries	47	39	76	61	9	16	15	23	..	..
	Least developed countries	47	43	87	76	4	9	9	15	..	..
	Sub-Saharan Africa	44	42	81	66	7	9	11	25	..	..
	Industrial countries	49	44	26	10	35	33	38	57	..	..
	World	47	40	61	49	17	20	22	31	..	..

Note: Percentage shares of labour force in agriculture, industry and services do not necessarily add to 100 because of rounding.

Source: Columns 1-8: calculated on the basis of data from ILO 1995a; columns 9 and 10: World Bank 1995f.

17 Wealth, poverty and social investment

HDI rank	Real GDP per capita (PPP\$) 1993	GNP per capita (US\$) 1993	Income share		People in poverty (%)		Social security benefits expenditure (as % of GDP) 1993	Public expenditure on	
			Lowest 40% of households (%) 1981-93	Ratio of highest 20% to lowest 20% 1981-93	Urban 1990 ^a	Rural 1990 ^a		Education (as % of GNP) 1992	Health (as % of GDP) 1990
High human development	8,054	4,509	..	..	..	..	..	4.2	2.0
22 Hong Kong	21,560	18,060	16.2	8.7	..	..	..	..	1.1
23 Cyprus	14,060	10,380	..	..	..	..	..	4.0	..
25 Barbados	10,570	6,230	..	..	..	..	..	7.0	..
26 Bahamas	16,180	11,420	..	..	..	..	..	3.6	..
29 Korea, Rep. of	9,710	7,660	19.7	5.7	5	4	2.3	4.2	2.7
30 Argentina	8,350	7,220	..	..	15	20	4.5	3.1	2.5
31 Costa Rica	5,680	2,150	13.1	12.7	24	30	..	4.4	..
32 Uruguay	6,550	3,830	..	..	10	23	14.8	2.8	2.5
33 Chile	8,900	3,170	10.2	18.3	..	..	..	2.9	3.4
34 Singapore	19,350	19,850	15.0	9.6	..	..	7.2	..	1.1
36 Brunei Darussalam	..	..	..	..	..	..	..	..	..
38 Trinidad and Tobago	8,670	3,830	..	..	..	40	..	4.0	..
39 Bahrain	15,500	8,030	..	..	..	..	..	..	..
40 Antigua and Barbuda	5,369 ^b	6,540	..	..	..	..	..	..	..
42 United Arab Emirates	20,940 ^c	21,430	..	..	..	..	..	2.0	..
43 Panama	5,890	2,600	8.3	29.9	36	52	..	5.5	..
44 Venezuela	8,360	2,840	14.3	10.3	30	42	..	5.3	2.0
45 Saint Kitts and Nevis	9,340	4,410	..	..	..	..	..	3.3	..
47 Fiji	5,530	2,130	..	..	..	..	..	5.6	..
48 Mexico	7,010	3,610	11.9	13.6	23	43	..	4.9	1.6
49 Colombia	5,790	1,400	11.2	15.5	40	45	2.4	3.1	1.8
50 Qatar	22,910 ^d	15,030	..	..	..	..	..	3.4	..
51 Kuwait	21,630 ^e	19,360	..	..	..	..	..	6.1	..
52 Thailand	6,350	2,110	15.5	8.3	7	29	0.1	4.0	1.1
53 Malaysia	8,360	3,140	12.9	11.7	8	23	2.3	5.5	1.3
54 Mauritius	12,510	3,030	..	..	..	..	3.6	3.7	..
Medium human development	2,946	900	..	..	..	..	..	3.9	2.3
Excluding China	3,746	1,485	..	..	..	..	..	4.7	2.3
58 Brazil	5,500	2,930	7.0	32.1	38	66	..	4.6	2.8
59 Libyan Arab Jamahiriya	..	..	..	..	..	..	..	..	..
60 Seychelles	4,960 ^b	6,280	..	..	..	..	..	8.5	..
63 Saudi Arabia	..	..	..	..	..	..	..	6.4	3.1
64 Ecuador	4,400	1,200	..	..	..	..	..	2.7	..
65 Dominica	3,810 ^b	2,720	..	..	..	..	..	5.8	..
66 Iran, Islamic Rep. of	5,380	..	..	..	..	..	1.5	4.6	1.5
67 Belize	4,610 ^b	2,450	..	..	..	..	..	5.7	..
69 Algeria	5,570	1,780	17.9	6.7	..	25	..	8.1	5.4
70 Jordan	4,380	1,190	16.8	7.3	..	..	0.6	6.5	1.8
71 Botswana	5,220	2,790	10.5	16.4	30	64	..	8.3	..
73 Saint Vincent	3,552 ^b	2,120	..	..	..	..	..	6.7	..
75 Suriname	3,670	1,180	..	..	..	..	..	7.3	..
76 Saint Lucia	3,795 ^b	3,380	..	..	..	..	..	..	..
77 Grenada	3,118 ^b	2,380	..	..	..	..	..	..	..
78 Tunisia	4,950	1,720	16.3	7.8	16	31	4.1	6.1	3.3
79 Cuba	..	..	..	..	..	..	..	6.6	..
82 Oman	10,420	4,850	..	..	..	..	..	3.8	..
83 Korea, Dem. People's Rep. of	..	..	..	..	..	..	..	..	..
84 Turkey	4,210	2,970	..	..	..	..	4.9	..	1.5
85 Paraguay	3,340	1,510	..	..	..	..	..	2.6	1.2
86 Jamaica	3,180	1,440	15.9	8.1	..	..	..	4.7	..
87 Dominican Rep.	3,690	1,230	12.1	13.2	..	..	..	1.6	2.1
88 Samoa (Western)	..	950	..	..	..	..	..	4.2	..
89 Sri Lanka	3,030	600	22.0	4.4	15	36	2.5	3.3	1.8
91 Peru	3,320	1,490	14.1	10.5	52	72	..	4.2	1.9
92 Syrian Arab Rep.	..	..	..	..	..	54	..	..	0.4
95 Philippines	2,590	850	16.6	7.4	40	54	1.2	2.9	1.0
97 Lebanon	..	..	..	..	..	..	..	1.9	..
100 South Africa	3,127 ^b	2,980	9.1	19.2	..	..	..	7.0	3.2
102 Indonesia	3,270	740	20.8	4.9	20	16	..	2.2	0.7
103 Guyana	2,140	350	..	..	..	..	..	7.8	..
106 Egypt	3,800	660	..	..	34	34	..	5.0	1.0
107 Maldives	..	820	..	..	..	..	..	6.6	..
108 China	2,330	490	17.4	6.5	..	12	..	2.0	2.1
109 Iraq	3,413 ^e	..	..	..	..	..	..	..	..
110 Swaziland	2,940	1,190	..	..	..	..	..	6.0	..
111 Bolivia	2,510	760	15.3	8.6	..	86	1.6	..	2.4
112 Guatemala	3,400	1,100	7.9	30.0	60	80	..	1.5	2.1
113 Mongolia	2,090	390	..	..	..	..	..	8.5	..

Developing countries

HDI rank		Real GDP per capita (PPP\$) 1993	GNP per capita (US\$) 1993	Income share		People in poverty (%)		Social security benefits expenditure (as % of GDP) 1993	Public expenditure on	
				Lowest 40% of households (%) 1981-93	Ratio of highest 20% to lowest 20% 1981-93	Urban 1990 ^a	Rural 1990 ^a		Education (as % of GNP) 1992	Health (as % of GDP) 1990
114	Honduras	2,100	600	8.7	23.5	74	80	..	4.1	2.9
115	El Salvador	2,360	1,320	..	..	..	..	..	1.6	2.6
116	Namibia	3,710	1,820	..	..	..	..	..	..	..
117	Nicaragua	2,280	340	12.2	13.2	..	..	..	..	6.7
118	Solomon Islands	..	740	..	..	..	..	..	4.2	..
119	Vanuatu	2,500	1,230	..	..	..	..	..	4.5	..
120	Gabon	3,861 ^b	4,960	..	..	..	..	..	..	..
121	Viet Nam	1,040 ^d	170	19.2	5.6	..	..	..	..	1.1
122	Cape Verde	1,820	920	..	..	..	..	..	4.2	..
123	Morocco	3,270	1,040	17.1	7.0	28	32	1.8	5.8	0.9
124	Zimbabwe	2,100	520	10.3	15.6	..	..	..	9.1	3.2
125	Congo	2,750	950	..	..	..	..	..	8.6	..
126	Papua New Guinea	2,530	1,130	..	..	..	..	..	..	2.8
Low human development		1,269	299	..	..	..	..	..	3.5	1.5
Excluding India		1,306	299	..	..	..	..	..	3.1	1.7
127	Cameroon	2,220	820	..	..	..	..	..	3.1	1.0
128	Kenya	1,400	270	10.1	18.2	..	..	0.7	5.4	2.7
129	Ghana	2,000	430	18.3	6.3	59	54	0.1	3.1	1.7
130	Lesotho	980	650	9.3	20.7	..	..	..	6.0	..
131	Equatorial Guinea	..	420	..	..	..	..	..	1.8	..
132	São Tomé and Príncipe	..	350	..	..	..	..	..	..	..
133	Myanmar	650 ^b	..	..	..	..	..	..	2.4	..
134	Pakistan	2,160	430	21.3	4.7	20	31	..	2.7	1.8
135	India	1,240	300	21.3	4.7	38	49	0.3	3.7	1.3
136	Zambia	1,110	380	15.2	8.9	..	..	..	2.6	2.2
137	Nigeria	1,540	300	15.2	9.6	..	..	..	..	1.2
138	Lao People's Dem. Rep.	1,458 ^b	280	..	..	..	..	..	2.3	1.0
139	Comoros	1,130	560	..	..	..	..	..	4.1	3.3
140	Togo	1,020	340	..	..	..	..	1.1	6.7	2.5
141	Zaire	..	..	..	..	..	..	..	..	0.8
142	Yemen	..	..	..	..	..	30	..	..	1.5
143	Bangladesh	1,290	220	22.9	4.1	56	51	..	2.3	1.4
144	Tanzania, U. Rep. of	630	90	8.1	26.1	..	..	..	5.0	3.2
145	Haiti	1,050	..	..	..	65	80	..	1.8	3.2
146	Sudan	..	..	..	..	..	..	0.7	..	0.5
147	Côte d'Ivoire	1,620	630	18.0	6.5	..	..	..	..	1.7
148	Central African Rep.	1,050	400	..	..	..	..	..	2.8	2.6
149	Mauritania	1,610	500	14.2	13.2	..	..	0.9	..	..
150	Madagascar	700	220	..	..	21	37	..	..	1.3
151	Nepal	1,000	190	22.0	4.3	19	43	..	2.9	2.2
152	Rwanda	740	210	22.8	4.0	..	..	..	3.8	1.9
153	Senegal	1,710	750	10.5	16.7	..	..	..	4.2	2.3
154	Benin	1,650	430	..	..	..	..	..	..	2.8
155	Uganda	910	180	20.6	4.9	25	33	..	2.0	1.6
156	Cambodia	..	..	..	..	..	..	..	..	..
157	Malawi	710	200	..	..	..	..	..	3.3	2.9
158	Liberia	..	..	..	..	..	..	..	..	..
159	Bhutan	790	..	..	..	..	..	..	..	..
160	Guinea	..	500	..	..	..	..	..	2.4	2.3
161	Guinea-Bissau	860	240	8.6	28.0	..	..	..	..	..
162	Gambia	1,190	350	..	..	..	..	..	2.7	..
163	Chad	690	210	..	..	..	..	..	2.3	4.7
164	Djibouti	775 ^b	780	..	..	..	..	..	3.8	..
165	Angola	..	..	..	..	..	..	0.2	..	..
166	Burundi	670	180	..	..	..	..	0.4	3.7	1.7
167	Mozambique	640	90	..	..	40	70	..	6.2	4.4
168	Ethiopia	420	100	21.3	4.8	..	..	1.7	5.1	2.3
169	Afghanistan	..	..	..	..	..	..	..	..	..
170	Burkina Faso	780	300	..	..	..	..	0.6	2.7	7.0
171	Mali	530	270	..	..	..	..	..	2.8	2.8
172	Somalia	..	..	..	..	..	..	..	..	0.9
173	Sierra Leone	860	150	..	..	..	..	..	1.4	1.7
174	Niger	790	270	..	..	..	..	0.4	..	3.4
All developing countries		2,703	970	..	..	..	..	..	3.9	2.0
Least developed countries		894	210	..	..	..	..	..	3.0	1.8
Sub-Saharan Africa		1,385	555	..	..	..	..	..	5.7	2.4
Industrial countries		15,211	16,394	..	..	..	..	..	5.4	..
World		5,545	4,570	..	..	..	..	..	5.1	..

a. Latest year available; around 1990.

b. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991.

c. World Bank 1995f.

d. World Bank 1995d.

e. Figures are from UNDP 1995c. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991.

Source: Column 1: calculated on the basis of estimates from World Bank 1995h; column 2: World Bank 1995f; columns 3 and 4: calculated on the basis of estimates from World Bank 1995f; columns 5 and 6: ILO 1994b; column 7: ILO 1995e; column 8: UNESCO 1995c; column 9: World Bank 1993c.

18 Resource flow imbalances

HDI rank	Total external debt		Debt service ratio (debt service as % of exports of goods and services)		Total net official development assistance received, 1994 (net disbursements)			Export-import ratio (exports as % of imports) 1993	Terms of trade (1987 = 100) 1993	Current account balance before official transfers (US\$ millions) 1993
	US\$ billions 1993	As % of GNP 1993	1980	1993	US\$ millions	As % of 1993 GNP	Per capita (US\$)			
High human development	410T	33	26	18	2,370T	0.3	6.7	96	96	-38,314T
22 Hong Kong	..	..	..	..	27	(.)	5.7	98	87	..
23 Cyprus	..	..	..	..	44	0.6	48.2	..	..	..
25 Barbados	..	..	..	..	-1	-0.1	3.8	..	..	..
26 Bahamas	..	..	..	..	..	..	7.5	..	..	..
29 Korea, Rep. of	47.2	14	20	9	-114	(.)	0.8	98	100	526
30 Argentina	74.5	30	37	46	225	0.1	8.3	78	116	-7,363
31 Costa Rica	3.9	55	29	18	76	1.1	30.0	69	94	-537
32 Uruguay	7.3	58	19	28	86	0.7	38.4	72	114	-252
33 Chile	20.6	47	43	23	157	0.4	12.8	88	104	-2,418
34 Singapore	..	..	..	..	17	(.)	8.2	87	94	2,253
36 Brunei Darussalam	..	..	..	..	5	0.1	18.2	..	..	..
38 Trinidad and Tobago	2.1	44	7	..	21	0.4	5.5	111	92	123
39 Bahrain	..	..	..	..	44	1.0	7.5	..	..	..
40 Antigua and Barbuda	..	..	..	..	451	106.1	46.2	..	..	..
42 United Arab Emirates	..	..	..	..	-7	(.)	..	105	98	..
43 Panama	6.8	103	6	3	40	0.6	31.1	25	87	-136
44 Venezuela	37.5	63	27	23	31	0.1	2.3	121	93	-2,216
45 Saint Kitts and Nevis	..	..	..	..	4	(.)	261.9	..	..	..
47 Fiji	..	..	..	..	40	2.5	77.8	..	..	..
48 Mexico	118.0	35	48	32	431	0.1	4.4	60	99	-23,393
49 Colombia	17.2	35	16	29	127	0.3	3.0	72	68	-2,220
50 Qatar	..	..	..	..	3	(.)	5.7	..	..	..
51 Kuwait	..	..	..	..	6	(.)	1.7	146	86	6,474
52 Thailand	45.8	37	19	19	578	0.5	10.7	80	103	-6,959
53 Malaysia	23.3	39	6	8	68	0.1	5.2	103	99	-2,100
54 Mauritius	1.0	30	9	6	14	0.4	35.7	76	108	-96
Medium human development	650T	38	25	23	19,340T	1.0	8.2	96	101	-52,470T
Excluding China	570T	52	28	29	16,110T	1.3	14.8	98	101	-40,570T
58 Brazil	132.7	29	63	24	336	0.1	1.5	152	97	-608
59 Libyan Arab Jamahiriya	..	..	..	..	7	(.)	1.2	..	..	..
60 Seychelles	..	..	..	..	13	2.9	138.9	..	..	..
63 Saudi Arabia	..	..	..	..	20	(.)	1.8	145	98	-13,278
64 Ecuador	14.1	107	34	26	217	1.6	21.6	113	90	-490
65 Dominica	..	..	..	..	16	8.2	140.8	..	..	..
66 Iran, Islamic Rep. of	20.5	..	7	7	131	0.1	2.2	54	96	-3,765
67 Belize	..	..	..	..	29	5.8	137.3	..	..	..
69 Algeria	25.8	54	27	77	420	0.9	12.4	132	95	361
70 Jordan	7.0	132	8	14	370	7.6	64.2	35	123	-472
71 Botswana	0.7	17	2	..	89	2.5	79.9	72	152	..
73 Saint Vincent	..	..	..	..	7	2.4	127.3	..	..	..
75 Suriname	..	..	..	..	60	(.)	198.1	..	..	..
76 Saint Lucia	..	..	..	..	27	6.0	194.2	..	..	..
77 Grenada	..	..	..	..	9	4.1	97.8	..	..	..
78 Tunisia	8.7	58	15	21	105	0.7	27.5	61	100	-1,023
79 Cuba	..	..	..	..	47	0.3	2.9	..	..	..
82 Oman	2.7	25	6	10	95	1.0	38.7	132	84	-1,087
83 Korea, Dem. People's Rep. of	..	..	..	..	6	(.)	0.7	..	..	..
84 Turkey	67.9	38	28	28	163	0.1	7.7	53	109	-7,113
85 Paraguay	1.6	23	19	15	103	1.5	28.3	41	112	-492
86 Jamaica	4.3	122	19	20	114	3.4	46.0	50	109	-247
87 Dominican Rep.	4.6	50	25	12	68	0.8	..	26	130	-241
88 Samoa (Western)	..	..	..	..	49	5.0	..	..	..	..
89 Sri Lanka	6.8	63	12	10	595	5.6	30.9	69	86	-541
91 Peru	20.3	60	45	59	416	1.2	24.5	102	90	-2,217
92 Syrian Arab Rep.	..	..	..	..	745	4.7	12.3	..	..	..
95 Philippines	35.3	64	27	25	1,057	1.9	22.9	59	117	-3,590
97 Lebanon	..	..	..	..	235	8.2	47.0	..	..	..
100 South Africa	..	..	..	..	294	(.)	4.9	123	105	1,743
102 Indonesia	89.5	64	14	32	1,642	1.2	10.6	120	90	-2,298
103 Guyana	..	..	..	..	80	35.6	104.2	..	..	..
106 Egypt	40.6	109	15	15	2,695	7.3	37.4	27	99	208
107 Maldives	..	..	..	..	30	15.5	130.3	..	..	..
108 China	83.8	15	4	11	3,232	0.6	2.7	89	101	-11,898
109 Iraq	..	..	..	..	259	1.3	8.7	..	..	..
110 Swaziland	..	..	..	..	56	6.0	69.2	..	..	..
111 Bolivia	4.2	78	35	59	578	10.6	80.7	60	78	-693
112 Guatemala	3.0	27	8	13	224	2.0	20.1	52	93	-689
113 Mongolia	0.4	56	..	4	184	19.5	48.3	..	..	-40

HDI rank	Total external debt		Debt service ratio (debt service as % of exports of goods and services)		Total net official development assistance received, 1994 (net disbursements)			Export-import ratio (exports as % of imports) 1993	Terms of trade (1987=100) 1993	Current account balance before official transfers (US\$ millions) 1993	
	US\$ billions 1993	As % of GNP 1993	1980	1993	US\$ millions	As % of 1993 GNP	Per capita (US\$)				
114	Honduras	3.9	121	21	32	298	9.3	58.9	77	73	-496
115	El Salvador	2.0	28	8	15	316	4.5	69.2	29	88	-299
116	Namibia	..	..	..	..	138	5.3	113.6	..	..	179
117	Nicaragua	10.4	746	22	29	600	42.2	81.9	37	94	-853
118	Solomon Islands	..	..	..	..	47	18.0	180.8	..	..	..
119	Vanuatu	..	..	..	..	42	21.2	198.8	..	..	..
120	Gabon	3.8	76	18	6	182	3.6	81.7	275	106	-284
121	Viet Nam	24.2	200	..	14	897	7.5	4.5	..	..	-1,063
122	Cape Verde	..	..	..	..	118	34.0	313.5	..	..	..
123	Morocco	21.4	81	33	32	631	2.3	23.3	59	114	-679
124	Zimbabwe	4.2	74	4	31	561	9.7	39.9	79	89	-295
125	Congo	5.1	211	11	11	362	15.6	54.4	206	98	-532
126	Papua New Guinea	3.2	65	14	30	326	7.0	87.3	138	91	323
Low human development		280T	54	..	..	23,630T	4.7	13.4	70	84	-15,470T
Excluding India		180T	90	..	..	21,310T	8.9	24.6	66	82	-14,780T
127	Cameroon	6.6	64	15	20	731	7.6	51.3	164	77	-794
128	Kenya	7.0	106	21	28	676	10.0	35.2	80	81	59
129	Ghana	4.6	66	13	23	546	7.8	37.9	61	65	-828
130	Lesotho	0.5	39	2	5	117	9.3	67.9	12	..	-376
131	Equatorial Guinea	..	..	..	..	30	18.6	134.6	..	..	..
132	São Tomé and Príncipe	..	..	..	..	51	124.4	378.0	..	..	..
133	Myanmar	5.5	..	25	..	162	(.)	2.3	72	111	..
134	Pakistan	26.0	48	18	25	1,606	3.0	8.0	70	100	-3,688
135	India	91.8	35	9	28	2,324	0.9	1.7	95	96	-685
136	Zambia	6.8	206	25	33	719	22.8	90.8	134	98	-471
137	Nigeria	32.5	112	4	..	190	0.6	2.0	144	99	1,537
138	Lao People's Dem. Rep.	2.0	153	..	10	218	16.8	43.0	23	..	-117
139	Comoros	..	..	..	..	40	14.7	84.0	..	..	..
140	Togo	1.3	92	9	9	126	9.5	32.2	77	97	-129
141	Zaire	..	..	..	..	245	3.0	4.6	..	..	..
142	Yemen	5.9	160	..	8	172	2.5	25.5	27	88	-1,441
143	Bangladesh	13.9	54	23	14	1,757	6.8	11.8	57	94	-535
144	Tanzania, U. Rep. of	7.5	301	26	21	968	38.4	34.9	28	85	-935
145	Haiti	..	..	..	..	601	24.2	18.6	..	..	..
146	Sudan	..	..	..	..	412	6.5	18.2	..	..	..
147	Côte d'Ivoire	19.1	228	39	29	1,594	18.4	63.1	173	79	-1,402
148	Central African Rep.	0.9	70	5	5	166	13.1	57.0	75	91	-139
149	Mauritania	2.2	200	17	27	269	24.7	153.2	67	115	-177
150	Madagascar	4.6	153	17	14	289	9.5	26.6	59	68	-326
151	Nepal	2.0	50	3	9	448	14.1	17.3	44	..	-263
152	Rwanda	0.9	57	4	5	713	47.6	52.2	24	73	-360
153	Senegal	3.8	66	29	8	644	11.0	62.8	59	106	-545
154	Benin	1.5	68	6	6	257	11.7	50.7	32	133	-212
155	Uganda	3.1	90	17	144	753	21.6	35.5	35	49	-369
156	Cambodia	..	..	..	..	337	29.3	32.3	..	..	..
157	Malawi	1.8	87	28	22	470	23.1	47.9	59	86	-221
158	Liberia	..	..	..	..	63	6.1	42.5	..	..	..
159	Bhutan	..	..	..	..	77	29.3	42.0	..	..	..
160	Guinea	2.9	90	20	10	360	11.4	66.6	73	84	-67
161	Guinea-Bissau	0.7	346	..	23	177	76.0	95.3	26	92	-80
162	Gambia	0.4	97	6	14	70	18.8	92.1	34	95	-35
163	Chad	0.8	58	8	7	215	17.2	38.3	59	101	-264
164	Djibouti	..	..	..	..	127	28.3	235.2	..	..	..
165	Angola	..	..	..	..	4	0.1	29.2	..	..	..
166	Burundi	1.1	97	10	36	310	26.8	45.8	32	52	-190
167	Mozambique	5.3	376	..	21	1,231	89.5	76.5	14	122	-820
168	Ethiopia	4.7	54	7	9	1,070	17.2	23.3	25	67	-433
169	Afghanistan	..	..	..	..	228	3.9	12.7	..	..	..
170	Burkina Faso	1.1	39	6	7	435	14.9	43.6	23	106	-493
171	Mali	2.7	98	5	5	442	16.1	35.7	72	102	-374
172	Somalia	..	..	..	..	538	64.4	98.4	..	..	..
173	Sierra Leone	1.4	198	23	12	276	42.7	44.7	80	76	-128
174	Niger	1.7	74	22	31	376	16.3	39.1	85	105	-165
All developing countries		1,330T	40	23	21	60,930T ^a	1.4	10.6	91	96	-106,250T
Least developed countries		80T	78	18	17	16,240T ^b	13.4	28.3	60	81	-9,120T
Sub-Saharan Africa		200T ^b	73 ^b	10 ^b	15 ^b	18,890T ^a	10.5	31.5	86	90	-8,020T
Industrial countries		..	..	..	..	..	..	..	105	104	57,520T
World		..	..	..	..	..	..	..	..	..	-48,730T

a. OECD 1996.

b. World Bank 1994b.

Source: Columns 1, 2 and 8: calculated on the basis of estimates from World Bank 1995f; columns 3, 4, 9 and 10: World Bank 1995f; column 5: OECD 1996; columns 6 and 7: calculated on the basis of estimates from OECD 1996 and UN 1995e.

19 Military expenditure and resource use imbalances

HDI rank	Defence expenditure						Military expenditure (as % of combined education and health expenditure)		Imports of conventional weapons (1990 prices)*		Total armed forces	
	US\$ millions (1993 prices)		As % of GDP		Per capita (US\$; 1993 prices)		1960	1990-91	US\$ millions 1994	Index (1990 =100) 1994	Thou- sands 1994	Index (1985 =100) 1994
	1985	1994	1985	1994	1985	1994						
High human development	30,850T	37,820T	3.5	2.8	107	112	..	..	1,570T	..	1,770T	112
22 Hong Kong	..	..	..	..	..	..	..	10	..	..	..	..
23 Cyprus	114	359	3.6	5.4	172	495	..	17	..	..	10.0	100
25 Barbados	16	13	..	0.8	64	51	..	5	..	..	0.6	60
26 Bahamas	48	17	1.4	0.5	194	63	..	..	..	..	2.6	520
29 Korea, Rep. of	8,268	13,153	5.1	3.6	201	294	273	60	613	89	633.0	106
30 Argentina	4,758	3,262	3.8	1.7	156	97	62	51	..	..	69.8	65
31 Costa Rica	38	36	0.7	0.5	15	11	17	5	..	..	..	..
32 Uruguay	223	289	2.5	2.5	56	91	40	38	..	..	25.6	80
33 Chile	1,632	1,906	7.8	3.5	135	137	60	68	263	130	93.0	92
34 Singapore	1,561	2,982	6.7	4.8	610	1,043	11	129	70	18	54.0	98
36 Brunei Darussalam	269	233	6.0	4.5	1,203	806	..	125	..	..	4.4	107
38 Trinidad and Tobago	96	81	1.4	1.4	81	63	..	9	..	..	2.6	124
39 Bahrain	198	246	3.5	5.5	476	439	..	41	8	2	8.1	289
40 Antigua and Barbuda	..	3	..	0.8	..	49	..	..	..	..	0.1	..
42 United Arab Emirates	2,685	2,055	7.6	5.7	1,954	1,149	..	44	389	42	61.5	143
43 Panama	118	85	2.0	1.2	58	33	2	34	..	..	0.7	6
44 Venezuela	1,083	925	1.3	1.6	63	43	40	33	147	147	79.0	161
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..	..
47 Fiji	18	27	1.2	1.5	26	35	..	37	..	..	3.9	144
48 Mexico	1,631	1,694	0.7	0.7	21	18	23	5	..	..	175.0	136
49 Colombia	557	1,178	1.6	2.3	20	34	57	57	..	..	146.4	221
50 Qatar	394	294	6.0	3.8	1,251	559	..	192	..	..	10.1	168
51 Kuwait	2,360	3,009	9.1	12.2	1,380	2,019	..	88	80	28	16.6	138
52 Thailand	2,462	3,313	5.0	2.6	48	56	96	71	..	..	256.0	109
53 Malaysia	2,318	2,652	5.6	3.9	149	135	48	38	..	..	114.5	104
54 Mauritius	3	11	1.7	0.4	24	10	4	4	..	..	1.3	130
Medium human development	129,830T	86,280T	7.5	4.3	75	42	..	..	6,510T	104	9,140T	90
Excluding China	103,740T	58,600T	7.4	3.8	137	64	..	..	6,510T	106	6,210T	100
58 Brazil	3,088	6,551	0.8	1.6	23	40	72	23	217	108	336.8	122
59 Libyan Arab Jamahiriya	1,774	1,062	6.2	3.7	471	210	29	71	..	..	70.0	96
60 Seychelles	11	10	2.1	2.9	162	142	..	..	..	..	0.8	67
63 Saudi Arabia	23,603	13,917	19.6	11.2	2,045	1,109	150	151	1,602	65	158.0	253
64 Ecuador	373	589	1.8	3.2	40	53	104	26	..	..	57.5	135
65 Dominica	..	..	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	18,689	2,237	36.0	3.8	419	37	141	38	780	101	513.0	168
67 Belize	5	11	1.8	1.9	32	51	..	..	..	..	1.0	167
69 Algeria	1,252	1,249	1.7	2.7	57	44	31	11	20	5	121.7	72
70 Jordan	791	422	15.9	7.1	226	96	464	138	..	..	98.6	140
71 Botswana	49	131	1.1	4.6	45	93	..	22	..	..	7.5	188
73 Saint Vincent	..	..	..	..	..	..	..	..	..	..	..	..
75 Suriname	11	13	2.4	2.8	15	27	..	27	..	..	1.8	90
76 Saint Lucia	..	..	..	..	..	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..	..	..
78 Tunisia	548	219	5.0	1.4	77	25	45	31	..	..	35.5	101
79 Cuba	2,098	292	9.6	2.7	208	27	64	125	..	..	106.0	66
82 Oman	2,834	1,854	20.8	15.9	1,771	991	..	293	..	..	42.9	1,716
83 Korea, Dem. People's Rep. of	5,461	5,412	23.0	26.6	268	234	..	..	13	2	1,128.0	135
84 Turkey	3,016	5,242	4.5	3.2	60	86	153	87	2,135	266	503.8	80
85 Paraguay	79	81	1.3	1.4	21	17	94	42	..	..	16.5	115
86 Jamaica	26	27	0.9	0.9	11	11	..	8	..	..	3.3	157
87 Dominican Rep.	67	112	1.1	1.1	10	15	147	22	..	..	24.5	110
88 Samoa (Western)	..	..	..	..	..	..	..	..	..	..	..	..
89 Sri Lanka	300	504	3.8	4.7	19	28	17	107	..	..	126.0	583
91 Peru	842	730	4.5	1.8	45	31	59	39	..	..	115.0	90
92 Syrian Arab Rep.	4,577	2,358	16.4	8.6	436	168	329	373	194	693	408.0	101
95 Philippines	623	855	1.4	1.4	11	13	44	41	..	..	106.5	93
97 Lebanon	263	301	9.0	4.4	99	75	..	..	..	..	44.3	255
100 South Africa	3,774	3,893	2.7	3.3	113	94	26	41	..	..	78.5	74
102 Indonesia	3,076	2,256	2.8	1.4	19	11	207	49	..	..	276.0	99
103 Guyana	26	6	9.7	1.4	75	8	..	21	..	..	1.7	26
106 Egypt	3,394	2,641	7.2	5.9	70	47	117	52	1,370	182	440.0	99
107 Maldives	..	..	..	..	..	..	..	..	..	..	..	..
108 China	26,083	27,680	7.9	5.6	25	23	387	114	2	2	2,930.0	75
109 Iraq	16,909	2,628	25.9	14.6	1,064	132	128	271	..	..	382.0	74
110 Swaziland	..	..	..	..	..	..	..	11	..	..	..	..
111 Bolivia	167	127	2.0	1.4	26	16	105	57	..	..	33.5	121
112 Guatemala	259	129	1.8	1.1	33	13	45	31	..	..	44.2	139
113 Mongolia	45	17	9.0	2.8	23	8	..	..	..	..	21.3	65

HDI rank	Defence expenditure						Military expenditure (as % of combined education and health expenditure)		Imports of conventional weapons (1990 prices) ^a		Total armed forces		
	US\$ millions (1993 prices)		As % of GDP		Per capita (US\$, 1993 prices)		1990	1990-91	US\$ millions 1994	Index (1990 = 100) 1994	Thousands 1994	Index (1985 = 100) 1994	
	1985	1994	1985	1994	1985	1994							
114	Honduras	95	42	2.1	1.3	22	7	38	92	..	..	16.8	101
115	El Salvador	331	152	4.4	1.9	69	27	34	66	..	..	30.7	74
116	Namibia	..	49	..	2.2	..	31	..	23	..	..	8.1	..
117	Nicaragua	837	38	14.2	2.0	256	9	100	97	..	..	15.2	24
118	Solomon Islands	..	..	..	..	..	..	..	..	..	..	..	..
119	Vanuatu	..	..	..	..	..	..	..	..	..	..	..	..
120	Gabon	104	118	1.8	2.3	104	93	..	51	..	..	3.2	133
121	Viet Nam	3,154	837	19.4	5.7	51	12	..	..	..	..	572.0	56
122	Cape Verde	5	3	0.9	0.9	15	8	..	..	..	..	1.1	14
123	Morocco	842	1,197	5.4	4.3	38	44	49	72	181	163	195.5	131
124	Zimbabwe	223	191	3.1	3.5	27	17	..	66	..	..	46.9	114
125	Congo	74	47	1.9	1.7	39	18	7	37	..	..	10.0	115
126	Papua New Guinea	47	53	1.5	1.1	13	12	..	41	..	..	3.8	119
Low human development		19,000T	15,930T	2.8	3.1	13	9	94	65	1,920T	..	3,270T	111
Excluding India		10,770T	8,610T	2.7	3.5	15	10	138	65	1,140T	..	2,000T	119
127	Cameroon	209	115	1.4	1.4	21	9	63	48	..	..	14.6	200
128	Kenya	336	180	3.1	2.2	17	6	8	24	..	..	24.2	177
129	Ghana	83	80	1.0	0.9	7	5	22	12	..	..	6.9	46
130	Lesotho	60	18	4.6	3.2	39	9	..	48	..	..	2.0	100
131	Equatorial Guinea	4	2	2.0	1.4	11	5	..	..	..	..	1.3	59
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..	..
133	Myanmar	640	415	7.0	3.1	17	9	241	222	248	126	286.0	154
134	Pakistan	2,728	3,426	6.9	6.9	28	27	393	125	819	110	587.0	122
135	India	8,230	7,321	3.0	2.8	11	8	68	65	773	48	1,265.0	100
136	Zambia	53	37	1.1	1.0	8	6	42	63	..	..	24.0	148
137	Nigeria	1,644	1,139	1.0	3.1	5	10	11	33	..	..	76.5	81
138	Lao People's Dem. Rep.	72	111	7.8	7.9	20	23	..	..	..	..	37.0	69
139	Comoros	..	..	..	..	..	..	..	..	..	..	..	..
140	Togo	25	30	1.3	2.7	8	7	..	39	..	..	7.0	194
141	Zaire	106	114	0.9	1.9	3	3	..	71	..	..	28.1	59
142	Yemen	643	401	8.9	5.2	64	29	..	197	..	..	66.0	103
143	Bangladesh	329	463	1.4	1.8	3	4	..	41	75	47	115.5	127
144	Tanzania, U. Rep. of	184	103	4.4	3.5	8	4	4	77	..	..	49.6	123
145	Haiti	41	34	1.5	2.2	7	5	100	30	..	..	7.3	106
146	Sudan	494	298	3.2	3.5	37	11	52	44	..	..	118.5	209
147	Côte d'Ivoire	100	68	0.8	0.8	10	5	8	14	..	..	8.4	64
148	Central African Rep.	23	24	1.4	2.0	9	7	..	33	..	..	2.7	117
149	Mauritania	68	35	6.5	2.7	40	16	..	40	..	..	15.7	185
150	Madagascar	71	28	2.0	0.8	7	2	8	37	..	..	21.0	100
151	Nepal	47	41	1.5	1.1	3	2	67	35	..	..	35.0	140
152	Rwanda	43	113	1.9	7.7	7	15	..	25	..	..	5.0	96
153	Senegal	83	88	1.1	2.2	13	11	13	33	..	..	13.4	133
154	Benin	28	25	1.1	1.5	7	5	28	..	..	..	4.5	100
155	Uganda	70	87	1.8	2.4	5	5	..	18	..	..	50.0	250
156	Cambodia	..	59	..	2.3	..	6	..	..	..	..	88.5	253
157	Malawi	28	20	1.0	1.1	4	2	..	24	..	..	10.4	196
158	Liberia	37	34	2.4	2.5	17	14	73	47	..	..	5.0	74
159	Bhutan	..	..	..	..	..	..	..	..	..	..	..	..
160	Guinea	68	42	1.8	1.2	11	7	52	37	..	..	9.7	98
161	Guinea-Bissau	14	8	5.7	3.3	16	8	..	..	..	..	7.3	85
162	Gambia	3	13	1.5	3.7	4	13	..	11	..	..	0.8	160
163	Chad	49	30	2.9	2.6	10	5	..	74	..	..	25.4	208
164	Djibouti	42	25	7.9	6.2	124	42	..	..	..	..	8.4	280
165	Angola	850	501	22.5	8.7	172	46	..	208	..	..	82.0	166
166	Burundi	46	31	3.0	3.0	10	5	..	42	..	..	10.5	202
167	Mozambique	314	102	22.5	7.1	23	6	..	121	..	..	2.0	13
168	Ethiopia	587	106	17.9	2.6	14	2	107	190	..	..	120.0	55
169	Afghanistan	377	..	8.7	..	21	..	..	..	..	..	..	..
170	Burkina Faso	45	42	1.1	1.6	6	4	29	30	..	..	5.8	145
171	Mali	39	64	1.4	3.0	5	7	57	53	..	..	7.4	151
172	Somalia	60	..	6.2	..	11	..	..	200	..	..	..	..
173	Sierra Leone	7	35	1.0	4.4	2	8	..	23	..	..	6.2	200
174	Niger	16	20	0.5	0.9	2	2	43	11	..	..	5.3	241
All developing countries		179,670T	140,030T	5.5	3.6	52	34	143	60	10,000T	83	14,170T	97
Least developed countries		5,590T	3,510T	4.0	2.9	14	7	..	..	320T	90	1,270T	121
Sub-Saharan Africa		9,540T	7,790T	2.1	2.9	21	14	27	43	..	..	810T	95
Industrial countries		612,590T	638,070T	4.1	3.1	718	525	97	33	7,840T	97	7,850T	83
World		790,220T	778,100T	4.3	3.2	171	141	104	37	17,840T	89	22,020T	93

a. Figures are trend indicator values.

Source: Columns 1-6 and 11: IISS 1995; columns 7 and 8: IISS 1993, UNDP 1994a and World Bank 1993c; column 9: SIPRI 1995; column 10: calculated on the basis of estimates from SIPRI 1995; column 12: calculated on the basis of estimates from IISS 1995.

20 Growing urbanization

HDI rank	Urban population (as % of total)			Urban population annual growth rate (%)		Population in cities of more than 750,000		Largest city				
	1960	1993	2000	1960- 1993	1993- 2000	As % of total population 1990	As % of urban population 1990	City	Population (thousands)		Growth rate (%)	
									1995	1970-75	1990-95	
High human development	45	67	71	3.5	2.2	31	47	..	..	..	..	..
22 Hong Kong	85	95	96	2.3	0.5	94	100	Hong Kong	5,574	2.6	0.8	..
23 Cyprus	36	53	57	1.9	2.0	..	..	..	..	..	..	..
25 Barbados	35	46	50	1.2	1.7	..	..	..	..	..	..	..
26 Bahamas	74	86	89	3.2	1.9	..	..	..	..	..	..	..
29 Korea, Rep. of	28	79	86	5.0	2.3	48	65	Seoul	11,641	4.9	2.0	..
30 Argentina	74	88	89	2.0	1.5	42	48	Buenos Aires	10,990	1.6	0.7	..
31 Costa Rica	37	49	53	3.9	3.3	25	53	San Jose	760	3.5	2.9	..
32 Uruguay	80	90	91	1.0	0.8	42	47	Montevideo	1,326	0.1	0.6	..
33 Chile	68	84	85	2.5	1.6	35	42	Santiago	5,065	2.7	2.0	..
34 Singapore	100	100	100	1.6	0.9	100	100	Singapore	2,848	1.7	1.0	..
36 Brunei Darussalam	43	58	59	4.7	2.2	..	..	..	..	..	..	..
38 Trinidad and Tobago	65	71	74	1.6	1.8	..	..	..	..	..	..	..
39 Bahrain	82	89	92	4.1	2.9	..	..	..	..	..	..	..
40 Antigua and Barbuda	40	36	37	0.3	1.2	..	..	..	..	..	..	..
42 United Arab Emirates	40	83	86	12.0	2.7	..	..	..	..	..	..	..
43 Panama	41	53	55	3.3	2.4	34	67	Panama City	948	2.3	2.8	..
44 Venezuela	67	92	94	4.1	2.5	30	34	Caracas	2,959	2.2	1.3	..
45 Saint Kitts and Nevis	28	41	46	0.6	0.8	..	..	..	..	..	..	..
47 Fiji	30	40	43	3.0	2.5	..	..	..	..	..	..	..
48 Mexico	51	74	78	3.9	2.5	30	41	Mexico City	15,643	4.3	0.7	..
49 Colombia	48	72	75	3.6	2.2	28	40	Bogota	5,614	4.8	2.9	..
50 Qatar	72	91	93	8.6	2.2	..	..	..	..	..	..	..
51 Kuwait	72	97	98	6.7	0.5	51	53	Kuwait City	1,090	4.0	0.0	..
52 Thailand	13	20	22	3.8	2.8	11	57	Bangkok	6,566	4.2	2.2	..
53 Malaysia	27	52	58	4.8	3.6	6	13	Kuala Lumpur	1,238	7.1	2.0	..
54 Mauritius	33	40	42	2.2	1.5	..	..	..	..	..	..	..
Medium human development Excluding China	24	39	45	3.7	3.4	14	38	..	..	..	..	..
58 Brazil	45	77	81	4.0	2.4	32	42	São Paulo	16,417	4.1	2.0	..
59 Libyan Arab Jamahiriya	23	85	88	8.3	4.0	77	93	Tripoli	3,272	10.5	4.6	..
60 Seychelles	25	53	59	4.1	2.4	..	..	..	..	..	..	..
63 Saudi Arabia	30	79	82	7.6	3.6	20	26	Riyadh	2,576	11.0	5.3	..
64 Ecuador	34	57	62	4.4	3.3	25	46	Guayaquil	1,717	4.2	2.8	..
65 Dominica	..	..	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	34	58	62	5.0	3.1	20	35	Teheran	6,830	5.2	1.5	..
67 Belize	54	47	47	2.0	2.5	..	..	..	..	..	..	..
69 Algeria	30	54	60	4.6	3.6	12	24	Algiers	3,702	4.2	4.0	..
70 Jordan	43	70	75	4.9	4.7	22	33	Amman	1,183	5.1	4.3	..
71 Botswana	2	26	33	12.3	6.6	..	..	..	..	..	..	..
73 Saint Vincent	14	45	52	4.9	2.9	..	..	..	..	..	..	..
75 Suriname	47	49	54	1.2	2.5	..	..	..	..	..	..	..
76 Saint Lucia	39	47	51	1.6	2.0	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..	..	..
78 Tunisia	36	56	60	3.6	2.7	22	39	Tunis	2,037	3.2	3.1	..
79 Cuba	55	75	78	2.3	1.2	20	27	Havana	2,241	0.9	1.1	..
82 Oman	4	12	16	8.0	7.7	..	..	..	..	..	..	..
83 Korea, Dem. People's Rep. of	40	61	63	3.6	2.3	10	17	Pyongyang	2,470	6.0	2.0	..
84 Turkey	30	66	75	4.9	3.7	22	37	Istanbul	7,817	5.1	3.7	..
85 Paraguay	36	51	56	4.1	4.0	..	..	..	..	..	..	..
86 Jamaica	34	53	56	2.6	1.7	..	..	..	..	..	..	..
87 Dominican Rep.	30	63	68	4.9	2.9	43	71	Santo Domingo	2,580	5.1	3.2	..
88 Samoa (Western)	19	21	22	1.6	1.9	..	..	..	..	..	..	..
89 Sri Lanka	18	22	24	2.4	2.7	..	..	..	..	..	..	..
91 Peru	46	71	75	3.9	2.5	30	43	Lima	7,452	4.5	2.8	..
92 Syrian Arab Rep.	37	51	55	4.4	4.4	27	54	Damascus	2,052	4.1	2.7	..
95 Philippines	30	52	59	4.3	3.9	15	30	Metro Manila	9,280	6.9	3.1	..
97 Lebanon	40	86	90	3.7	2.9	..	..	..	..	..	..	..
100 South Africa	47	50	53	2.8	3.1	21	43	Cape Town	2,671	3.7	3.1	..
102 Indonesia	15	34	40	4.7	4.2	12	38	Jakarta	11,500	4.1	4.4	..
103 Guyana	29	35	40	1.7	2.9	..	..	..	..	..	..	..
106 Egypt	38	44	46	2.9	2.6	23	51	Cairo	9,665	2.6	2.2	..
107 Maldives	11	26	28	5.4	4.2	..	..	..	..	..	..	..
108 China	19	29	35	3.1	3.8	10	38	Shanghai	15,082	0.5	2.3	..
109 Iraq	43	74	77	4.9	3.6	22	31	Baghdad	4,478	6.5	2.0	..
110 Swaziland	4	29	36	9.5	5.9	..	..	..	..	..	..	..
111 Bolivia	39	59	65	3.5	3.9	16	28	La Paz	1,246	3.3	3.6	..
112 Guatemala	32	41	44	3.6	4.1	9	23	Guatemala City	946	1.6	2.3	..
113 Mongolia	36	60	64	4.3	3.0	..	..	..	..	..	..	..

HDI rank	Urban population (as % of total)			Urban population annual growth rate (%)		Population in cities of more than 750,000		Largest city				
	1960	1993	2000	1960- 1993	1993- 2000	As % of total population 1990	As % of urban population 1990	City	Growth rate (%)			
									Population (thousands) 1995	1970-75	1990-95	
114	Honduras	23	43	47	5.2	4.4	..	..	..	..	..	..
115	El Salvador	38	45	47	2.8	2.9	..	..	..	..	..	..
116	Namibia	15	35	43	5.3	5.6	..	..	..	..	..	..
117	Nicaragua	40	62	66	4.5	4.3	26	44	Managua	1,195	5.3	4.3
118	Solomon Islands	9	16	20	5.4	6.4	..	..	..	..	..	..
119	Vanuatu	9	19	21	5.6	3.8	..	..	..	..	..	..
120	Gabon	17	48	54	6.2	4.4	..	..	..	..	..	..
121	Viet Nam	15	20	22	3.2	3.5	7	33	Ho Chi Minh City	3,555	3.3	1.9
122	Cape Verde	16	51	63	5.6	5.9	..	..	..	..	..	..
123	Morocco	29	47	51	4.0	3.0	17	36	Casablanca	3,289	3.4	3.1
124	Zimbabwe	13	31	36	6.0	4.6	9	30	Harare	854	5.5	4.0
125	Congo	32	57	63	4.6	4.4	36	66	Brazzaville	1,009	2.8	4.8
126	Papua New Guinea	3	16	18	8.0	4.0	..	..	..	..	..	..
Low human development Excluding India	15	26	30	4.1	4.1	9	37	..	..	..	..	..
	12	27	31	5.1	5.1	10	39	..	..	..	..	..
127	Cameroon	14	43	49	6.2	4.9	16	22	Douala	1,322	5.3	5.6
128	Kenya	7	26	32	7.6	6.0	6	27	Nairobi	2,079	4.9	6.3
129	Ghana	23	35	39	4.0	4.5	9	28	Accra	1,687	3.3	3.7
130	Lesotho	3	22	27	8.4	6.0	..	..	..	..	..	..
131	Equatorial Guinea	26	40	48	2.6	5.5	..	..	..	..	..	..
132	São Tomé and Príncipe	16	45	51	5.4	3.6	..	..	..	..	..	..
133	Myanmar	19	26	28	3.1	3.7	8	32	Yangon	3,851	4.3	3.1
134	Pakistan	22	34	38	4.3	4.6	16	49	Karachi	9,863	4.9	4.3
135	India	18	26	29	3.4	3.0	9	36	Bombay	15,093	3.3	4.2
136	Zambia	17	43	45	6.1	3.4	12	29	Lusaka	1,327	6.5	6.1
137	Nigeria	14	38	43	5.8	5.0	9	27	Lagos	10,287	9.8	5.7
138	Lao People's Dem. Rep.	8	20	25	5.3	5.9	..	..	..	..	..	..
139	Comoros	10	30	34	6.7	5.8	..	..	..	..	..	..
140	Togo	10	30	34	6.4	4.9	..	..	..	..	..	..
141	Zaire	22	29	31	3.8	4.4	9	33	Kinshasa	4,214	4.7	4.0
142	Yemen	9	32	38	6.8	6.6	..	..	..	..	..	..
143	Bangladesh	5	17	21	6.3	5.4	8	52	Dhaka	7,832	7.9	5.7
144	Tanzania, U. Rep. of	5	23	28	8.2	5.9	6	27	..	..	9.8	3.8
145	Haiti	16	30	35	3.9	4.1	16	56	Port-au-Prince	1,266	4.4	3.9
146	Sudan	10	24	27	5.3	4.7	8	35	Khartoum	2,492	6.0	4.5
147	Côte d'Ivoire	19	42	47	6.4	4.9	18	45	Abidjan	2,797	11.0	5.1
148	Central African Rep.	23	39	42	3.9	3.6	..	..	..	..	..	..
149	Mauritania	6	51	59	9.4	4.6	..	..	..	..	..	..
150	Madagascar	11	26	31	5.7	5.8	..	..	..	..	..	..
151	Nepal	3	13	17	6.8	6.9	..	..	..	..	..	..
152	Rwanda	2	6	7	6.0	4.7	..	..	..	..	..	..
153	Senegal	32	41	45	3.6	4.0	22	55	Dakar	1,986	5.0	4.2
154	Benin	9	30	34	6.3	4.7	..	..	..	..	..	..
155	Uganda	5	12	14	6.2	5.6	4	38	Kampala	954	3.2	4.7
156	Cambodia	10	19	24	3.7	5.9	..	..	..	..	..	..
157	Malawi	4	13	16	6.8	5.0	..	..	..	..	..	..
158	Liberia	19	44	48	5.8	4.7	..	..	..	..	..	..
159	Bhutan	3	6	8	4.7	6.0	..	..	..	..	..	..
160	Guinea	10	28	34	5.4	5.7	20	76	Conakry	1,508	8.0	5.8
161	Guinea-Bissau	14	21	25	3.4	4.6	..	..	..	..	..	..
162	Gambia	12	24	29	5.5	5.6	..	..	..	..	..	..
163	Chad	7	21	23	5.6	4.1	..	..	..	..	..	..
164	Djibouti	50	82	84	7.6	2.5	..	..	..	..	..	..
165	Angola	10	31	36	5.7	6.0	18	63	Luanda	2,207	7.5	5.9
166	Burundi	2	7	9	6.1	6.7	..	..	..	..	..	..
167	Mozambique	4	31	41	9.0	7.4	11	41	Maputo	2,227	7.2	7.1
168	Ethiopia	6	13	15	4.7	5.2	4	31	Addis Ababa	2,209	4.8	4.0
169	Afghanistan	8	19	22	4.3	8.2	10	57	Kabul	2,034	7.1	5.2
170	Burkina Faso	5	23	38	7.5	9.8	..	..	..	..	..	..
171	Mali	11	26	30	5.2	5.7	..	..	..	..	..	..
172	Somalia	17	25	28	3.8	4.3	9	37	Mogadishu	982	7.0	4.6
173	Sierra Leone	13	35	40	5.1	4.6	..	..	..	..	..	..
174	Niger	6	16	19	6.5	5.9	..	..	..	..	..	..
All developing countries	22	36	40	3.8	3.5	14	39	..	..	..	..	..
Least developed countries	9	22	26	5.2	5.3	8	47	..	..	..	..	..
Sub-Saharan Africa	15	30	34	5.0	4.9	10	34	..	..	..	..	..
Industrial countries	61	73	75	1.4	0.7	29	41	..	..	..	..	..
World	34	44	47	2.7	2.5	17	39	..	..	..	..	..

Source: Columns 1, 3, 10 and 11: UN 1995h; columns 2, 4-7 and 9: calculated on the basis of estimates from UN 1995h.

21 Demographic profile

HDI rank	Estimated population (millions)			Annual population growth rate (%)		Population doubling date (at current growth rate) 1993	Crude birth rate 1993	Crude death rate 1993	Total fertility rate 1992	Contraceptive prevalence rate, any method (%) 1986-93
	1960	1993	2000	1960-1993	1993-2000					
High human development	160T	340T	380T	2.3	1.5	2041	22.7	5.9	2.6	62
22 Hong Kong	3.1	5.8	6.0	1.9	0.4	2172	11.0	5.7	1.2	81
23 Cyprus	0.6	0.7	0.8	0.7	1.0	2064	18.6	7.4	2.5	..
25 Barbados	0.2	0.3	0.3	0.4	0.4	2153	16.2	9.2	1.8	55
26 Bahamas	0.1	0.3	0.3	2.7	1.4	2043	18.9	5.1	2.0	62
29 Korea, Rep. of	25.0	44.1	47.1	1.7	0.9	2066	16.5	6.3	1.7	79
30 Argentina	20.6	33.8	36.6	1.5	1.2	2052	20.2	8.2	2.8	..
31 Costa Rica	1.2	3.3	3.8	3.0	2.2	2025	26.0	3.7	3.1	75
32 Uruguay	2.5	3.1	3.3	0.7	0.6	2117	17.0	10.3	2.3	..
33 Chile	7.6	13.8	15.3	1.8	1.5	2040	21.7	5.7	2.5	..
34 Singapore	1.6	2.8	3.0	1.6	0.9	2073	15.8	5.8	1.7	..
36 Brunei Darussalam	0.1	0.3	0.3	3.7	1.9	2030	23.8	3.5	3.1	..
38 Trinidad and Tobago	0.8	1.3	1.4	1.3	1.1	2056	20.5	6.1	2.4	53
39 Bahrain	0.2	0.5	0.6	3.8	2.4	2021	27.8	4.0	3.8	53
40 Antigua and Barbuda	0.1	0.1	0.1	0.5	0.6	2100	..	..	..	53
42 United Arab Emirates	0.1	1.8	2.1	9.5	2.1	2025	22.7	2.7	4.2	..
43 Panama	1.1	2.5	2.9	2.5	1.7	2034	24.7	5.3	2.9	..
44 Venezuela	7.6	20.9	24.2	3.1	2.1	2026	27.1	4.7	3.3	49 ^a
45 Saint Kitts and Nevis	0.1	(.)	(.)	-0.6	-0.3	..	..	..	..	41 ^a
47 Fiji	0.4	0.8	0.8	2.0	1.6	2037	23.5	4.5	3.0	..
48 Mexico	36.9	90.0	102.4	2.7	1.9	2030	27.5	5.3	3.2	53
49 Colombia	15.9	34.0	37.8	2.3	1.5	2038	23.8	5.9	2.7	66
50 Qatar	(.)	0.5	0.6	7.8	1.9	2029	20.4	3.4	4.3	32
51 Kuwait	0.3	1.8	1.8	5.8	0.3	2195	24.5	2.1	3.1	35
52 Thailand	26.4	57.6	61.9	2.4	1.0	2060	19.0	6.1	2.1	66
53 Malaysia	8.1	19.2	22.3	2.6	2.1	2025	28.4	5.1	3.6	48
54 Mauritius	0.7	1.1	1.2	1.5	1.1	2055	21.0	6.7	2.4	75
Medium human development	1,100T	2,190T	2,420T	2.1	1.4	2041	22.7	7.4	2.7	71
Excluding China	450T	990T	1,140T	2.5	1.9	2029	28.4	7.4	3.6	53
58 Brazil	72.6	156.5	174.8	2.4	1.6	2036	24.4	7.4	2.9	66
59 Libyan Arab Jamahiriya	1.3	5.0	6.4	4.1	3.4	2013	41.8	7.9	6.4	..
60 Seychelles	(.)	0.1	0.1	1.6	1.0	2065	..	..	..	..
63 Saudi Arabia	4.1	17.1	21.3	4.4	3.1	2015	35.2	4.6	6.4	..
64 Ecuador	4.4	11.0	12.6	2.8	2.0	2027	28.0	6.2	3.5	53
65 Dominica	0.1	0.1	0.1	-1.0	0	..	..	..	..	50
66 Iran, Islamic Rep. of	21.6	64.2	74.6	3.4	2.2	2025	34.8	6.5	5.0	65
67 Belize	0.1	0.2	0.2	2.4	2.7	2019	34.6	4.7	4.2	47
69 Algeria	10.8	26.7	31.2	2.8	2.2	2024	28.7	6.3	3.9	47
70 Jordan	1.7	4.9	6.4	3.3	3.8	2011	38.9	5.4	5.6	35
71 Botswana	0.5	1.4	1.7	3.3	3.0	2016	37.0	6.5	4.9	33
73 Saint Vincent	0.1	0.1	0.1	1.0	0.9	2071	..	..	..	58
75 Suriname	0.3	0.4	0.4	1.1	1.1	2056	25.1	5.8	2.7	..
76 Saint Lucia	0.1	0.1	0.2	1.0	1.3	2047	..	..	..	47
77 Grenada	0.1	0.1	0.1	0.1	0.3	2218	..	..	..	54
78 Tunisia	4.2	8.6	9.7	2.2	1.8	2032	25.2	6.3	3.2	50
79 Cuba	7.0	10.9	11.4	1.4	0.7	2098	16.8	6.8	1.8	70
82 Oman	0.6	2.0	2.6	3.9	4.0	2010	43.7	4.8	7.2	9
83 Korea, Dem. People's Rep. of	10.8	23.0	26.0	2.3	1.7	2033	24.1	5.3	2.4	..
84 Turkey	27.5	59.6	67.7	2.4	1.8	2030	27.0	7.4	3.4	63
85 Paraguay	1.8	4.7	5.6	3.0	2.6	2020	32.7	5.4	4.3	48
86 Jamaica	1.6	2.4	2.5	1.2	0.8	2084	21.7	6.2	2.4	67
87 Dominican Rep.	3.2	7.5	8.5	2.6	1.7	2033	26.7	5.5	3.1	56
88 Samoa (Western)	0.1	0.2	0.2	1.2	1.6	2035	37.3	6.0	4.5	..
89 Sri Lanka	9.9	17.9	19.5	1.8	1.2	2049	20.6	5.8	2.5	62
91 Peru	9.9	22.9	26.1	2.6	1.9	2030	27.2	6.8	3.4	59
92 Syrian Arab Rep.	4.6	13.7	17.3	3.4	3.4	2013	40.9	5.7	5.9	..
95 Philippines	27.6	64.8	74.6	2.6	2.0	2027	30.2	6.4	3.9	40
97 Lebanon	1.9	2.8	3.3	1.3	2.3	2023	26.8	7.0	3.1	..
100 South Africa	17.4	39.7	46.2	2.5	2.2	2024	31.1	8.8	4.1	50
102 Indonesia	96.2	191.7	212.7	2.1	1.5	2039	24.4	8.3	2.9	50
103 Guyana	0.6	0.8	0.9	1.1	1.1	2054	25.0	7.1	2.6	..
106 Egypt	27.8	60.3	69.1	2.4	2.0	2028	28.7	8.0	3.9	46
107 Maldives	0.1	0.2	0.3	2.7	3.2	2014	41.7	8.5	6.8	..
108 China	657.5	1,196.4	1,284.6	1.8	1.0	2061	18.0	7.3	2.0	83
109 Iraq	6.8	19.5	23.8	3.2	2.9	2017	38.0	6.7	5.7	14
110 Swaziland	0.3	0.8	1.0	2.8	2.8	2018	38.4	10.5	4.9	20
111 Bolivia	3.4	7.1	8.3	2.3	2.4	2022	35.7	10.1	4.8	30
112 Guatemala	4.0	10.0	12.2	2.9	2.9	2017	38.5	7.6	5.4	23
113 Mongolia	1.0	2.3	2.7	2.7	2.0	2028	26.8	7.2	3.6	..

HDI rank	Estimated population (millions)			Annual population growth rate (%)		Population doubling date (at current growth rate) 1993	Crude birth rate 1993	Crude death rate 1993	Total fertility rate 1992	Contraceptive prevalence rate, any method (%) 1986-93	
	1960	1993	2000	1960-1993	1993-2000						
114	Honduras	1.9	5.3	6.5	3.2	2.8	2017	37.0	6.1	4.9	47
115	El Salvador	2.6	5.5	6.4	2.3	2.2	2024	33.4	7.0	4.0	53
116	Namibia	0.6	1.5	1.8	2.6	2.6	2019	36.8	10.4	5.3	29
117	Nicaragua	1.5	4.1	5.2	3.1	3.3	2014	40.2	6.6	5.0	49
118	Solomon Islands	0.1	0.4	0.4	3.4	3.3	2014	37.4	4.4	5.4	..
119	Vanuatu	0.1	0.2	0.2	2.8	2.5	2020	35.1	7.3	4.7	..
120	Gabon	0.5	1.2	1.5	2.9	2.8	2017	37.3	15.4	5.3	..
121	Viet Nam	34.7	71.3	82.6	2.2	2.1	2025	30.6	7.8	3.9	53
122	Cape Verde	0.2	0.4	0.4	1.9	2.8	2018	36.4	8.5	4.3	..
123	Morocco	11.6	25.9	29.6	2.5	1.9	2029	28.9	8.0	3.8	42
124	Zimbabwe	3.8	10.7	12.5	3.2	2.2	2024	38.8	12.1	5.0	43
125	Congo	1.0	2.4	3.0	2.8	2.8	2017	44.8	15.0	6.3	..
126	Papua New Guinea	1.9	4.1	4.8	2.3	2.3	2023	33.3	10.6	5.1	..
Low human development		800T	1,770T	2,080T	2.4	2.3	2023	35.8	11.8	4.9	31
Excluding India		360T	870T	1,060T	2.7	2.9	2018	43.0	13.9	6.0	16
127	Cameroon	5.3	12.5	15.2	2.6	2.9	2017	40.6	12.1	5.7	16
128	Kenya	8.3	26.4	32.6	3.6	3.1	2016	44.4	11.8	6.3	33
129	Ghana	6.8	16.4	20.2	2.7	3.0	2016	41.5	11.6	6.0	13
130	Lesotho	0.9	1.9	2.3	2.5	2.7	2019	36.8	9.8	5.2	23
131	Equatorial Guinea	0.3	0.4	0.5	1.2	2.5	2020	43.5	17.9	5.9	..
132	São Tomé and Príncipe	0.1	0.1	0.1	2.1	2.0	2027	..	..	..	..
133	Myanmar	21.7	44.6	51.5	2.2	2.1	2026	32.4	11.0	4.2	..
134	Pakistan	50.0	132.9	161.8	3.0	2.8	2017	40.7	9.1	6.2	12
135	India	442.3	901.5	1,022.0	2.2	1.8	2031	28.9	9.9	3.8	43
136	Zambia	3.1	8.9	10.8	3.2	2.7	2019	44.3	15.3	6.0	15
137	Nigeria	42.3	105.3	128.8	2.8	2.9	2017	45.4	15.3	6.5	6
138	Lao People's Dem. Rep.	2.2	4.6	5.6	2.3	2.8	2017	45.3	15.1	6.7	..
139	Comoros	0.2	0.6	0.8	3.2	3.6	2012	48.6	11.6	7.1	..
140	Togo	1.5	3.9	4.8	2.9	3.1	2015	44.6	12.8	6.6	12
141	Zaire	15.3	41.2	51.1	3.0	3.1	2015	47.6	14.5	6.7	8
142	Yemen	5.2	13.2	17.1	2.8	3.7	2011	49.3	15.3	7.6	7
143	Bangladesh	51.4	115.2	134.4	2.5	2.2	2024	35.5	11.5	4.4	40
144	Tanzania, U. Rep. of	10.2	28.0	34.1	3.1	2.8	2017	43.0	13.6	5.9	10
145	Haiti	3.8	6.9	8.0	1.8	2.1	2026	35.2	11.8	4.8	10
146	Sudan	11.2	26.6	32.1	2.7	2.7	2019	39.7	13.0	5.7	9
147	Côte d'Ivoire	3.8	13.3	16.8	3.9	3.3	2014	50.0	15.2	7.4	..
148	Central African Rep.	1.5	3.2	3.7	2.2	2.4	2021	41.6	16.6	5.7	..
149	Mauritania	1.0	2.2	2.6	2.4	2.6	2020	39.7	14.3	5.4	3
150	Madagascar	5.4	13.9	17.3	2.9	3.2	2015	43.6	11.6	6.1	17
151	Nepal	9.4	20.8	24.8	2.4	2.6	2020	39.3	13.2	5.4	23
152	Rwanda	2.7	7.6	9.0	3.1	2.6	2019	44.2	16.7	6.6	21
153	Senegal	3.2	7.9	9.5	2.8	2.7	2019	42.8	15.9	6.1	7
154	Benin	2.2	5.1	6.3	2.5	3.0	2016	48.8	17.8	7.1	..
155	Uganda	6.6	19.9	24.6	3.4	3.1	2016	51.9	19.3	7.3	5
156	Cambodia	5.4	9.7	11.6	1.8	2.7	2019	43.3	14.1	5.3	..
157	Malawi	3.5	10.5	12.1	3.4	2.1	2026	50.1	19.9	7.2	13
158	Liberia	1.0	2.8	3.6	3.1	3.3	2014	47.4	14.1	6.8	6
159	Bhutan	0.9	1.6	1.8	1.9	2.1	2026	39.8	15.2	5.9	..
160	Guinea	3.1	6.3	7.8	2.1	3.0	2016	50.7	20.2	7.0	..
161	Guinea-Bissau	0.5	1.0	1.2	2.0	2.1	2025	42.8	21.2	5.8	..
162	Gambia	0.4	1.0	1.3	3.3	3.1	2015	43.4	18.7	5.6	12
163	Chad	3.1	6.0	7.3	2.1	2.8	2017	43.9	17.9	5.9	..
164	Djibouti	0.1	0.6	0.6	5.9	2.1	2026	37.6	16.0	5.8	..
165	Angola	4.8	10.3	13.1	2.3	3.5	2013	51.5	19.1	7.2	..
166	Burundi	2.9	6.0	7.3	2.2	2.9	2017	46.0	15.6	6.8	9
167	Mozambique	7.5	15.1	19.0	2.2	3.3	2014	45.5	18.6	6.5	..
168	Ethiopia	22.8	51.9	63.8	2.5	3.0	2016	48.6	17.9	7.0	4
169	Afghanistan	10.8	17.7	26.7	1.5	6.0	2004	51.1	22.0	6.9	..
170	Burkina Faso	4.5	9.8	11.7	2.4	2.6	2019	46.8	18.1	6.5	8
171	Mali	4.4	10.1	12.6	2.6	3.1	2015	50.9	19.0	7.1	5
172	Somalia	3.8	9.0	10.8	2.6	2.7	2019	50.7	18.5	7.0	..
173	Sierra Leone	2.2	4.3	5.1	2.0	2.4	2022	49.2	25.0	6.5	..
174	Niger	3.0	8.6	10.8	3.2	3.4	2013	52.3	18.8	7.4	4
All developing countries		2,070T	4,300T	4,880T	2.2	1.8	2032	28.1	9.1	3.5	55
Least developed countries		240T	550T	670T	2.5	2.8	2018	42.9	14.9	5.8	19
Sub-Saharan Africa		210T	520T	640T	2.8	2.9	2017	44.8	15.1	6.3	15
Industrial countries		930T	1,210T	1,240T	0.8	0.4	2163	13.2	10.0	1.8	73
World		3,000T	5,510T	6,120T	1.9	1.5	2039	24.8	9.3	3.1	58

a. Data refer to a period other than that specified in the column heading.

Source: Columns 1, 2, 3, 7, 8 and 9: UN 1995e; columns 4, 5 and 6: calculated on the basis of estimates from UN 1995e; column 10: UN 1994c.

22 Natural resources balance sheet

HDI rank	Land area (1,000 ha) 1993	Forest and woodland (as % of land area) 1993	Arable land (as % of land area) 1993	Irrigated land (as % of arable land area) 1993	Deforestation (1,000 ha per year) 1980-89	Annual rate of deforestation (%) 1980-89	Reforestation (1,000 ha per year) 1980-89	Production of fuel wood and charcoal (1,000 m ³ per year)		Internal renewable water resources per capita (1,000 m ³ per year) 1992	Annual fresh water withdrawals	
								1979-81	1993		As % of water resources 1980-89	Per capita (m ³) 1980-89
High human development	894,970T	27.6	9.2	19.7	485	1.3	30	84,640T	104,770T	13.5	..	657
22 Hong Kong	104	21.2	5.8	33.3	..	..	..	164	193	..	..	..
23 Cyprus	925	13.3	11.9	35.5	..	..	..	24	18	..	60	812
25 Barbados	43	11.6	37.2	..	..	..	..	..	..	..	51	117
26 Bahamas	1,388	23.3	0.6	..	..	..	..	..	..	..	..	..
29 Korea, Rep. of	9,902	65.2	19.0	71.1	..	..	67	6,452	4,491	1.5	17	299
30 Argentina	276,689	18.4	9.0	6.8	..	..	40	5,608	4,288	21.0	3	1,042
31 Costa Rica	5,110	30.7	5.6	42.1	55	3.1	..	2,243	3,210	29.8	1	780
32 Uruguay	17,741	5.2	7.1	11.1	..	..	5	2,513	3,044	18.9	1	241
33 Chile	75,695	21.8	5.3	31.8	50	0.7	74	5,300	9,627	34.4	4	1,623
34 Singapore	62	4.8	1.6	..	..	..	..	..	120	0.2	32	84
36 Brunei Darussalam	577	78.0	0.5	33.3	..	..	..	79	79	..	..	13
38 Trinidad and Tobago	513	45.8	14.6	29.3	1	0.4	1	16	22	4.0	3	148
39 Bahrain	68	..	1.5	100.0	..	..	..	..	..	..	..	735
40 Antigua and Barbuda	44	11.4	18.2	..	..	..	..	..	..	..	..	..
42 United Arab Emirates	8,360	..	0.3	17.2	..	..	..	..	..	0.2	140	414
43 Panama	7,552	43.2	6.6	6.4	36	0.9	..	708	927	57.3	1	744
44 Venezuela	91,250	32.9	3.5	5.9	245	0.7	19	578	1,032	42.4	..	387
45 Saint Kitts and Nevis	36	16.7	22.2	..	..	..	..	..	..	..	..	..
47 Fiji	1,827	64.9	9.9	0.6	2	0.2	7	22	37	38.6	(.)	41
48 Mexico	195,820	24.9	11.8	26.3	615	1.3	22	11,752	15,769	4.1	15	875
49 Colombia	113,891	43.9	3.4	13.5	890	1.7	8	13,441	17,220	32.0	..	172
50 Qatar	1,100	..	0.6	..	..	..	..	..	..	..	174	234
51 Kuwait	1,782	0.1	0.3	40.0	..	..	..	..	..	(.)	..	11
52 Thailand	51,312	26.3	34.3	25.0	397	2.5	24	29,001	35,313	2.0	18	600
53 Malaysia	32,975	67.6	3.2	32.7	310	1.5	20	6,711	9,375	24.3	2	768
54 Mauritius	204	21.6	49.0	17.0	(.)	3.3	(.)	24	2	2.0	16	410
Medium human development	4,180,360T	28.7	6.8	32.1	..	..	..	570,370T	719,440T	6.7	..	478
Excluding China	3,224,260T	33.3	5.9	21.7	1,552	0.8	188	415,700T	519,380T	12.3	..	498
58 Brazil	851,197	57.3	4.9	6.7	3,650	0.7	449	150,432	194,270	33.7	1	248
59 Libyan Arab Jamahiriya	175,954	0.5	1.0	25.9	..	..	31	536	536	0.1	374	692
60 Seychelles	45	11.1	2.2	..	..	..	..	..	..	..	..	15
63 Saudi Arabia	214,969	0.8	1.7	11.9	..	..	..	..	..	0.1	106	321
64 Ecuador	28,356	55.0	5.7	34.1	340	2.3	4	5,549	4,231	28.4	2	567
65 Dominica	75	66.7	9.3	..	..	..	..	..	..	..	..	14
66 Iran, Islamic Rep. of	164,800	6.9	10.1	56.5	20	0.5	..	2,323	2,525	1.9	39	1,362
67 Belize	2,296	91.5	2.0	4.4	..	0.6	..	79	126	80.8	..	104
69 Algeria	238,174	1.7	3.1	7.6	40	2.3	52	1,427	2,060	0.7	16	160
70 Jordan	8,921	0.8	3.5	20.0	..	..	3	4	7	0.2	41	173
71 Botswana	58,173	45.6	0.7	0.5	20	0.1	..	901	1,351	0.8	1	100
73 Saint Vincent	39	35.9	10.3	25.0	..	..	..	..	..	..	..	108
75 Suriname	16,327	91.9	0.3	..	3	(.)	(.)	26	19	456.6	..	1,155
76 Saint Lucia	62	12.9	8.1	20.0	..	..	..	..	..	..	..	89
77 Grenada	(.)	8.8	32.4	..	..	..	..	..	..	..	..	16
78 Tunisia	16,361	4.1	18.3	12.9	5	1.7	3	2,406	3,236	0.5	53	317
79 Cuba	11,086	23.5	23.5	34.9	2	0.1	11	2,801	2,535	3.2	23	870
82 Oman	21,246	..	0.1	..	..	..	..	..	..	1.2	22	561
83 Korea, Dem. People's Rep. of	12,054	61.1	14.1	85.9	..	..	200	3,714	4,230	3.0	21	687
84 Turkey	77,945	25.9	31.4	15.0	..	..	82	15,698	9,750	3.2	18	434
85 Paraguay	40,675	31.6	5.4	3.1	212	1.1	1	4,294	5,432	20.8	..	110
86 Jamaica	1,099	16.8	14.1	22.6	2	3.0	1	7	355	3.4	4	159
87 Dominican Rep.	4,873	12.3	20.5	23.0	4	0.6	1	769	976	2.7	15	443
88 Samoa (Western)	284	47.2	19.4	..	..	..	..	70	70	..	..	..
89 Sri Lanka	6,561	32.0	14.2	59.1	58	3.5	13	7,305	8,703	2.5	15	503
91 Peru	128,522	66.0	2.6	37.6	300	0.4	6	6,166	7,237	1.8	15	301
92 Syrian Arab Rep.	18,518	3.5	27.6	17.7	..	..	..	22	20	0.6	9	434
95 Philippines	30,000	45.3	18.4	28.6	143	1.5	50	26,320	35,980	5.0	9	693
97 Lebanon	1,040	7.7	20.8	39.8	..	..	..	448	489	1.7	16	271
100 South Africa	122,104	6.7	10.1	10.3	..	..	63	7,116	7,210	1.3	18	410
102 Indonesia	190,457	58.7	9.9	24.3	920	0.8	131	115,525	149,063	13.2	1	95
103 Guyana	21,497	76.8	2.2	27.1	3	(.)	(.)	15	14	298.3	2	7,564
106 Egypt	100,145	..	2.4	..	..	..	2	1,672	2,292	0.1	97	1,213
107 Maldives	30	3.3	10.0	..	..	..	..	..	..	..	..	..
108 China	956,100	13.5	9.6	53.6	..	..	4,552	154,666	200,060	2.4	16	462
109 Iraq	43,832	0.4	12.0	48.6	..	..	..	75	105	1.8	43	4,575
110 Swaziland	1,736	6.9	10.8	35.8	..	..	5	543	560	8.8	4	408
111 Bolivia	109,858	52.8	1.9	8.3	117	0.2	1	1,020	1,407	39.9	..	184
112 Guatemala	10,889	53.4	12.2	9.4	90	2.0	8	8,724	11,142	11.9	1	139
113 Mongolia	156,650	8.8	0.9	5.7	..	..	..	1,350	445	10.7	2	273

Developing countries

HDI rank	Land area (1,000 ha) 1993	Forest and woodland	Arable land	Irrigated land	Deforestation (1,000 ha per year) 1980-89	Annual rate of deforestation (%) 1980-89	Reforestation (1,000 ha per year) 1980-89	Production of fuel wood and charcoal (1,000 m ³ per year)		Internal renewable water resources per capita (1,000 m ³ per year) 1992	Annual fresh water withdrawals		
		(as % of land area) 1993	(as % of land area) 1993	(as % of arable land area) 1993				1979-81	1993		As % of water resources 1980-89	Per capita (m ³) 1980-89	
114	Honduras	11,209	53.5	15.0	4.4	90	2.3	..	3,804	5,844	11.6	1	510
115	El Salvador	2,104	4.9	26.9	21.2	5	3.2	..	5,214	6,347	3.5	5	245
116	Namibia	82,429	21.8	0.8	0.9	..	0.2	..	..	..	5.9	2	84
117	Nicaragua	13,000	24.6	8.5	8.0	121	2.7	1	2,315	3,397	44.3	1	370
118	Solomon Islands	2,890	84.8	1.4	..	1	(.)	(.)	102	138	130.7	(.)	18
119	Vanuatu	1,219	75.0	1.6	..	..	..	..	24	24	..	..	..
120	Gabon	26,767	74.3	1.1	1.4	15	0.1	1	1,766	2,803	132.6	..	57
121	Viet Nam	33,169	29.1	16.6	33.8	173	1.7	29	21,960	28,984	5.4	1	81
122	Cape Verde	403	0.2	10.7	7.0	..	..	1	..	..	..	20	147
123	Morocco	44,655	20.1	20.7	13.6	13	0.4	13	1,062	1,448	1.1	37	499
124	Zimbabwe	39,076	22.5	7.0	7.0	80	0.4	4	5,207	6,269	2.2	5	138
125	Congo	34,200	61.7	0.4	0.7	22	0.1	(.)	1,520	2,220	76.4	..	19
126	Papua New Guinea	46,284	90.7	0.1	..	23	0.1	2	5,393	5,533	197.5	(.)	28
Low human development		2,721,710T	28.9	12.8	22.9	374	1.2	30	598,890T	845,630T	4.9	..	547
Excluding India		2,392,960T	30.0	7.6	17.4	211	1.0	7	396,930T	582,850T	8.0	..	474
127	Cameroon	47,544	75.5	12.5	0.4	190	0.8	1	7,378	11,785	17.0	..	37
128	Kenya	58,037	28.9	6.9	1.7	39	1.7	10	23,406	36,710	0.6	7	50
129	Ghana	23,854	33.1	11.7	0.2	72	0.8	2	11,284	15,512	3.3	1	35
130	Lesotho	3,035	..	10.5	0.9	..	..	1	463	651	2.2	1	31
131	Equatorial Guinea	2,805	46.3	4.6	..	3	0.2	..	421	447	81.3	..	15
132	São Tomé and Príncipe	96	..	2.1	..	..	..	..	..	..	..	..	10
133	Myanmar	67,658	47.9	14.2	11.1	677	2.1	..	14,433	19,156	24.8	..	101
134	Pakistan	79,610	4.4	26.1	82.3	9	0.4	7	16,683	25,021	2.4	33	2,053
135	India	328,759	20.8	50.5	28.9	1,500	2.3	138	201,956	262,782	2.1	18	612
136	Zambia	75,261	38.1	7.0	0.9	70	0.2	2	8,411	12,952	11.1	..	86
137	Nigeria	92,377	12.2	32.3	3.2	400	2.7	26	72,169	109,789	2.3	1	37
138	Lao People's Dem. Rep.	23,680	52.8	3.3	16.0	130	1.0	1	2,965	4,254	60.4	..	260
139	Comoros	223	17.9	35.0	..	1	3.1	(.)	..	..	..	1	14
140	Togo	5,679	15.8	36.5	0.3	12	0.7	..	532	1,097	3.1	1	28
141	Zaire	234,486	74.1	3.1	0.1	588	0.3	..	25,244	41,293	25.6	..	22
142	Yemen	52,797	3.8	2.6	26.2	..	..	..	252	324	0.2	..	..
143	Bangladesh	14,400	13.2	65.6	32.8	8	0.9	17	22,941	31,774	11.4	1	211
144	Tanzania, U. Rep. of	94,509	35.4	3.2	5.0	130	0.3	9	21,953	33,963	2.7	1	36
145	Haiti	2,775	5.0	20.2	13.4	2	3.8	..	4,605	5,932	1.6	..	7
146	Sudan	250,581	17.7	5.1	15.1	504	1.1	13	15,335	22,488	1.1	14	1,092
147	Côte d'Ivoire	32,246	22.0	7.6	2.8	510	5.2	6	6,663	10,888	5.7	1	66
148	Central African Rep.	62,298	75.0	3.1	..	55	0.2	..	2,486	3,250	44.4	..	25
149	Mauritania	102,552	4.3	0.2	23.9	13	2.4	(.)	6	8	0.2	10	494
150	Madagascar	58,704	39.5	4.4	42.1	156	1.2	12	5,339	8,051	3.1	41	1,642
151	Nepal	14,080	40.8	16.5	36.6	84	4.0	4	13,732	19,440	8.3	2	151
152	Rwanda	2,634	20.9	32.5	0.5	5	2.3	3	4,519	5,392	0.8	2	23
153	Senegal	19,672	53.1	11.8	3.0	50	0.5	3	3,099	4,333	3.0	4	202
154	Benin	11,262	30.2	12.7	0.7	67	1.7	(.)	3,569	5,234	5.3	..	26
155	Uganda	23,588	23.3	21.4	0.2	50	0.8	2	9,197	13,500	3.5	..	20
156	Cambodia	18,104	64.1	13.0	3.9	30	0.2	..	4,246	5,880	10.0	..	68
157	Malawi	11,848	31.2	14.1	1.7	150	3.5	1	5,521	9,546	0.9	2	20
158	Liberia	9,775	17.4	1.3	1.5	46	2.3	2	3,861	5,118	84.3	..	56
159	Bhutan	4,700	66.0	2.4	29.6	1	0.1	1	1,027	1,364	58.9	..	14
160	Guinea	24,586	58.8	2.5	15.2	86	0.8	(.)	2,678	3,969	37.0	..	140
161	Guinea-Bissau	3,612	29.6	8.3	5.7	57	2.7	(.)	422	422	30.8	..	11
162	Gambia	1,130	24.8	15.9	8.3	5	2.4	(.)	894	937	3.3	..	29
163	Chad	128,400	25.2	2.5	0.4	80	0.6	(.)	2,731	3,667	6.6	..	34
164	Djibouti	2,320	0.3	..	..	..	..	..	..	..	0.6	2	29
165	Angola	124,670	41.6	2.4	2.5	94	0.2	3	3,946	5,652	16.0	..	52
166	Burundi	2,783	3.1	40.8	1.2	1	2.7	3	3,144	4,558	0.6	3	20
167	Mozambique	80,159	17.5	3.7	4.0	120	0.8	4	12,188	15,022	3.9	1	53
168	Ethiopia	110,076	22.7	10.9	1.6	88	0.3	10	32,085	45,254	2.1	2	49
169	Afghanistan	65,290	2.9	12.1	37.9	..	..	..	4,763	6,113	2.6	52	1,706
170	Burkina Faso	27,400	50.4	13.0	0.6	80	1.7	2	6,461	9,090	2.9	1	18
171	Mali	124,019	5.6	2.0	3.1	36	0.5	1	3,902	5,753	6.3	2	162
172	Somalia	63,766	25.1	1.6	18.0	14	0.1	1	6,302	8,939	1.3	7	119
173	Sierra Leone	7,174	28.4	6.8	6.0	6	0.3	..	2,316	3,188	36.6	..	96
174	Niger	126,700	2.0	2.8	1.8	67	2.6	2	3,361	5,130	1.7	1	41
All developing countries		7,797,040T	28.7	9.2	26.2	866	1.1	797	1,253,900T	1,669,840T	6.5	..	520
Least developed countries		2,044,440T	30.7	5.6	11.6	214	0.9	6	256,450T	369,040T	10.8	..	242
Sub-Saharan Africa		2,098,330T	32.6	6.2	3.8	162	0.9	11	306,730T	452,580T	7.3	..	122
Industrial countries		5,503,010T	35.1	11.3	9.9	..	..	..	132,240T	204,530T	10.9	..	1,150
World		13,300,050T	31.3	10.0	18.7	15,517 ^a	0.4 ^a	14,713 ^a	1,386,140T	1,874,370T	7.6	8 ^a	641

a. UN 1994a.

Source: Columns 1, 8 and 9: FAO 1994; columns 2, 3 and 4: calculated on the basis of data from FAO 1994; columns 5, 6 and 7: UN 1993b; column 10: World Resources Institute 1994; columns 11 and 12: UN 1994a.

23 Energy consumption

HDI rank	Production as % of national energy reserves			Commercial energy production average annual growth rate (%)		Commercial energy consumption average annual growth rate (%)		Commercial energy use (oil equivalent)				Commercial energy imports (as % of merchandise exports)	
	Coal 1991	Natural gas 1991		1971-80	1980-93	1971-80	1980-93	Kilograms per capita		GDP output per kg (US\$)		1971	1993
		Crude oil 1991	gas					1991	1993	1971	1993		
High human development	..	..	..	..	..	..	..	711	1,586	1.0	3.5	8	9
22 Hong Kong	..	..	..	..	..	7	7	850	2,278	1.2	8.3	3	2
23 Cyprus	..	..	..	..	..	..	..	..	..	..	..	..	..
25 Barbados	..	..	..	..	..	..	..	..	..	..	..	..	..
26 Bahamas	..	..	..	..	..	..	..	..	..	..	..	..	..
29 Korea, Rep. of	7.4	(.)	(.)	5	8	11	10	507	2,863	0.6	2.6	16	18
30 Argentina	0.2	4.4	12.0	3	3	3	1	1,282	1,351	1.1	5.6	4	3
31 Costa Rica	..	..	..	7	6	6	4	443	558	1.4	4.2	5	12
32 Uruguay	..	..	..	1	7	1	1	749	715	1.3	5.8	15	12
33 Chile	0.2	1.3	2.0	0	2	1	5	709	911	1.5	3.5	5	11
34 Singapore	..	..	..	..	..	8	8	1,396	5,563	0.8	3.6	21	13
36 Brunei Darussalam	(.)	3.0	4.0	..	..	..	..	..	..	..	..	..	..
38 Trinidad and Tobago	(.)	2.2	9.3	6	0	4	3	2,735	4,696	0.3	0.8	60	14
39 Bahrain	(.)	2.9	17.0	..	..	..	..	..	..	..	..	..	..
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..	..	..
42 United Arab Emirates	(.)	0.4	0.9	7	6	27	11	4,151	16,878	..	1.2	2	..
43 Panama	..	..	..	17	10	0	0	834	599	0.9	4.3	63	51
44 Venezuela	0.6	0.7	1.5	-5	2	5	2	2,072	2,369	0.6	1.2	1	1
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..	..	..
47 Fiji	..	..	..	..	..	..	..	..	..	..	..	..	..
48 Mexico	0.6	1.3	2.3	17	2	10	3	653	1,439	1.2	2.7	6	4
49 Colombia	0.5	3.5	7.7	-2	12	4	4	444	694	0.8	2.3	1	5
50 Qatar	(.)	0.2	3.7	..	..	..	..	..	..	..	..	..	..
51 Kuwait	(.)	0.3	0.5	-6	-2	7	-4	7,264	4,217	0.7	3.0	..	1
52 Thailand	1.5	3.7	4.8	10	26	7	11	178	678	1.1	3.2	16	9
53 Malaysia	(.)	0.9	8.9	19	12	8	10	436	1,529	0.9	2.2	10	4
54 Mauritius	..	..	..	2	7	5	3	225	391	1.3	7.7	8	11
Medium human development	..	..	..	..	..	..	..	299	648	1.1	2.5	..	10
Excluding China	..	..	..	..	..	..	..	332	681	1.2	3.3	12	13
58 Brazil	0.2	3.4	8.2	6	8	8	4	361	666	1.4	4.9	13	11
59 Libyan Arab Jamahiriya	(.)	0.7	2.3	..	..	..	..	..	..	..	..	..	..
60 Seychelles	..	..	..	..	..	..	..	..	..	..	..	..	..
63 Saudi Arabia	(.)	0.7	1.1	8	1	21	5	1,061	4,552	1.0	..	..	69
64 Ecuador	(.)	(.)	7.5	29	4	16	3	202	561	1.3	2.3	9	1
65 Dominica	..	..	..	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	0.7	0.2	1.3	-8	7	8	7	714	1,235	..	..	..	..
67 Belize	..	..	..	..	..	..	..	..	..	..	..	..	..
69 Algeria	(.)	1.3	2.1	5	5	15	5	255	955	1.4	1.9	3	1
70 Jordan	..	..	..	..	..	14	5	228	766	..	1.4	31	37
71 Botswana	..	..	..	9	0	11	3	243	388	0.7	7.0	..	..
73 Saint Vincent	..	..	..	..	..	..	..	..	..	..	..	..	..
75 Suriname	..	..	..	..	..	..	..	..	..	..	..	..	..
76 Saint Lucia	..	..	..	..	..	..	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..	..	..	..
78 Tunisia	(.)	(.)	2.3	5	-1	10	4	262	582	1.2	2.9	8	13
79 Cuba	..	..	..	..	..	..	..	..	..	..	..	..	..
82 Oman	(.)	1.0	6.1	1	8	41	10	119	2,408	3.4	2.4	..	1
83 Korea, Dem. People's Rep. of	15.0	(.)	(.)	..	..	..	..	..	..	..	..	..	..
84 Turkey	0.6	(.)	8.5	6	4	8	5	377	983	0.9	3.0	11	26
85 Paraguay	..	..	..	14	46	10	6	94	214	2.9	6.8	15	30
86 Jamaica	..	..	..	..	-6	0	2	996	1,096	0.8	1.4	10	..
87 Dominican Rep.	..	..	..	22	4	5	1	235	340	1.6	3.7	9	..
88 Samoa (Western)	..	..	..	..	..	..	..	..	..	..	..	..	..
89 Sri Lanka	..	..	..	8	7	2	2	80	110	2.3	5.3	..	13
91 Peru	(.)	0.2	12.0	13	-4	4	-1	429	332	1.4	5.4	1	8
92 Syrian Arab Rep.	(.)	0.2	12.0	..	..	..	..	..	..	..	..	..	..
95 Philippines	0.5	(.)	(.)	31	6	5	4	222	328	0.9	2.5	14	19
97 Lebanon	..	..	..	..	..	..	..	..	..	..	..	..	..
100 South Africa	0.3	(.)	(.)	8	3	4	3	1,993	2,399	0.4	1.2	9	..
102 Indonesia	0.1	2.6	10.0	8	4	13	8	71	321	1.1	2.3	30	6
103 Guyana	..	..	..	..	..	..	..	..	..	..	..	..	..
106 Egypt	(.)	2.2	5.4	14	4	9	6	200	539	1.2	1.2	10	6
107 Maldives	..	..	..	..	..	..	..	..	..	..	..	..	..
108 China	0.9	1.4	4.3	8	5	7	5	278	623	0.4	0.6	..	6
109 Iraq	(.)	0.1	0.7	..	..	..	..	..	..	..	..	..	..
110 Swaziland	..	..	..	..	..	..	..	..	..	..	..	..	..
111 Bolivia	(.)	2.6	4.0	4	1	10	1	173	310	1.5	2.5	1	8
112 Guatemala	..	..	..	21	4	7	2	155	159	2.4	7.1	2	26
113 Mongolia	..	..	..	10	5	10	2	632	1,089	..	0.2	..	..

HDI rank	Production as % of national energy reserves			Commercial energy production average annual growth rate (%)		Commercial energy consumption average annual growth rate (%)		Commercial energy use (oil equivalent)				Commercial energy imports (as % of merchandise exports)	
	Coal	Natural gas	Crude oil	1971-80	1980-93	1971-80	1980-93	Kilograms per capita		GDP output per kg (US\$)		1971	1993
								1971	1993	1971	1993		
114	..	..	..	13	3	6	2	185	180	1.5	3.5	8	16
115	..	..	..	17	4	8	2	160	222	1.8	6.2	2	39
116	..	..	..	..	..	..	..	..	..	..	..	..	..
117	..	..	..	3	3	4	2	248	241	1.6	1.8	7	61
118	..	..	..	..	..	..	..	..	..	..	..	..	..
119	..	..	..	..	..	..	..	..	..	..	..	..	..
120	(.)	(.)	17.0	6	6	5	2	805	769	0.9	5.6	1	..
121	3.3	(.)	(.)	11	10	-9	3	165	77	..	2.4	..	..
122	..	..	..	..	..	..	..	..	..	..	..	..	..
123	..	..	..	3	-3	8	4	155	299	1.8	3.4	8	24
124	..	..	..	0	7	1	6	442	471	0.7	1.1	..	15
125	(.)	(.)	7.2	33	7	1	2	176	165	1.4	5.9	4	..
126	(.)	0	(.)	12	20	7	2	136	238	2.1	5.2	9	..
Low human development	..	..	..	..	..	..	..	89	177	2.2	2.3	8	..
Excluding India	..	..	..	..	..	..	..	58	97	3.8	4.4	8	..
127	(.)	(.)	14.0	47	5	8	2	59	87	3.1	10.2	6	..
128	..	..	..	16	16	4	3	114	99	1.3	2.2	15	..
129	..	..	..	7	2	3	3	107	96	2.6	3.8	5	..
130	..	..	..	..	..	..	..	..	..	..	..	..	..
131	..	..	..	..	..	..	..	..	..	..	..	..	..
132	..	..	..	..	..	..	..	..	..	..	..	..	..
133	(.)	0.4	(.)	8	-2	3	-1	56	39	1.4	..	9	..
134	0.6	1.7	11.0	7	7	6	7	103	209	1.5	1.9	11	24
135	0.4	1.5	3.9	5	7	5	7	111	242	1.0	1.2	8	36
136	..	..	..	7	-3	1	-3	335	146	1.1	2.8	5	..
137	(.)	0.2	3.9	3	2	19	2	39	141	6.6	2.1	3	..
138	..	..	..	40	-1	-3	3	55	39	..	7.4	..	..
139	..	..	..	..	..	..	..	..	..	..	..	..	..
140	..	..	..	8	..	9	1	51	47	2.7	6.9	5	..
141	(.)	(.)	12.0	..	..	..	..	..	..	..	..	..	..
142	(.)	(.)	1.7	..	..	8	8	111	285	..	3.4	9	..
143	(.)	1.4	(.)	11	12	9	8	18	59	5.2	3.5	..	26
144	..	..	..	5	5	2	1	53	35	1.9	2.4	11	..
145	..	..	..	..	..	..	..	..	..	..	..	..	..
146	..	..	..	..	..	..	..	..	..	..	..	..	..
147	..	..	..	22	-6	6	0	152	109	1.8	6.4	4	..
148	..	..	..	5	3	-1	3	40	29	2.5	13.4	2	..
149	..	..	..	..	..	5	0	105	105	1.7	4.2	5	..
150	..	..	..	-1	6	-4	2	64	34	2.7	7.1	9	..
151	..	..	..	12	14	7	8	6	22	12.6	6.5	..	..
152	..	..	..	3	3	18	0	11	27	5.2	7.2	6	..
153	..	..	..	..	..	5	0	121	115	1.7	6.3	6	..
154	..	..	..	..	11	2	-3	39	20	3.1	20.4	7	..
155	..	..	..	-4	2	-7	3	58	21	(.)	7.7	1	..
156	..	..	..	..	..	..	..	..	..	..	..	..	..
157	..	..	..	11	4	8	2	37	35	2.1	5.4	8	..
158	..	..	..	..	..	..	..	..	..	..	..	..	..
159	..	..	..	..	..	..	..	..	..	..	..	..	..
160	..	..	..	14	4	2	1	69	66	..	7.7	..	..
161	..	..	..	..	..	4	2	35	37	4.1	6.4	47	..
162	..	..	..	..	..	15	1	35	57	3.4	6.1	4	..
163	..	..	..	..	..	4	1	18	16	5.2	12.1	32	..
164	..	..	..	..	..	..	..	..	..	..	..	..	..
165	(.)	(.)	9.9	..	..	..	..	..	..	..	..	..	..
166	..	..	..	..	7	8	7	8	24	9.4	6.7	10	..
167	..	..	..	23	-16	-2	-3	103	43	..	2.2	17	..
168	..	..	..	6	7	1	6	19	23	..	..	11	..
169	..	..	..	..	..	..	..	..	..	..	..	..	..
170	..	..	..	..	..	13	1	9	16	7.4	17.7	22	..
171	..	..	..	8	5	8	2	16	20	4.2	13.1	13	..
172	..	..	..	..	..	..	..	..	..	..	..	..	..
173	..	..	..	..	..	0	0	133	74	1.2	2.3	5	..
174	..	..	..	..	9	12	2	17	38	9.6	6.8	7	..
All developing countries	..	..	..	..	..	..	..	255	536	1.2	2.8	10	14
Least developed countries	..	..	..	..	..	..	..	42	50	..	6.4	..	..
Sub-Saharan Africa	..	..	..	..	..	..	..	251	288	2.3	3.7	7	..
Industrial countries	..	..	..	..	..	..	..	4,211	4,589	..	5.1	..	11
World	0.4 ^a	1.6 ^a	2.2 ^a	..	..	..	..	..	1,421 ^b	..	3.1 ^b	..	11

a. UN 1994a.

b. World Bank 1995f.

Source: Columns 1, 2 and 3: UN 1994a; columns 4-11: World Bank 1995f; columns 12 and 13: calculated on the basis of estimates from World Bank 1995f.

24 National income accounts

HDI rank	GDP (US\$ billions) 1993	Agriculture (as % of GDP) 1993	Industry (as % of GDP) 1993	Services (as % of GDP) 1993	Consumption		Gross domestic investment (as % of GDP) ^a 1993	Gross domestic savings (as % of GDP) ^a 1993	Tax revenue (as % of GNP) 1993	Central government expenditure (as % of GNP) 1993	Exports (as % of GDP) 1993	Imports (as % of GDP) 1993
					Private (as % of GDP) 1993	Government (as % of GDP) 1993						
High human development	1,510T	8	35	57	65	11	27	28	17	20	32.1	35.3
22 Hong Kong	90.0	..	21	79	60	9	27	31	..	..	150.3	154.1
23 Cyprus	..	..	..	..	..	..	..	..	..	..	..	..
25 Barbados	..	..	..	..	..	..	..	..	..	..	..	..
26 Bahamas	..	..	..	..	..	..	..	..	..	..	..	..
29 Korea, Rep. of	330.8	7	43	50	54	11	34	35	17	17	24.9	25.3
30 Argentina	255.6	6	31	63	84	..	18	..	..	..	5.1	6.6
31 Costa Rica	7.6	15	26	59	59	17	30	25	23	27	26.4	38.4
32 Uruguay	13.1	9	27	64	72	14	16	14	28	29	12.5	17.5
33 Chile	43.7	..	..	..	66	10	26	24	21	23	21.4	24.3
34 Singapore	55.2	(..)	37	63	43	9	44	47	17	20	134.2	154.5
36 Brunei Darussalam	..	..	..	..	..	..	..	..	..	..	..	..
38 Trinidad and Tobago	4.5	3	43	55	66	12	13	22	..	..	35.9	32.3
39 Bahrain	..	..	..	..	..	..	..	..	..	..	..	..
40 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..	..
42 United Arab Emirates	34.9	2	57	40	49	18	25	33	..	11	58.7	55.9
43 Panama	6.6	10	18	72	59	17	25	24	21	32	8.4	33.3
44 Venezuela	60.0	5	42	53	73	9	19	18	15	19	22.1	18.3
45 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..	..
47 Fiji	..	..	..	..	..	..	..	..	..	..	..	..
48 Mexico	343.5	8	28	63	75	9	22	16	..	..	8.8	14.6
49 Colombia	54.1	16	35	50	70	12	22	18	..	..	13.0	18.2
50 Qatar	..	..	..	..	..	..	..	..	..	..	..	..
51 Kuwait	22.4	(.)	55	45	37	32	23	30	1	55	45.8	31.4
52 Thailand	124.9	10	39	51	54	10	40	36	16	16	29.5	36.9
53 Malaysia	64.4	..	..	..	49	13	33	38	21	27	73.1	70.8
54 Mauritius	2.8	10	33	57	65	11	29	24	20	22	46.7	61.7
Medium human development	1,840T	15	39	47	63	14	27	26	14	21	17.6	19.1
Excluding China	1,420T	13	36	51	67	16	22	22	17	25	16.4	17.5
58 Brazil	444.2	11	37	52	79	..	19	21	19	26	8.7	5.7
59 Libyan Arab Jamahiriya	..	..	..	..	..	..	..	..	..	..	..	..
60 Seychelles	..	..	..	..	..	..	..	..	..	..	..	..
63 Saudi Arabia	121.5	7 ^{b,c}	52 ^{b,c}	41 ^{b,c}	40	33	24	27	..	..	33.6	23.2
64 Ecuador	14.4	12	38	50	71	8	21	22	16	15	20.1	17.8
65 Dominica	..	..	..	..	..	..	..	..	..	..	..	..
66 Iran, Islamic Rep. of	107.3 ^b	24 ^b	29 ^b	47 ^b	55	15	29	30	8	20	15.6	28.6
67 Belize	..	..	..	..	..	..	..	..	..	..	..	..
69 Algeria	39.8	13	43	43	54	17	29	28	..	..	25.7	19.5
70 Jordan	4.4	8	26	66	90	24	30	-13	28	36	27.7	79.7
71 Botswana	3.8	6	47	47	..	..	..	..	31	40	45.2	62.7
73 Saint Vincent	..	..	..	..	..	..	..	..	..	..	..	..
75 Suriname	..	..	..	..	..	..	..	..	..	..	..	..
76 Saint Lucia	..	..	..	..	..	..	..	..	..	..	..	..
77 Grenada	..	..	..	..	..	..	..	..	..	..	..	..
78 Tunisia	12.8	18	31	51	63	16	29	20	24	33	29.7	48.6
79 Cuba	..	..	..	..	..	..	..	..	..	..	..	..
82 Oman	11.7	3	53	44	34	39	17	27	10	64	46.5	35.2
83 Korea, Dem. People's Rep. of	..	..	..	..	..	..	..	..	..	..	..	..
84 Turkey	156.4	15	30	55	65	13	27	22	14	26	9.8	18.7
85 Paraguay	6.8	26	21	53	77	9	22	14	9	13	10.2	24.7
86 Jamaica	3.8	8	41	51	61	13	35	26	..	..	27.4	54.8
87 Dominican Rep.	9.5	15	23	62	77	5	22	18	..	..	5.8	22.3
88 Samoa (Western)	..	..	..	..	..	..	..	..	..	..	..	..
89 Sri Lanka	9.4	25	26	50	75	9	25	16	17	27	30.9	45.1
91 Peru	41.1	11	43	46	76	8	19	16	9	14	8.4	8.3
92 Syrian Arab Rep.	17.2 ^{b,c}	30 ^{b,c}	23 ^{b,c}	48 ^{b,c}	79 ^b	14 ^b	16 ^b	7 ^b	..	27 ^b	..	..
95 Philippines	54.1	22	33	45	76	9	24	16	15	18	20.5	34.7
97 Lebanon	..	..	..	..	..	..	..	..	..	..	..	..
100 South Africa	105.6	5	39	56	60	21	15	19	27	33	21.6	17.6
102 Indonesia	144.7	19	39	42	60	10	28	31	16	19	23.2	19.4
103 Guyana	..	..	..	..	..	..	..	..	..	..	..	..
106 Egypt	35.8	18	22	60	80	14	17	6	26	47	6.3	22.8
107 Maldives	..	..	..	..	..	..	..	..	..	..	..	..
108 China	425.6	19	48	33	51	9	41	40	4	9	21.6	24.2
109 Iraq	..	..	..	..	..	..	..	..	..	..	..	..
110 Swaziland	..	..	..	..	..	..	..	..	..	..	..	..
111 Bolivia	5.4	..	..	..	81	13	15	6	11	27	13.5	22.4
112 Guatemala	11.3	25	19	55	85	6	17	9	..	..	11.9	23.0
113 Mongolia	0.5	21	46	33	66	18	19	16	24	25	..	..

HDI rank	GDP (US\$ billions) 1993	Agriculture (as % of GDP) 1993	Industry (as % of GDP) 1993	Services (as % of GDP) 1993	Consumption		Gross domestic investment (as % of GDP) ^a 1993	Gross domestic savings (as % of GDP) ^a 1993	Tax revenue (as % of GNP) 1993	Central government expenditure (as % of GNP) 1993	Exports (as % of GDP) 1993	Imports (as % of GDP) 1993	
					Private (as % of GDP) 1993	Government (as % of GDP) 1993							
114	Honduras	2.9	20	30	50	70	12	27	19	..	..	28.4	36.9
115	El Salvador	7.6	9	25	66	88	10	17	2	11	7.3	25.2	
116	Namibia	2.1	10	27	63	63	33	10	4	31	..	..
117	Nicaragua	1.8	30	20	50	91	17	17	-8	28	40	14.8	40.4
118	Solomon Islands	..	..	..	..	..	..	..	..	..	..	..	..
119	Vanuatu	..	..	..	..	..	..	..	..	..	..	..	..
120	Gabon	5.4	8	45	47	48	16	22	36	23	34	42.4	15.4
121	Viet Nam	12.8	29	28	42	84	..	21	..	..	..	..	..
122	Cape Verde	..	..	..	..	..	..	..	..	..	..	..	..
123	Morocco	26.6	14	32	53	65	18	23	17	..	..	15.0	25.4
124	Zimbabwe	5.0	15	36	48	64	19	22	17	29	36	23.7	30.1
125	Congo	2.4	11	35	53	70	22	14	8	..	..	46.8	22.7
126	Papua New Guinea	5.1	26	43	31	51	21	20	29	22	36	35.2	25.5
Low human development Excluding India		420T 200T	35 39	24 21	40 40	70 75	13 15	21 17	18 10	12 13	20 27	13.5 18.0	15.9 22.6
127	Cameroon	11.1	29	25	47	73	12	15	15	11	18	16.4	10.0
128	Kenya	4.7	29	18	54	66	13	16	21	20	29	29.3	36.5
129	Ghana	6.1	48	16	36	90	12	15	-1	13	21	17.3	28.4
130	Lesotho	0.6	10	47	43	112	30	76	-42	23	32	17.9	153.2
131	Equatorial Guinea	..	..	..	..	..	..	..	..	..	..	..	..
132	São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..	..
133	Myanmar	..	63	9	28	89	..	12	11	5	12	..	..
134	Pakistan	46.4	25	25	50	74	14	21	12	13	24	14.3	20.5
135	India	225.4	31	27	41	66	11	24	24	11	17	9.6	10.1
136	Zambia	3.7	34	36	30	75	11	15	14	..	..	31.7	23.6
137	Nigeria	31.3	34	43	24	63	18	15	19	..	..	37.9	26.4
138	Lao People's Dem. Rep.	1.3	51	18	31	..	..	..	..	..	..	6.0	26.5
139	Comoros	..	..	..	..	..	..	..	..	..	..	..	..
140	Togo	1.2	49	18	33	86	17	6	-2	..	..	25.8	33.5
141	Zaire	..	..	..	..	..	..	..	..	..	..	..	..
142	Yemen	12.0	21	24	55	68	29	20	3	17	51	5.4	20.1
143	Bangladesh	24.0	30	18	52	79	14	14	8	..	..	9.5	16.7
144	Tanzania, U. Rep. of	2.1	56	14	30	82	9	51	10	..	..	20.1	73.0
145	Haiti	..	..	..	..	..	..	..	..	..	..	..	..
146	Sudan	..	34 ^b	17 ^b	50 ^b	..	..	..	..	..	..	..	..
147	Côte d'Ivoire	8.1	37	24	39	63	20	9	16	..	..	35.6	20.6
148	Central African Rep.	1.2	50	14	36	89	10	9	1	..	..	10.6	14.1
149	Mauritania	0.9	28	30	42	79	10	24	11	..	..	52.4	78.0
150	Madagascar	3.1	34	14	52	91	7	12	2	7	16	8.5	14.5
151	Nepal	3.6	43	21	36	80	9	21	11	8	19	11.0	24.8
152	Rwanda	1.4	41	21	38	87	22	15	-10	12	32	5.0	21.2
153	Senegal	5.8	20	19	61	80	12	14	7	..	..	12.8	21.9
154	Benin	2.1	36	13	51	85	11	15	3	..	..	5.4	16.9
155	Uganda	3.0	53	12	35	89	14	15	-2	..	..	5.9	17.0
156	Cambodia	..	..	..	..	..	..	..	..	..	..	..	..
157	Malawi	1.8	39	18	43	81	17	12	2	..	..	17.7	30.2
158	Liberia	..	..	..	..	..	..	..	..	..	..	..	..
159	Bhutan	0.2 ^b	42 ^b	27 ^b	31 ^b	..	..	..	..	..	..	..	..
160	Guinea	3.2	24	31	45	84	7	16	9	13	22	13.9	18.9
161	Guinea-Bissau	0.2	45	19	36	93	7	26	..	..	..	6.6	25.7
162	Gambia	0.3	28	15	58	74	18	20	8	..	..	26.4	77.2
163	Chad	1.1	44	22	35	93	17	9	-10	7	32	15.5	26.5
164	Djibouti	..	..	..	..	..	..	..	..	..	..	..	..
165	Angola	..	..	..	..	..	..	..	..	..	..	..	..
166	Burundi	0.9	52	21	27	90	13	18	-3	..	..	7.9	24.8
167	Mozambique	1.4	33	12	55	94	17	41	-11	..	..	9.7	69.9
168	Ethiopia	5.8	60	10	29	86	11	12	3	..	..	3.5	13.7
169	Afghanistan	..	..	..	..	..	..	..	..	..	..	..	..
170	Burkina Faso	2.7	44 ^b	20 ^b	37 ^b	81	17	22	2	..	..	5.4	23.8
171	Mali	2.7	42	15	42	81	13	22	7	..	..	12.9	17.9
172	Somalia	0.9 ^b	65 ^b	9 ^b	26 ^b	..	..	..	..	..	..	..	..
173	Sierra Leone	0.7	38 ^b	16 ^b	46 ^b	84	11	9	5	15	23	17.9	22.3
174	Niger	2.2	39	18	44	82	17	6	1	..	..	12.8	14.9
All developing countries		3,780T	15	35	50	65	13	26	26	14	21	23.0	25.3
Least developed countries		80T	48	15	37	81	15	17	5	13	36	10.8	23.0
Sub-Saharan Africa		240T	19	33	48	67	18	16	15	24	31	23.8	22.5
Industrial countries		19,150T	3	37	60	62	17	21	21	26	34	14.1	14.0
World		22,930T	6	36	58	63	16	21	22	24	31	15.5	15.8

Note: The percentage shares of agriculture, industry and services do not necessarily add to 100 because of rounding.

a. Includes public and private investment.

b. Data refer to a year other than that specified in the column heading.

c. GDP and its components are at purchaser values.

Source: Columns 1-8 and 10: World Bank 1995f; columns 9, 11 and 12: calculated on the basis of data from World Bank 1995f.

25 Trends in economic performance

HDI rank	GNP (US\$ billions) 1993	GNP annual growth rate (%) 1980-93	GNP per capita annual growth rate (%)		Average annual rate of inflation (%)		Exports as % of GDP (% annual growth rate) 1980-93	Tax revenue as % of GNP (% annual growth rate) 1980-92	Overall budget surplus/deficit (as % of GNP)	
			1965-80	1980-93	1980-93	1993			1980	1993
High human development	1,560T	4.4	4.1	2.5	78.6	9.7	3.5	-0.3	0.9	..
22 Hong Kong	110.3	..	6.2	5.4	7.9	8.8	7.0	..	..	..
23 Cyprus	7.5	5.7	..	4.9	5.2	2.9	1.4	..	..	..
25 Barbados	1.6	-0.1	3.5	0.5	4.3	1.9	..	..	..	..
26 Bahamas	3.1	2.3	1.0	1.4	4.2	-1.8	..	..	..	..
29 Korea, Rep. of	337.9	8.7	7.3	8.2	6.3	4.6	2.3	0.2	-2.3	0.6
30 Argentina	245.5	1.0	1.7	-0.5	374.3	7.2	2.5	..	-2.6	..
31 Costa Rica	7.0	3.3	3.3	1.1	22.1	11.6	4.3	1.4	-7.8	-0.2
32 Uruguay	12.5	-0.4	2.5	-0.1	66.7	45.2	4.1	2.2	..	0.6
33 Chile	43.8	4.6	(.)	3.6	20.1	12.1	2.2	-1.8	5.6	2.1
34 Singapore	56.2	7.6	8.3	6.1	2.5	4.0	2.9	0.3	2.2	12.6
36 Brunei Darussalam	..	..	..	..	-5.1	..	..	..	..	..
38 Trinidad and Tobago	4.9	-0.8	3.1	-2.8	4.8	9.9	9.7	..	7.6	..
39 Bahrain	4.3	0.8	..	-2.9	-0.3	-1.1	..	..	..	..
40 Antigua and Barbuda	0.4	5.4	-1.4	5.2	5.9	1.5	..	..	..	..
42 United Arab Emirates	38.7	0.2	0.6	-4.4	..	..	..	..	2.0	-0.2
43 Panama	6.6	2.5	2.8	-0.7	2.1	3.5	0.5	0.6	-5.7	4.4
44 Venezuela	59.3	1.6	2.3	-0.7	23.9	32.4	1.0	-2.1	..	-3.0
45 Saint Kitts and Nevis	0.2	4.7	4.0	5.4	6.3	2.3	..	..	..	..
47 Fiji	1.7	1.8	4.2	0.5	5.6	8.8	..	..	..	..
48 Mexico	335.8	1.9	3.6	-0.5	57.9	9.7	4.4	-0.8	-3.1	..
49 Colombia	49.5	3.2	3.7	1.5	24.9	21.9	2.8	..	-1.8	..
50 Qatar	7.9	-1.4	..	-7.2	..	..	..	..	..	..
51 Kuwait	35.7	-0.1	0.6	-4.3	..	..	..	..	50.2	-26.1
52 Thailand	122.7	7.9	4.4	6.4	4.3	3.4	5.4	1.7	-4.9	2.1
53 Malaysia	59.9	6.4	4.7	3.5	2.2	1.8	4.2	-0.9	-6.2	1.7
54 Mauritius	3.3	5.9	3.7	5.5	8.8	9.0	1.6	1.2	-10.4	..
Medium human development	1,810T	4.9	3.9	5.5	114.6	539.3	3.7	..	..	..
Excluding China	1,230T	3.0	3.7	1.4	140.3	673.9	3.9	-0.2	-5.2	-2.2
58 Brazil	458.0	1.6	6.3	0.3	423.4	2,207.9	5.7	-1.3	-2.6	-1.0
59 Libyan Arab Jamahiriya	..	..	0.6	..	0.2	..	..	..	..	..
60 Seychelles	0.5	3.9	4.6	3.4	3.2	-0.1	..	..	..	..
63 Saudi Arabia	..	..	0.6	-3.6	-2.1	..	..	..	..	..
64 Ecuador	13.2	2.6	5.4	..	40.4	38.4	3.3	2.7	-1.5	0.5
65 Dominica	0.2	4.6	-0.8	4.6	5.5	1.6	..	..	..	..
66 Iran, Islamic Rep. of	..	3.3	2.9	..	17.1	37.5	6.8	1.0	-13.7	-1.4
67 Belize	0.5	4.9	3.4	2.9	3.4	5.2	4.5	..	..	..
69 Algeria	47.4	2.0	4.2	-0.8	13.2	13.9	1.2	..	..	..
70 Jordan	5.3	..	5.8	..	..	4.9	..	..	..	6.0
71 Botswana	3.9	9.5	9.9	6.2	12.3	9.0	..	1.1	-0.2	11.2
73 Saint Vincent	0.2	6.0	0.2	5.0	4.6	-0.7	..	..	..	..
75 Suriname	0.4	8.7	5.5	-2.0	11.8	136.3	..	..	..	..
76 Saint Lucia	0.5	..	2.7	4.4	3.5	0	..	..	..	..
77 Grenada	0.2	..	0.1	3.8	4.6	1.6	..	..	..	..
78 Tunisia	15.0	3.8	4.7	1.2	7.1	4.5	0.9	-0.4	-2.9	-2.6
79 Cuba	..	..	0.6	..	..	..	..	..	..	..
82 Oman	10.6	9.3	9.0	3.4	-2.3	-7.1	..	-3.0	0.5	-17.4
83 Korea, Dem. People's Rep. of	..	..	0.6	..	..	..	..	..	..	..
84 Turkey	177.1	5.5	3.6	2.4	53.5	67.7	9.7	0.4	-3.8	-7.0
85 Paraguay	7.1	2.6	4.1	-0.7	25.0	18.7	5.4	-0.5	0.3	1.2
86 Jamaica	3.5	1.4	-0.1	-0.3	22.4	34.6	1.0	..	-17.1	..
87 Dominican Rep.	9.3	3.0	3.8	0.7	25.0	4.2	1.8	(.)	-2.7	..
88 Samoa (Western)	0.2	..	..	..	11.2	..	..	..	..	..
89 Sri Lanka	10.7	4.6	2.8	2.7	11.1	8.2	1.3	-0.5	-18.4	-6.4
91 Peru	34.0	0.1	0.8	-2.7	316.1	46.5	0.1	-4.9	-2.5	-1.8
92 Syrian Arab Rep.	..	..	5.1	..	15.5	..	..	5.5	..	..
95 Philippines	55.2	1.7	3.2	-0.6	13.6	6.8	2.5	1.6	-1.4	-1.5
97 Lebanon	..	..	0.6	..	..	..	..	..	..	..
100 South Africa	118.2	1.1	3.2	-0.2	14.7	11.3	0.8	2.0	-2.5	-4.4
102 Indonesia	140.2	6.0	5.2	4.2	8.5	19.3	-1.9	-1.2	-2.3	0.7
103 Guyana	0.4	-1.8	0.7	-3.0	34.5	16.8	0.1	..	..	..
106 Egypt	37.2	4.6	2.8	2.8	13.6	10.4	0.5	..	-12.5	-4.1
107 Maldives	0.2	..	1.8	7.2	10.0	14.9	..	..	..	..
108 China	577.4	9.6	4.1	8.2	7.0	12.3	2.9	..	..	-2.3
109 Iraq	..	..	0.6	..	..	..	..	..	..	..
110 Swaziland	1.0	4.1	3.7	2.3	13.3	11.7	..	..	..	..
111 Bolivia	5.4	1.3	1.7	-0.7	187.1	7.6	2.9	..	..	-2.1
112 Guatemala	11.0	1.5	3.0	-1.2	16.8	13.8	-2.3	..	-3.9	..
113 Mongolia	0.7	2.3	0.6	0.2	13.8	332.4	-6.6	..	..	-2.0

HDI rank	GNP (US\$ billions) 1993	GNP annual growth rate (%) 1980-93	GNP per capita annual growth rate (%)		Average annual rate of inflation (%)		Exports as % of GNP (% annual growth rate) 1980-93	Tax revenue as % of GNP (% annual growth rate) 1980-92	Overall budget surplus/deficit (as % of GNP)	
			1965-80	1980-93	1980-93	1993			1980	1993
114 Honduras	3.2	2.7	1.1	-0.3	8.2	8.9	-1.8	..	..	..
115 El Salvador	7.3	1.3	1.5	0.2	17.0	14.1	-0.4	-1.7	-5.9	-0.8
116 Namibia	2.8	1.7	0.6	0.7	11.9	7.4	..	..	..	-4.8
117 Nicaragua	1.4	-2.1	-0.7	-5.7	664.6	20.2	1.7	-1.6	-7.3	0.5
118 Solomon Islands	0.3	6.6	5.0	2.6	12.1	..	..	..	..	..
119 Vanuatu	0.2	..	..	0.5	5.3	0.5	..	..	..	..
120 Gabon	5.0	0.1	5.6	-1.6	1.5	1.0	2.3	-1.3	6.8	-1.8
121 Viet Nam	12.1	..	0.6	..	..	14.3	..	..	..	..
122 Cape Verde	0.3	4.9	..	3.0	8.7	5.9	-1.1	..	..	..
123 Morocco	26.6	2.9	2.7	1.2	6.6	3.8	1.5	1.0	-10.0	..
124 Zimbabwe	5.6	3.1	1.7	-0.3	14.4	36.2	0.6	3.0	-11.1	-7.0
125 Congo	2.4	4.0	2.7	-0.3	-0.6	-4.3	1.4	..	-5.8	..
126 Papua New Guinea	4.9	3.7	0.6	0.6	4.8	3.2	2.7	-0.1	-2.0	-6.4
Low human development Excluding India	470T 200T	4.4 3.2	1.3 1.1	2.1 0.8	11.4 15.2	11.1 15.5	2.0 1.2	..	..	..
127 Cameroon	10.3	1.1	2.4	-2.2	4.0	1.1	4.7	-1.9	0.5	-2.0
128 Kenya	6.6	..	3.1	0.3	9.9	24.5	2.5	1.4	-4.6	-3.8
129 Ghana	7.0	2.7	-0.8	0.1	37.0	25.2	0.9	..	-4.2	-2.5
130 Lesotho	1.3	2.7	6.8	-0.5	13.8	10.6	-1.0	4.1	-3.7	-0.3
131 Equatorial Guinea	0.2	..	..	1.2	-0.6	-1.5	..	..	..	..
132 São Tomé and Príncipe	(.)	-2.6	3.3	-3.6	24.0	20.1	1.4	..	..	..
133 Myanmar	..	2.1	1.6	..	16.5	29.2	4.0	-4.1	1.2	-3.1
134 Pakistan	54.0	6.1	1.8	3.1	7.4	8.6	3.5	-0.8	-5.8	-7.4
135 India	263.0	5.0	1.5	3.0	8.7	8.1	2.4	1.1	-6.5	-4.8
136 Zambia	3.3	1.0	-1.2	-3.1	58.9	180.0	-0.4	..	-20.0	..
137 Nigeria	29.0	1.8	4.2	-0.1	20.6	24.9	-3.2	..	..	..
138 Lao People's Dem. Rep.	1.3	..	0.6	..	..	6.3	..	..	..	..
139 Comoros	0.3	2.5	0.6	-0.4	5.2	1.4	9.5	..	..	..
140 Togo	1.4	-0.5	1.7	-2.1	3.7	-2.8	-3.3	..	-2.0	..
141 Zaire	..	..	-1.3	..	..	..	..	..	..	..
142 Yemen	3.7	..	5.1	..	..	..	..	..	..	-20.6
143 Bangladesh	25.6	4.5	-0.3	2.1	8.6	0.2	3.9	..	2.5	..
144 Tanzania, U. Rep. of	2.5	2.7	0.8	0.1	24.3	22.5	..	..	-8.4	..
145 Haiti	1.9	-1.9	0.9	..	9.5	19.6	-0.5	..	..	..
146 Sudan	..	..	0.8	..	42.8	..	..	..	..	..
147 Côte d'Ivoire	8.4	-1.0	2.8	-4.6	1.5	-0.4	0.3	1.1	-11.4	..
148 Central African Rep.	1.3	0.3	0.8	-1.6	4.2	1.5	-3.5	..	-3.5	..
149 Mauritania	1.1	1.8	-0.1	-0.8	8.2	4.9	0.6	..	..	..
150 Madagascar	3.0	-0.1	-0.4	-2.6	16.1	13.0	-1.4	-4.7	..	-5.9
151 Nepal	4.0	4.6	(.)	2.0	11.5	10.3	..	1.7	-3.0	-6.3
152 Rwanda	1.6	1.4	1.6	-1.2	3.4	9.7	0.4	0.8	-1.7	-9.1
153 Senegal	5.7	2.3	-0.5	..	4.9	0.4	0.4	..	0.9	..
154 Benin	2.2	3.0	-0.3	-0.4	1.4	1.6	-4.6	..	..	..
155 Uganda	3.4	..	-2.2	..	..	30.7	..	..	-3.1	..
156 Cambodia	..	..	0.6	..	..	108.3	..	..	..	..
157 Malawi	2.1	2.9	3.2	-1.2	15.5	21.8	-1.7	..	-17.3	..
158 Liberia	..	..	0.5	..	..	..	..	..	..	..
159 Bhutan	0.3	7.6	0.6	..	8.1	9.7	..	-2.6	..	..
160 Guinea	3.2	..	1.3	..	..	8.1	..	..	..	-3.3
161 Guinea-Bissau	0.2	4.6	-2.7	2.8	58.7	53.5	-10.3	..	..	..
162 Gambia	0.4	4.0	2.3	-0.2	16.2	-1.5	-0.3	..	-4.7	..
163 Chad	1.3	5.0	-1.9	3.2	0.7	0.6	-4.6	..	..	-7.5
164 Djibouti	0.4	..	..	..	3.6	3.0	..	..	..	..
165 Angola	..	..	0.6	..	..	..	..	..	..	..
166 Burundi	1.1	3.6	2.4	0.9	4.6	7.7	1.3	..	-3.9	..
167 Mozambique	1.4	-0.2	0.6	-1.5	42.3	46.5	-2.6	..	..	..
168 Ethiopia	8.8	..	0.4	..	..	13.3	..	..	..	..
169 Afghanistan	..	..	0.6	..	..	..	..	..	..	..
170 Burkina Faso	2.9	3.4	1.7	0.8	3.3	2.0	-1.5	..	0.3	..
171 Mali	2.7	1.5	2.1	-1.0	4.4	3.0	3.6	..	-4.7	..
172 Somalia	..	..	-0.1	..	49.7	..	..	..	..	..
173 Sierra Leone	0.7	0.6	0.7	-1.5	61.6	32.9	-6.6	-1.3	-13.2	-5.0
174 Niger	2.3	-1.4	-2.5	-4.1	1.3	-0.1	-4.1	..	-4.8	..
All developing countries	3,840T	4.6	2.9	3.9	86.0	289.3	3.3	..	..	..
Least developed countries	80T	2.7	0.4	0.5	19.8	18.8	1.4	..	..	..
Sub-Saharan Africa	250T	1.5	1.5	-0.6	13.9	15.1	0.3	..	..	..
Industrial countries	19,740T	2.4	3.1	1.2	6.3	70.6	2.1	..	..	-4.4
World	23,580T	2.8	3.0	3.3	18.5	103.3	2.3	..	..	..

Source: Column 1: calculated on the basis of estimates from World Bank 1995d and UN 1995e; columns 2-6: World Bank 1995e; columns 7 and 8: calculated on the basis of estimates from World Bank 1995f; columns 9 and 10: World Bank 1995f.

HDI rank	Life expectancy at birth (years) 1993	Maternal mortality rate (per 100,000 live births) 1993	Population per doctor 1993	R & D scientists and technicians (per 1,000 people) 1988-92	Combined first-, second- and third-level gross enrolment ratio (%) 1993	Tertiary full-time equivalent gross enrolment ratio		Daily newspapers (copies per 100 people) 1992	Televisions (per 100 people) 1992	Real GDP per capita (PPP\$) 1993	GNP per capita (US\$) 1993
						Total (%) 1991	Female (%) 1991				
High human development	75.3	22	342	5	84	45	46	30	55	17,182	18,874
1 Canada	77.5	6	446	3	100 ^a	66	71	22	64	20,950	19,970
2 USA	76.1	12	..	..	96	66	72	24	82	24,680	24,740
3 Japan	79.6	18	..	7	78	39	41	58	61	20,660	31,490
4 Netherlands	77.5	12	398	4 ^b	89	35	33	30	49	17,340	20,950
5 Norway	77.0	6	309	5 ^b	90	62	67	61	42	20,370	25,970
6 Finland	75.8	11	405	4 ^b	96	58	67	52	51	16,320	19,300
7 France	77.0	15	333	5	88	39	42	21	41	19,140	22,490
8 Iceland	78.2	0	..	5	82	..	..	52	32	18,640	24,950
9 Sweden	78.3	7	395	6 ^b	80	47	55	51	47	17,900	24,740
10 Spain	77.7	7	262	1	87	31	33	11	40	13,660	13,590
11 Australia	77.8	9	..	..	79	40	43	26	48	18,530	17,500
12 Belgium	76.5	10	298	4 ^b	85	32	35	31	45	19,540	21,650
13 Austria	76.3	10	..	2	85	29	27	40	48	19,115 ^c	23,510
14 New Zealand	75.6	25	521	2 ^d	89	39	38	30	44	16,720	12,600
15 Switzerland	78.1	6	585	4	75	28	20	39	41	22,720	35,760
16 United Kingdom	76.3	9	..	..	83	26	26	38	44	17,230	18,060
17 Denmark	75.3	9	360	5 ^b	87	32	34	33	54	20,200	26,730
18 Germany	76.1	22	..	..	79	22	24	33	56	18,840	23,560
19 Ireland	75.4	10	633	2	84	..	24	19	30	15,120	13,000
20 Italy	77.6	12	211	2	70	..	19	11	42	18,160	19,840
21 Greece	77.7	10	313	..	78	..	..	14	20	8,950	7,390
24 Israel	76.6	7	..	..	76	..	..	24	27	15,130	13,920
27 Luxembourg	75.8	0	..	..	57	..	..	38	27	25,390	37,320
28 Malta	76.2	0	..	(.)	76	..	..	15	74	11,570	7,970
35 Portugal	74.7	15	352	1	79	20	24	5	19	10,720	9,130
37 Czech Rep.	71.3	15	..	3	67	12	12	..	..	8,430 ^e	2,710
41 Slovakia	70.9	..	..	..	71	..	..	..	..	5,620 ^e	1,950
46 Hungary	69.0	30	312	2	67	16	16	28	41	6,059 ^e	3,350
55 Latvia	69.0	40	..	..	72	..	..	19	45	5,010	2,010
56 Poland	71.1	19	467	2	76	..	..	16	30	4,702 ^e	2,260
57 Russian Federation	67.4	75	..	7	79	..	..	..	37	4,760 ^e	2,340
Medium human development	69.8	65	351	..	71	..	..	23	21	3,150	1,511
61 Belarus	69.7	37	282	4	79	..	..	..	..	4,244 ^e	2,870
62 Bulgaria	71.2	27	315	5	65	..	..	16	26	4,320 ^e	1,140
68 Estonia	69.2	41	..	..	78	..	..	..	35	3,610 ^e	3,080
72 Kazakhstan	69.7	80	..	..	65	..	..	..	..	3,710	1,560
74 Romania	69.9	130	552	2	62	..	..	32	20	3,727 ^e	1,140
80 Ukraine	69.3	50	259	..	76	..	..	..	..	..	2,210
81 Lithuania	70.3	36	..	..	72	..	..	22	38	3,110	1,320
90 Turkmenistan	65.1	55	..	..	..	..	..	..	..	..	..
93 Armenia	72.8	50	..	..	78	..	..	..	..	2,040	660
94 Uzbekistan	69.4	55	..	2	73	..	..	..	..	2,510	970
96 Azerbaijan	70.7	22	..	..	72	..	..	..	..	2,190	730
98 Moldova, Rep. of	67.6	60	..	..	76	..	..	5	4	2,370 ^e	1,060
99 Kyrgyzstan	69.2	110	..	..	70	..	..	..	..	2,320	850
101 Georgia	72.9	33	..	..	68	..	..	..	..	1,750	580
104 Albania	72.0	65	730	..	59	..	..	5	9	..	340
105 Tajikistan	70.4	130	..	..	69	..	..	..	..	1,380	470
All developing countries	63.3	384	5,767	1	55	..	..	5	6	2,703	970
Industrial countries	74.5	28	344	5	82	..	..	29	53	15,211	16,394
World	64.8	307	4,968	..	60	..	..	11	16	5,545	4,570
North America	76.2	11	446	..	96	66	72	24	80	24,305	24,261
Eastern Europe and CIS	69.0	62	378	..	74	..	..	21	33	4,192	1,992
Western and Southern Europe	76.9	14	309	3	82	30	30	24	45	17,554	20,551
OECD	75.8	33	496	3	81	46	47	27	53	18,152	20,169
European Union	76.8	13	301	3	82	30	30	25	45	17,377	19,815
Nordic countries	76.9	8	373	5	87	49	55	49	48	18,526	24,233

a. Capped at 100.

b. Includes auxiliary personnel.

c. Preliminary results of the European Comparison Programme, conducted by the United Nations Economic Commission for Europe, the OECD, Eurostat and the Austrian Statistical Office. See United Nations Economic Commission for Europe 1996.

d. Provisional or estimated data.

e. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991.

Source: Column 1: calculated on the basis of data from UN 1995e; column 2: WHO and UNICEF 1996; column 3: calculated on the basis of estimates from WHO 1994 and UN 1995e; column 4: calculated on the basis of data from UNESCO 1994b and UN 1995e; column 5: UNESCO 1995d; columns 6 and 7: UNESCO 1993b; columns 8 and 9: calculated on the basis of estimates from UNESCO 1994b; column 10: calculated on the basis of estimates from World Bank 1995h; column 11: World Bank 1995f.

HDI rank	Unemployment rate (%) 1993	Youth unemployment rate (%)		Adults with less than upper-secondary education (as % of age 15-64) 1991	Ratio of income of highest 20% of households to lowest 20% 1981-91	Average annual rate of inflation (%)		Injuries and deaths from road accidents (per 100,000 people) 1990-93
		Male (age 15-24) 1991-93	Female (age 15-24) 1991-93			1980-93	1993	
High human development	7.4	16.4	17.2	34	..	5.7	33.6	901
1 Canada	11.2	20.2	14.9	24	7.1	3.9	1.1	..
2 USA	6.8	14.3	12.2	17	8.9	3.8	2.0	2,367
3 Japan	2.5	4.9	5.3	33	4.3	1.5	0.8	..
4 Netherlands	6.5	9.7	9.7	44	4.5	1.7	1.6	73
5 Norway	6.0	12.7	10.4	21	5.9	4.6	1.0	201
6 Finland	17.9	31.4	29.3	40	6.0	5.8	2.3	122
7 France	11.7	21.5	28.4	49	7.5	5.1	2.2	239
8 Iceland	5.3	..	..	..	..	25.4	2.9	381
9 Sweden	8.2	21.6	14.9	33	4.6	6.9	2.6	159
10 Spain	22.7	39.9	47.4	78	4.4	8.4	4.4	202
11 Australia	10.9	20.2	16.8	44	9.6	6.1	1.1	..
12 Belgium	12.0	17.4	19.6	57	4.6	4.0	4.4	547
13 Austria	4.2	4.0	3.0	33	..	3.6	3.6	531
14 New Zealand	9.5	18.4	15.9	..	8.8	8.5	0.9	..
15 Switzerland	4.5	6.9	6.7	19	8.6	3.8	2.1	324
16 United Kingdom	10.2	20.8	13.2	35	9.6	5.6	3.4	395
17 Denmark	12.4	14.4	14.7	39	7.1	4.6	1.2	165
18 Germany	8.9	8.1	8.3	18	5.8	2.8	3.9	477
19 Ireland	15.6	27.0	23.0	60	..	4.8	3.6	181
20 Italy	10.3	26.7	35.6	72	6.0	8.8	4.4	299
21 Greece	9.7	20.1 ^a	38.8 ^a	..	..	17.3	12.6	214
24 Israel	10.0	21.0	25.0	..	6.6	70.4	11.0	..
27 Luxembourg	2.1	5.0	3.8	..	..	5.0	6.2	1,180
28 Malta	4.5	..	..	..	..	2.3	3.3	2,868
35 Portugal	5.6	9.8	14.9	93	..	16.4	7.4	517
37 Czech Rep.	3.5	..	..	27	..	..	15.6	244
41 Slovakia	12.7	..	..	..	..	..	15.2	..
46 Hungary	12.1	..	..	..	3.2	12.8	21.5	191
55 Latvia	5.8	..	..	..	..	23.8	74.2	130
56 Poland	16.4	25.0 ^a	32.0 ^a	..	3.9	69.3	31.1	128
57 Russian Federation	1.1 ^b	..	..	..	11.4	35.4	873.5	121
Medium human development	6.2	..	..	..	..	30.5	1,824.0	80
61 Belarus	1.4 ^b	..	..	..	..	30.9	1,428.7	72
62 Bulgaria	16.4 ^b	..	..	..	4.7	15.9	57.5	83
68 Estonia	1.9 ^b	..	..	..	..	29.8	81.2	85
72 Kazakhstan	1.0 ^b	..	..	..	..	35.2	1,255.5	93
74 Romania	10.6 ^b	..	..	..	..	22.4	225.9	..
80 Ukraine	..	..	..	..	..	37.2	3,691.2	79
81 Lithuania	1.6 ^b	..	..	..	..	35.2	342.7	116
90 Turkmenistan	..	..	..	..	..	16.5	..	..
93 Armenia	6.2 ^b	..	..	..	..	26.9	1,480.7	26
94 Uzbekistan	..	..	..	..	..	24.5	914.5	..
96 Azerbaijan	..	..	..	..	..	28.2	714.5	..
98 Moldova, Rep. of	0.7 ^b	..	..	..	..	32.4	..	55
99 Kyrgyzstan	0.2 ^b	..	..	..	22.8	28.6	792.2	..
101 Georgia	2.0 ^b	..	..	..	..	40.7	..	..
104 Albania	19.5 ^b	..	..	..	..	5.6	105.7	..
105 Tajikistan	..	..	..	..	..	26.0	1,251.7	..
All developing countries	..	..	..	..	..	86.0	289.3	360
Industrial countries	7.4	16.4	17.2	..	..	6.3	70.6	814
World	..	..	..	..	..	18.5	103.3	787
North America	7.3	14.9	12.5	18	..	3.8	1.9	2,367
Eastern Europe and CIS	5.1	..	..	..	..	35.5	1,025.4	115
Western and Southern Europe	11.0	20.3	25.0	46	..	5.4	3.4	321
OECD	8.2	15.9	16.4	34	..	5.0	2.8	1,084
European Union	11.1	20.7	23.7	47	..	5.5	3.5	331
Nordic countries	10.8	20.1	16.9	34	..	5.9	1.9	162

a. ILO 1995e.

b. Official unemployment rate. Registered unemployment only. United Nations Economic Commission for Europe 1995b.

Source: Columns 1, 2 and 3: OECD 1995d; column 4: UNDP 1994a; column 5: calculated on the basis of data from World Bank 1994c; column 6: World Bank 1995f; column 7: calculated on the basis of data from World Bank 1995e; column 8: United Nations Economic Commission for Europe 1995a.

HDI rank	Prisoners (per 100,000 people)		Homicides in selected cities (per 100,000 people)		Drug crimes (per 100,000 people) 1980-86	Total number of reported adult rapes (thousands) 1986	Suicides (per 100,000 people)	
	1987	1993	City	1990			Male 1989-93	Female 1989-93
High human development	..	..	..	..	..	129.1	28	8
1 Canada	..	45	Toronto	6.1	225	20.5	21	6
2 USA	..	..	..	..	234	90.4	20	5
3 Japan	..	..	Tokyo	1.6	31	1.8	22	11
4 Netherlands	37	51	Amsterdam	38.0	38	1.2	14	7
5 Norway	46	60	Oslo	9.3	116	0.3	21	8
6 Finland	..	62	Helsinki	15.3	..	0.3	45	11
7 France	89	86	..	..	..	2.9	30	11
8 Iceland	28	39	..	..	..	..	..	..
9 Sweden	51	66	Stockholm	15.9	..	1.0	22	10
10 Spain	70	115	Madrid	2.7	15	1.5	11	4
11 Australia	..	..	..	..	403	2.3	21	5
12 Belgium	67	72	..	..	40	..	..	..
13 Austria	98	91	Vienna	5.0	77	0.5	32	11
14 New Zealand	..	..	..	..	..	0.5	24	6
15 Switzerland	..	81	..	..	129	0.4	30	11
16 United Kingdom	96	92	London	2.5	..	..	..	..
17 Denmark	62	71	Copenhagen	10.5	176	0.6	29	16
18 Germany ^a	85	81	West Berlin	6.8	..	..	23	9
19 Ireland	55	60	..	..	..	(.)	17	3
20 Italy	61	89	..	..	6	0.7	12	4
21 Greece	41	68	..	..	..	0.6	6	2
24 Israel	..	..	Jerusalem	3.1	25	0.4	11	4
27 Luxembourg	96	108	..	..	..	..	..	..
28 Malta	15	..	..	..	..	(.)	..	..
35 Portugal	84	111	Lisbon	(.)	13	0.2	12	4
37 Czech Rep.	..	165	..	..	..	..	28	10
41 Slovakia	..	136	..	..	..	..	..	..
46 Hungary	..	132	Budapest	2.7	..	1.1	55	18
55 Latvia	..	..	Riga	12.1	..	..	72	17
56 Poland	..	160	..	..	..	1.9	25	5
57 Russian Federation	..	..	..	..	..	..	66	13
Medium human development	..	..	..	..	..	0.7	31	8
61 Belarus	..	..	..	..	..	..	49	10
62 Bulgaria	..	99	..	..	..	0.7	25	10
68 Estonia	..	..	..	..	..	..	65	15
72 Kazakhstan	..	..	..	..	..	..	38	9
74 Romania	..	200	..	..	..	..	..	..
80 Ukraine	..	..	Kiev	4.0	..	..	38	9
81 Lithuania	..	275	..	..	..	..	74	14
90 Turkmenistan	..	..	..	..	..	..	..	..
93 Armenia	..	..	..	..	..	..	4	1
94 Uzbekistan	..	..	..	..	..	..	9	3
96 Azerbaijan	..	..	..	..	..	..	..	..
98 Moldova, Rep. of	..	..	..	..	..	..	..	..
99 Kyrgyzstan	..	..	..	..	..	..	..	..
101 Georgia	..	..	..	..	..	..	..	..
104 Albania	..	..	..	..	..	..	2	1
105 Tajikistan	..	..	..	..	..	..	5	2
All developing countries	..	..	..	..	..	..	..	..
Industrial countries	..	..	..	..	..	129.8	29	8
World	..	..	..	..	..	..	..	..
North America	..	..	..	..	233	110.9	20	5
Eastern Europe and CIS	..	..	..	..	..	..	47	10
Western and Southern Europe	73	85	..	..	..	10.2	20	8
OECD	80	79	..	..	142	125.7	21	7
European Union	77	87	..	7.7	..	9.5	20	7
Nordic countries	53	65	..	13.3	..	2.2	28	11

a. Data refer to the former Federal Republic of Germany.

Source: Columns 1 and 2: United Nations Economic Commission for Europe 1995b; column 4: UNCSDDHA 1995; column 5: UNDP 1994a; column 6: UN 1994b and UNCSDDHA 1995; columns 7 and 8: WHO 1994.

HDI rank	Adults who smoke (%)		Alcohol consumption per capita (litres) 1991	Likelihood of dying after age 65 of				AIDS cases (per 100,000 people) ^a 1994	People with disabilities (as % of total population) 1985-92	Health bills paid by public insurance (%) 1991	Public expenditure on health (as % of total public expenditure) 1989-91	Private expenditure on health (as % of total health expenditure) 1989-91	Total expenditure on health (as % of GDP)	
	Male 1986-94	Female 1986-94		Heart disease (per 1,000 people)		Cancer (per 1,000 people)							1960	1991
				Male 1990-93	Female 1990-93	Male 1990-93	Female 1990-93							
High human development	44	23	8.1	314	306	230	151	9.5	..	77	16.3	34.4	3.8	6.0
1 Canada	31 ^b	28 ^b	7.1	..	..	..	..	4.6	15.5	82	14.6	27.8	5.3	9.9
2 USA	30	24	7.0	..	..	..	..	22.7	12.0	61	14.8	56.1	5.3	13.3
3 Japan	66	14	6.3	213	264	247	157	0.2	2.3	87	30.7	28.0	3.0	6.8
4 Netherlands	41 ^b	33 ^b	8.2	279	285	291	191	3.0	11.5	71	10.4	26.9	4.0	8.7
5 Norway	42 ^b	32 ^b	4.1	340	314	222	160	1.7	..	..	13.0	3.4	3.2	8.4
6 Finland	35 ^b	17 ^b	7.4	366	351	212	151	0.9	17.0	82	14.7	19.1	3.8	8.9
7 France	49 ^b	26 ^b	11.9	220	244	289	179	9.3	..	75	13.2	26.1	4.3	9.1
8 Iceland	..	..	3.9	..	..	..	..	1.1	..	93	19.3	13.0	3.4	8.3
9 Sweden	26	30	5.5	388	357	209	165	2.2	12.0	94	11.1	22.0	4.7	8.8
10 Spain	58	27	10.4	235	277	239	139	16.0	15.0	90	11.8	17.8	1.6	6.5
11 Australia	37 ^b	30 ^b	7.7	342	370	252	174	4.6	15.6	70	15.4	32.2	4.8	8.6
12 Belgium	35	21	9.4	..	..	..	..	2.3	..	86	12.2	11.1	3.4	8.1
13 Austria	33 ^b	22 ^b	10.3	379	403	247	181	2.1	22.7	84	11.2	32.9	4.4	8.5
14 New Zealand	35 ^b	29 ^b	7.8	347	337	248	183	1.2	13.0	90	..	21.1	4.2	7.7
15 Switzerland	46 ^b	29	10.7	322	347	281	189	8.0	..	91	15.7	31.7	3.3	8.0
16 United Kingdom	36	32	7.4	..	..	..	..	2.7	14.2	93	12.2	16.7	3.9	6.6
17 Denmark	49	38	9.9	320	305	252	202	4.5	12.0	85	9.0	18.5	3.6	7.0
18 Germany	..	..	10.9	350	359	243	184	2.6	8.4	92	12.3	28.2	4.9	9.1
19 Ireland	39 ^b	32 ^b	7.4	349	324	235	186	1.5	3.5	90	12.0	24.2	3.8	8.0
20 Italy	46 ^b	18 ^b	8.4	257	280	263	174	9.3	2.7	75	14.8	22.5	3.6	8.3
21 Greece	54 ^b	13 ^b	8.6	294	311	219	122	1.8	..	85	12.2	23.0	2.6	4.8
24 Israel	38	25	0.9	340	324	183	156	0.6	..	..	..	..	1.0	4.2
27 Luxembourg	..	..	12.3	448	502	180	109	3.5	..	91	10.3	8.6	..	6.6
28 Malta	..	..	..	..	..	..	..	1.4	..	..	..	..	..	..
35 Portugal	37 ^b	10 ^b	11.6	182	187	181	124	5.1	11.0	..	9.8	38.3	2.3	6.2
37 Czech Rep.	..	..	..	331	313	233	171	0.1	..	..	..	..	2.9	5.9
41 Slovakia	..	..	..	..	..	..	..	0.1	..	..	..	..	..	..
46 Hungary	50	25	10.5	283	283	221	168	0.2	15.7	..	..	..	2.6	6.0
55 Latvia	..	..	..	398	393	165	99	0.1	..	..	..	..	..	..
56 Poland	63 ^b	29 ^b	7.1	240	201	188	124	0.2	9.9	..	..	..	3.5	5.1
57 Russian Federation	..	..	..	365	359	164	97	(.)	..	..	..	..	..	3.0
Medium human development	..	..	..	377	343	107	76	..	..	..	..	..	..	4.5
61 Belarus	..	..	..	394	399	151	82	(.)	..	..	..	..	..	3.2
62 Bulgaria	..	..	7.8	349	351	119	82	0.1	0.4	..	..	..	2.0	5.4
68 Estonia	..	..	..	422	453	..	..	0.1	..	..	..	..	..	..
72 Kazakhstan	..	..	..	..	..	..	..	(.)	..	..	..	..	..	4.4
74 Romania	48 ^b	13 ^b	6.4	..	..	..	..	2.0	..	..	..	..	2.0	3.9
80 Ukraine	..	..	..	304	297	133	75	(.)	..	..	..	..	..	3.3
81 Lithuania	..	..	..	..	..	..	..	(.)	..	..	..	..	..	3.6
90 Turkmenistan	..	..	..	..	..	..	..	(.)	..	..	..	..	..	5.0
93 Armenia	..	..	..	475	524	105	69	(.)	..	..	..	..	..	4.2
94 Uzbekistan	..	..	..	508	538	89	61	(.)	..	..	..	..	..	5.9
96 Azerbaijan	..	..	..	..	..	..	..	(.)	..	..	..	..	..	4.3
98 Moldova, Rep. of	..	..	..	..	..	..	..	(.)	..	..	..	..	..	3.9
99 Kyrgyzstan	..	..	..	364	404	163	103	(.)	..	..	..	..	..	5.0
101 Georgia	..	..	..	..	..	..	..	(.)	..	..	..	..	..	4.5
104 Albania	..	..	..	304	307	102	51	0.1	..	..	..	..	..	4.0
105 Tajikistan	..	..	..	364	378	103	60	(.)	..	..	..	..	..	6.0
All developing countries	..	..	..	..	..	..	..	6.7	..	..	..	..	..	..
Industrial countries	44	23	8.0	326	310	208	142	9.2	..	..	..	..	3.6	5.6
World	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North America	30	24	7.0	..	..	..	..	20.9	..	63	14.8	53.2	5.3	11.6
Eastern Europe and CIS	..	..	..	353	333	147	99	..	..	..	..	..	..	4.8
Western and Southern Europe	46	24	10.0	315	304	237	171	6.7	..	83	12.7	24.4	3.7	7.7
OECD	43	23	8.1	312	296	239	168	9.2	..	77	16.3	34.4	3.9	8.0
European Union	44	25	9.6	312	303	235	171	6.2	..	85	12.5	23.3	3.8	7.5
Nordic countries	36	29	6.6	354	337	223	169	2.3	..	88	11.8	17.1	3.8	8.3

a. The number of reported AIDS cases in adults and children.

b. Data refer to years before 1986.

Source: Columns 1 and 2: UN 1994b; column 3: ARF 1994; columns 4-7: WHO 1994; column 8: WHO 1996; column 9: UN 1993a; columns 10-14: World Bank 1993c.

HDI rank	Full-time students per 100 people (age 5-29)	Secondary full-time net enrolment ratio (%)	Upper-secondary technical enrolment (as % of total upper secondary)	Tertiary net enrolment ratio (as % of ages 18-21)	Tertiary natural and applied science enrolment (as % of total tertiary)	Public expenditure on higher education (as % of all levels)	Public expenditure per tertiary student (PPP) ^a	Public expenditure on education (as % of GNP)	Total expenditure on education (as % of GDP)	
	1992	1992	1992	1992	1992	1992	1992	1992	1960	1991
High human development	53	85	51	28	21	22.0	9,734	5.3	4.4	5.9
1 Canada	58	96	..	24 ^b	16	27.9	12,350	7.6	4.6	7.4
2 USA	54	91	..	39	17	24.1	11,880	5.3	5.3	7.0
3 Japan	56	95	28	..	22	..	11,850	4.7	4.9	5.0
4 Netherlands	54	97	70	20	24	31.9	8,720	5.9	4.9	5.8
5 Norway	55	93	60	20 ^c	20	16.9	8,720	8.4	4.6	7.6
6 Finland	61	95	54	23 ^c	38	27.6	8,650	7.3	4.9	6.6
7 France	58	92	54	29	19	14.1	6,020	5.7	3.6	6.0
8 Iceland	..	..	..	..	16	14.9	..	5.8	..	6.0
9 Sweden	50	89	..	13 ^c	29	15.9	7,120	8.3	5.9	6.5
10 Spain	57	76	41	23	26	16.0	3,770	4.6	1.1	5.6
11 Australia	..	79	25	42	26	29.5	6,600	5.5	..	5.5
12 Belgium	54	97	59	31	24	16.4	6,850	5.2	4.8	5.4
13 Austria	51	..	76	..	29	18.7	5,820	5.8	2.9	5.4
14 New Zealand	56	88	19	26	20	36.7	6,080	7.1	2.2	5.8
15 Switzerland	49	85	73	13 ^c	32	19.4	12,900	5.2	3.3	5.4
16 United Kingdom	52	75	58	18	28	20.7	15,060	5.2	3.4	5.3
17 Denmark	55	92	56	20 ^c	27	18.4	6,710	7.4	4.0	6.1
18 Germany	50	95 ^d	80	17 ^{b,c}	39	..	6,550	..	2.4	5.4
19 Ireland	56	88	..	..	31	20.9	7,270	6.2	3.0	5.9
20 Italy	50	..	67	..	28	..	5,850	5.4	4.2	4.1
21 Greece	50	88	..	24	37	19.5	..	3.1	2.0	3.0
24 Israel	..	..	..	..	27	17.3	..	5.8	..	6.0
27 Luxembourg	..	..	..	..	..	3.3	..	4.1	..	5.8
28 Malta	..	..	..	..	13	17.9	..	4.6	..	4.4
35 Portugal	..	..	..	..	31	15.5	..	5.0	1.8	5.5
37 Czech Rep.	51	87	54	..	42	13.0	3,590	4.6	..	..
41 Slovakia	..	..	..	..	47	15.0	..	6.6	..	..
46 Hungary	49	75	75	10	29	15.3	9,690	7.0	..	6.7
55 Latvia	..	..	..	..	46	..	..	6.7	..	..
56 Poland	53	85	75	13 ^c	28	16.9	..	5.6	3.8	4.9
57 Russian Federation	45	60	44	..	51	..	..	4.0	..	..
Medium human development	..	..	..	..	47	12.0	..	6.7	..	..
61 Belarus	..	..	..	..	40	12.2	..	6.6	..	..
62 Bulgaria	..	..	..	..	37	13.7	..	5.9	..	5.4
68 Estonia	..	..	..	..	36	15.9	..	5.8	..	..
72 Kazakhstan	..	..	..	..	26	..	..	7.7	..	..
74 Romania	..	..	..	..	57	9.6	..	3.6	2.9	3.1
80 Ukraine	..	..	..	..	52	12.6	..	7.8	..	..
81 Lithuania	..	..	..	..	..	14.9	..	5.5	..	..
90 Turkmenistan	..	..	..	..	..	..	..	7.9	..	..
93 Armenia	..	..	..	..	..	..	..	7.3	..	..
94 Uzbekistan	..	..	..	..	..	..	..	..	..	..
96 Azerbaijan	..	..	..	..	51	10.4	..	7.7	..	..
98 Moldova, Rep. of	..	..	..	..	..	11.1	..	6.5	..	..
99 Kyrgyzstan	..	..	..	..	..	..	..	6.9	..	..
101 Georgia	..	..	..	..	..	..	..	..	..	..
104 Albania	..	..	..	..	30	..	..	..	..	..
105 Tajikistan	..	..	..	..	..	..	..	..	..	..
All developing countries	..	..	..	..	30	18.0	..	3.9	..	..
Industrial countries	..	..	..	..	21	22.0	..	5.4	4.4	5.9
World	..	..	..	..	25	21.0	..	5.1	..	..
North America	..	..	..	..	17	24.0	11,927	5.5	5.2	7.0
Eastern Europe and CIS	..	..	..	..	38	14.0	..	5.2	..	..
Western and Southern Europe	..	..	..	..	26	18.0	6,296	5.7	3.4	5.4
OECD	..	..	..	..	21	22.0	9,853	5.4	4.4	6.0
European Union	..	..	..	..	26	18.0	7,589	5.6	3.4	5.4
Nordic countries	..	..	..	..	29	19.0	7,658	7.9	5.0	6.6

a. US dollars converted using purchasing power parity (PPP) rates. See OECD 1995c.

b. University enrolment only.

c. Ages 22-25.

d. Data refer to the territory of the former Federal Republic of Germany.

Source: Columns 1-4 and 7: OECD 1995c; columns 5, 6 and 8: UNESCO 1995c; columns 9 and 10: UNESCO 1993b.

HDI rank	Radios (per 1,000 people) 1992	Televisions (per 1,000 people) 1992	Annual museum visits (per person) 1981-91	Registered public library users (thousands) 1986-92	Book titles published (per 100,000 people) 1990-92	Printing and writing paper consumed (metric tons per 1,000 people) 1992	Main telephone lines (per 100 people) 1991	Fax machines (per 100 people) 1992	Mobile cellular telephone subscribers (per 100 people) 1992
High human development	1,078	547	..	51,340T	49	64.5	41.5	1.7	2.5
1 Canada	1,030	640	0.9	..	..	84.9	58.6	1.7	3.5
2 USA	2,118	815	..	..	19	86.6	55.3	2.3	4.3
3 Japan	908	614	0.6	16,038	..	75.9	45.4	4.4	1.4
4 Netherlands	907	488	..	425	78	72.9	47.7	2.4	1.1
5 Norway	795	424	1.4	..	95	37.9	51.5	2.8	6.5
6 Finland	997	505	0.8	..	163	96.0	54.4	2.1	7.0
7 France	889	408	0.2	16,497	79	54.5	51.1	1.1	0.8
8 Iceland	788	319	..	..	399	16.2	52.7	1.5	5.8
9 Sweden	877	469	1.7	..	114	54.9	68.7	3.5	7.5
10 Spain	312	402	(.)	4,089	95	36.2	34.0	0.5	0.5
11 Australia	1,273	482	1.0	..	..	43.3	46.4	2.3	2.8
12 Belgium	769	453	..	..	139	84.5	41.0	1.5	0.6
13 Austria	617	480	2.4	960	43	22.5	43.2	1.7	2.2
14 New Zealand	931	443	0.1	..	..	47.8	43.6	1.1	2.9
15 Switzerland	843	407	..	..	208	82.9	60.3	1.9	3.0
16 United Kingdom	1,146	435	..	..	140	56.2	44.5	1.7	2.6
17 Denmark	1,033	537	1.9	..	157	55.7	57.7	3.3	4.1
18 Germany	885	558	..	881	..	62.7	42.0	1.5	1.2
19 Ireland	637	304	..	808	..	29.6	30.0	2.1	1.2
20 Italy	791	421	..	254	47	47.4	40.0	0.4	1.4
21 Greece	421	201	0.3	1,737	..	20.0	41.3	0.1	..
24 Israel	471	271	..	..	..	25.8	34.9	1.3	0.7
27 Luxembourg	635	267	..	..	..	..	51.1	1.3	0.3
28 Malta	526	744	..	102	78	52.9	39.0	0.6	1.0
35 Portugal	229	188	0.4	381	65	27.9	27.3	0.3	0.4
37 Czech Rep.	..	..	..	..	..	..	..	0.3	(.)
41 Slovakia	569	..	..	..	58	..	..	0.3	(.)
46 Hungary	599	414	0.1	1,646	75	15.0	10.7	0.2	0.2
55 Latvia	597	448	..	699	44	0.1	23.9	(.)	(.)
56 Poland	435	295	0.6	6,826	24	6.6	9.3	0.1	(.)
57 Russian Federation	327	370	..	..	15	..	15.0	0.1	(.)
Medium human development	..	..	..	32,820T	12	..	12.6	..	..
61 Belarus	..	..	0.5	..	16	..	16.3	(.)	..
62 Bulgaria	445	257	0.9	1,609	..	3.7	24.6	0.1	..
68 Estonia	449	351	..	..	72	0.7	21.0	0.1	0.3
72 Kazakhstan	..	..	..	..	7	..	11.1	..	..
74 Romania	199	196	0.1	5,183	16	1.9	10.5	(.)	..
80 Ukraine	..	..	0.4	25,800	7	..	15.6	(.)	..
81 Lithuania	380	375	..	..	41	(.)	21.6	0.1	(.)
90 Turkmenistan	..	..	..	..	10	..	6.3	..	..
93 Armenia	..	..	..	..	..	..	17.7	..	..
94 Uzbekistan	..	..	..	..	..	..	7.1	..	..
96 Azerbaijan	..	..	..	..	7	..	9.0	..	..
98 Moldova, Rep. of	..	40	..	..	16	..	11.3	(.)	(.)
99 Kyrgyzstan	..	..	..	..	..	..	7.3	..	..
101 Georgia	..	..	..	..	..	..	10.3	..	..
104 Albania	176	88	..	229	11	1.4	1.3	(.)	..
105 Tajikistan	..	..	..	..	..	..	4.8	..	..
All developing countries	176	56	..	40,260T	5	3.5	2.3	..	..
Industrial countries	1,048	533	..	84,160T	43	61.9	37.2	1.7	2.5
World	349	151	..	124,420T	13	14.1	9.9	..	..
North America	2,009	797	..	..	19	86.4	55.6	2.2	4.2
Eastern Europe and CIS	..	..	..	41,990T	18	..	13.2	..	..
Western and Southern Europe	753	445	..	26,130T	84	52.9	43.7	1.2	1.5
OECD	1,098	528	0.5	42,790T	48	58.6	42.3	1.8	2.2
European Union	813	444	..	26,030T	92	53.1	43.4	1.2	1.6
Nordic countries	921	482	1.5	..	134	60.4	59.9	3.0	6.4

Source: Columns 1-4 and 6: UNESCO 1995a; column 5: calculated on the basis of estimates from UNESCO 1994b and UN 1995e; column 7: ITU 1995; columns 8 and 9: UN 1995b.

HDI rank	Labour force (as % of total population) 1990	Percentage of labour force in			Future labour force replacement ratio 1993	Real earnings per employee annual growth rate (%) 1980-92	Labour force unionized (%)		Weekly hours of work (per person in manufacturing) 1993	Expenditure on labour market programmes (as % of GDP) 1993-94
		Agriculture 1990	Industry 1990	Services 1990			1970	1990		
High human development	49	8	32	60	96	1.4	33	26	39	1.7
1 Canada	53	3	25	71	98	0.1	31	36	39	2.6
2 USA	50	3	26	71	107	0.4	23	16	41	0.7
3 Japan	52	7	34	59	79	1.9	35	25	38	0.4
4 Netherlands	46	5	26	70	85	1.7	38	26	40	3.8
5 Norway	50	6	25	68	95	2.3	51	56	37	2.9
6 Finland	52	8	31	61	93	2.6	51	72	38	6.7
7 France	44	5	29	66	98	..	22	10	39	3.3
8 Iceland	56	11	27	62	121	..	68	78	..	..
9 Sweden	54	4	30	66	94	1.2	68	83	37	5.7
10 Spain	41	12	33	55	85	1.2	27	11	36	3.6
11 Australia	50	6	26	68	103	0.5	50	40	38	2.7
12 Belgium	41	3	28	70	88	0.5	46	51	32	4.3
13 Austria	46	8	38	55	84	2.0	62	46	35	1.9
14 New Zealand	48	10	25	65	114	0.1	..	45	42	2.9
15 Switzerland	53	6	35	60	82	..	30	27	32	1.9
16 United Kingdom	50	2	29	69	96	2.5	45	39	43	2.2
17 Denmark	57	6	28	66	81	-0.3	60	71	32	7.0
18 Germany	50	4	38	58	76	..	33	33	38	3.8
19 Ireland	37	14	29	57	129	2.0	53	50	40	4.3
20 Italy	43	9	31	60	74	5.8	36	39	..	1.8
21 Greece	42	23	27	50	86	0.8	36	34	41	1.2
24 Israel	39	4	29	67	156	-1.6	..	..	41	..
27 Luxembourg	43	4	27	69	80	..	47	50	41	1.1
28 Malta	37	3	35	63	108	..	..	..	..	..
35 Portugal	49	18	34	48	96	0.5	61	32	38	2.0
37 Czech Rep.	53	11	45	43	96	..	..	..	40	0.3
41 Slovakia	51	12	33	55	117	..	..	..	..	0.9
46 Hungary	46	15	38	47	91	1.7	..	..	36	1.9
55 Latvia	55	16	40	44	104	..	..	..	..	..
56 Poland	49	27	36	37	118	-0.8	..	..	34	2.3
57 Russian Federation	52	14	42	45	107	..	..	..	..	..
Medium human development	47	24	37	39	138	..	..	..	..	..
61 Belarus	52	20	40	40	111	..	..	..	..	..
62 Bulgaria	51	13	48	38	95	..	..	..	..	0.7
68 Estonia	54	14	41	44	105	..	..	..	34	..
72 Kazakhstan	47	22	32	46	154	..	..	..	34	..
74 Romania	46	24	47	29	106	..	..	..	8	..
80 Ukraine	50	20	40	40	102	..	..	..	..	..
81 Lithuania	52	18	41	41	109	..	..	..	41	..
90 Turkmenistan	41	37	23	40	223	..	..	..	..	..
93 Armenia	48	18	43	39	153	..	..	..	..	..
94 Uzbekistan	39	35	25	40	229	..	..	..	..	..
96 Azerbaijan	42	31	29	40	166	..	..	..	..	..
98 Moldova, Rep. of	49	33	30	37	136	..	..	..	28	..
99 Kyrgyzstan	41	32	27	41	207	..	..	..	..	..
101 Georgia	49	26	31	43	120	..	..	..	..	..
104 Albania	48	55	23	22	160	..	..	..	..	..
105 Tajikistan	36	41	23	36	258	..	..	..	..	..
All developing countries	47	61	16	23	181	..	..	..	..	..
Industrial countries	49	10	33	57	102	..	33	26	..	1.7
World	47	49	20	31	163	..	..	..	..	..
North America	51	3	26	71	106	0.4	24	18	41	0.9
Eastern Europe and CIS	49	20	39	42	121	..	..	..	..	..
Western and Southern Europe	46	7	33	60	84	2.9	36	32	37	3.4
OECD	47	9	29	62	106	1.4	32	26	39	1.7
European Union	46	6	32	62	86	2.8	37	33	39	3.3
Nordic countries	53	6	29	65	91	1.3	60	73	36	5.6

Note: Percentage shares of labour force in agriculture, industry and services do not necessarily add to 100 because of rounding.

Source: Columns 1-4: calculated on the basis of data from ILO 1995c; column 5: calculated on the basis of estimates from UN 1995e and UNDP 1995c; column 6: World Bank 1995f; columns 7 and 8: OECD 1994; columns 9 and 10: OECD 1995d.

HDI rank	Un-employed people (thousands) 1993	Total unemployment rate 1993	Unemployment rate (%)		Youth unemployment rate (%)		Incidence of long-term unemployment (%)				Discouraged workers (as % of total labour force) 1993	Involuntary part-time workers (as % of total labour force) 1993	Unemployment benefits expenditure (as % of total government expenditure) 1991
			Male 1993	Female 1993	Male (age 15-24) 1991-93	Female (age 15-24) 1991-93	More than 6 months		More than 12 months				
							Male 1993	Female 1993	Male 1993	Female 1993			
High human development	35,180T	7.4	7.0	8.1	16	17	45	42	28	27	..	..	2.1
1 Canada	1,649	11.2	11.8	10.6	20	15	31	33	14	16	0.9	5.5	8.1
2 USA	8,734	6.8	7.1	6.5	14	12	23	17	14	9	0.9	5.0	1.5
3 Japan	1,660	2.5	2.4	2.6	5	5	40	28	21	13	2.2	1.9	0.7
4 Netherlands	415	6.5	6.0	7.3	10	10	77	82	53	52	0.6	5.6	4.5
5 Norway	127	6.0	6.6	5.2	13	10	45	47	25	30	1.2	..	2.2
6 Finland	444	17.9	19.5	15.7	31	29	54	51	34	26	1.5	2.9	3.6
7 France	2,929	11.7	10.0	13.7	22	28	54	62	32	36	0.2	4.8	3.2
8 Iceland	6	5.3	3.6	5.4	..	..	..	..	..	..	..	..	..
9 Sweden	326	8.2	..	..	22	15	34	29	12	9	2.0	6.2	0.8
10 Spain	2,260	22.7	9.9	23.8	40	47	64	76	43	58	0.2	1.0	7.0
11 Australia	939	10.9	11.5	10.1	20	17	59	54	40	32	1.6	6.9	4.0
12 Belgium	550	12.0	9.7	17.4	17	20	65	75	46	59	1.5	3.8	5.8
13 Austria	222	4.2	6.7	6.9	4	3	..	..	..	..	..	..	1.8
14 New Zealand	157	9.5	10.0	8.9	18	16	57	45	38	26	1.0	6.3	..
15 Switzerland	163	4.5	4.4	4.7	7	7	47	48	18	23	..	..	0.4
16 United Kingdom	2,891	10.2	12.4	7.5	21	13	67	55	47	33	0.6	3.2	1.7
17 Denmark	349	12.4	11.3	13.7	14	15	43	49	24	27	1.6	4.8	5.5
18 Germany	2,720	8.9	8.0	8.4	8	8	56	64	37	44	..	1.5	3.0
19 Ireland	294	15.6	18.8	19.5	27	23	80	72	63	53	0.5	3.3	6.3
20 Italy	2,799	10.3	8.1	17.3	27	36	75	78	55	60	2.6	2.3	1.0
21 Greece	398	9.7	6.4	15.2	20 ^a	39 ^a	65	75	42	57	0.3	3.1	..
24 Israel	195	10.0	8.5	12.1	21	25	..	..	..	..	..	..	..
27 Luxembourg	4	2.1	1.5	1.9	5	4	53	68	26	37	..	..	..
28 Malta	6	4.5	5.2	2.5	..	..	..	..	..	..	..	..	..
35 Portugal	258	5.6	4.6	6.5	10	15	41	49	39	47	0.1	1.8	..
37 Czech Rep.	200	3.5	3.1	4.6	..	..	..	..	..	..	..	..	..
41 Slovakia	306	12.7	12.7	11.7	..	..	..	..	..	..	..	..	..
46 Hungary	632	12.1	14.2	10.1	..	..	..	..	..	..	..	..	..
55 Latvia	77	5.8	5.2	6.4	..	..	..	..	..	..	..	..	..
56 Poland	2,890	16.4	15.0	17.9	25 ^a	32 ^b	..	..	..	..	..	..	..
57 Russian Federation	578	1.1 ^b	0.4	1.1	..	..	..	..	..	..	..	..	..
Medium human development	2,190T	6.2	..	..	..	..	..	..	..	..	..	..	..
61 Belarus	66	1.4 ^b	..	..	..	..	..	..	..	..	..	..	..
62 Bulgaria	626	16.4 ^b	..	..	..	..	..	..	..	..	..	..	..
68 Estonia	16	1.9 ^b	1.7	2.1	..	..	..	..	..	..	..	..	..
72 Kazakhstan	78	1.0 ^b	..	..	..	..	..	..	..	..	..	..	..
74 Romania	1,165	10.6 ^b	8.1	12.6	..	..	..	..	..	..	..	..	..
80 Ukraine	..	..	..	..	..	..	..	..	..	..	..	..	..
81 Lithuania	66	1.6 ^b	3.8	3.3	..	..	..	..	..	..	..	..	..
90 Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..	..
93 Armenia	..	6.2 ^b	..	..	..	..	..	..	..	..	..	..	..
94 Uzbekistan	..	..	..	..	..	..	..	..	..	..	..	..	..
96 Azerbaijan	19	..	..	..	..	..	..	..	..	..	..	..	..
98 Moldova, Rep. of	14	0.7 ^b	..	..	..	..	..	..	..	..	..	..	..
99 Kyrgyzstan	3	0.2 ^b	..	..	..	..	..	..	..	..	..	..	..
101 Georgia	..	2.0 ^b	..	..	..	..	..	..	..	..	..	..	..
104 Albania	140	19.5 ^b	..	..	..	..	..	..	..	..	..	..	..
105 Tajikistan	..	..	..	..	..	..	..	..	..	..	..	..	..
All developing countries	..	..	..	..	..	..	..	..	..	..	..	..	..
Industrial countries	37,370T	7.4	7.0	8.2	16	17	..	..	..	..	..	..	..
World	..	..	..	..	..	..	..	..	..	..	..	..	..
North America	10,380T	7.3	7.6	6.9	15	13	24	19	14	10	..	..	2.0
Eastern Europe and CIS	6,880T	5.2	..	..	..	..	..	..	..	..	..	..	..
Western and Southern Europe	14,270T	11.0	8.6	13.5	20	25	60	67	40	47	..	..	3.0
OECD	30,290T	8.2	7.6	8.9	16	16	45	42	28	27	..	..	2.1
European Union	16,860T	11.1	9.4	12.8	21	24	62	65	42	45	..	..	2.9
Nordic countries	1,250T	10.8	12.6	11.8	20	17	42	41	22	21	..	..	2.8

a. ILO 1995e.

b. Official unemployment rate. Registered unemployment only.

Source: Column 1: ILO 1995e; column 2: OECD 1995b and United Nations Economic Commission for Europe 1995b; columns 3-10: OECD 1995d and ILO 1995e; column 11: ILO 1993; columns 12 and 13: OECD 1995d.

HDI rank	Female net enrolment				Female tertiary students		Female life expectancy at birth		Total fertility		Maternal mortality rate
	Primary		Secondary		Per 100,000 people	Index (1980=100)	Years	Index (1970=100)	Rate	Index (1970=100)	(per 100,000 live births) 1993
	Ratio 1992	Index (1980=100) 1992	Ratio 1992	Index (1980=100) 1992							
High human development	97	101	88	50	3,606	113	79.0	106	1.7	77	22
1 Canada	97	101	90	107	7,424	141	80.8	106	1.9	85	6
2 USA	100	103	90	..	5,834	110	79.4	106	2.1	92	12
3 Japan	100	100	..	..	1,861	140	82.6	110	1.5	74	18
4 Netherlands	96	102	87	106	3,038	151	80.5	105	1.6	68	12
5 Norway	99	100	90	105	4,120	224	80.4	104	1.9	77	6
6 Finland	..	..	94	..	3,856	160	79.7	107	1.9	103	11
7 France	99	100	89	109	3,605	..	80.9	107	1.7	69	15
8 Iceland	..	..	..	..	2,812	146	80.9	105	2.2	73	0
9 Sweden	100	103	91	107	2,783	128	81.2	105	2.1	105	7
10 Spain	100	100	92	124	3,328	209	80.6	107	1.2	41	7
11 Australia	99	99	82	115	3,435	171	80.7	108	1.9	70	9
12 Belgium	97	99	90	106	2,621	147	79.8	107	1.6	75	10
13 Austria	91	103	91	..	2,560	177	79.3	107	1.5	66	10
14 New Zealand	98	98	89	107	4,512	227	78.7	105	2.2	73	25
15 Switzerland	95	..	77	..	1,490	188	81.3	107	1.6	78	6
16 United Kingdom	100	103	84	104	2,291	218	78.8	105	1.8	79	9
17 Denmark	98	103	88	99	3,147	157	78.2	103	1.7	81	9
18 Germany	83	..	86	..	1,813	..	79.1	107	1.3	66	22
19 Ireland	90	99	84	105	3,195	243	78.2	106	2.1	55	10
20 Italy	..	..	..	..	2,782	169	80.7	108	1.3	55	12
21 Greece	94	97	89	119	1,884	184	80.2	109	1.4	60	10
24 Israel	..	..	..	..	3,131	122	78.5	108	2.9	77	7
27 Luxembourg	..	..	..	..	..	..	79.4	108	1.7	81	0
28 Malta	99	101	82	119	1,236	889	78.4	109	2.1	99	0
35 Portugal	100	100	..	..	2,264	256	78.1	111	1.6	57	15
37 Czech Rep.	..	..	..	..	974	..	74.9	102	1.8	87	15
41 Slovakia	..	..	..	..	1,173	..	75.4	103	1.9	76	..
46 Hungary	92	97	77	171	1,113	122	73.8	102	1.7	84	30
55 Latvia	80	..	..	..	2,775	..	74.9	101	1.6	84	40
56 Poland	96	98	81	109	1,680	93	75.7	103	1.9	84	19
57 Russian Federation	96	..	..	..	3,307	77	73.5	100	1.5	75	75
Medium human development	77	82	70	86	1,309	129	73.5	106	2.3	70	65
61 Belarus	..	..	..	..	3,060	92	75.1	100	1.7	74	37
62 Bulgaria	79	82	62	86	2,189	171	74.9	102	1.5	69	27
68 Estonia	80	..	77	..	2,475	..	74.8	101	1.6	77	41
72 Kazakhstan	..	..	..	..	..	..	74.0	108	2.5	70	80
74 Romania	76	..	73	..	939	129	73.4	104	1.5	53	130
80 Ukraine	..	..	..	..	2,954	..	74.2	100	1.6	80	50
81 Lithuania	..	..	..	..	3,097	..	76.0	101	1.8	79	36
90 Turkmenistan	..	..	..	..	..	..	68.6	108	4.0	64	55
93 Armenia	..	..	..	..	..	..	75.8	102	2.6	80	50
94 Uzbekistan	..	..	..	..	..	..	72.4	109	3.9	64	55
96 Azerbaijan	..	..	..	..	2,453	..	74.6	104	2.5	54	22
98 Moldova, Rep. of	..	..	..	..	..	..	71.7	105	2.1	80	60
99 Kyrgyzstan	..	..	..	..	..	..	73.0	110	3.7	76	110
101 Georgia	..	..	..	..	..	..	76.8	106	2.1	81	33
104 Albania	..	..	..	..	722	129	75.0	110	2.9	59	65
105 Tajikistan	..	..	..	..	..	..	73.2	112	4.9	72	130
All developing countries	84	118	33	86	365	227	62.8	121	3.5	60	499
Industrial countries	97	101	87	50	3,515	133	77.9	106	1.8	76	29
World	87	112	52	72	1,139	208	64.6	119	3.1	63	444
North America	100	103	90	11	5,991	113	79.5	106	2.1	91	11
Eastern Europe and CIS	93	96	76	116	2,594	92	73.8	104	1.9	75	62
Western and Southern Europe	94	100	89	101	2,777	186	80.1	107	1.5	64	14
OECD	98	102	89	43	3,829	170	77.8	110	2.0	73	33
European Union	95	101	88	102	2,698	191	79.8	107	1.5	65	13
Nordic countries	99	102	91	104	3,221	160	80.1	105	1.9	94	8

Source: Columns 1, 3 and 5: UNESCO 1995c; columns 2, 4, and 6: calculated on the basis of data from UNESCO 1995c; columns 7-10: calculated on the basis of data from UN 1995c; column 11: WHO and UNICEF 1996.

HDI rank	Administrators and managers		Professional and technical workers		Clerical and sales workers		Service workers		Women in government		
	Female (%)	Female as % of male	Female (%)	Female as % of male	Female (%)	Female as % of male	Female (%)	Female as % of male	Total ^a (%)	At ministerial level ^a (%)	At sub-ministerial level ^a (%)
	1990	1990	1990	1990	1990	1990	1990	1990	1995	1995	1995
High human development	27	44	48	95	59	162	60	159	13.3	15.4	13.2
1 Canada	42	73	56	128	68	209	57	133	19.1	19.2	19.1
2 USA	42	72	53	111	67	201	60	150	30.1	21.1	30.7
3 Japan	9	9	42	72	50	101	54	118	8.3	6.7	8.8
4 Netherlands	15	18	44	79	52	109	70	238	19.7	26.3	17.0
5 Norway	31	45	58	135	66	192	75	301	44.1	40.9	45.7
6 Finland	26	36	62	166	67	207	71	250	16.3	35.0	10.0
7 France	9	10	41	71	..	..	..	..	8.8	6.5	9.3
8 Iceland	..	..	..	..	..	..	..	..	8.1	13.3	6.4
9 Sweden	39	64	64	181	77	335	77	333	33.3	47.8	25.6
10 Spain	12	14	48	93	47	90	59	141	9.7	15.0	7.1
11 Australia	43	76	25	33	19	24	77	339	23.7	13.3	26.7
12 Belgium	19	23	51	102	..	..	..	..	8.3	10.5	7.3
13 Austria	19	24	49	95	64	178	71	243	6.8	21.1	4.0
14 New Zealand	32	122	48	43	76	325	67	207	16.8	7.4	20.0
15 Switzerland	28	39	24	31	..	..	..	..	7.0	16.7	4.4
16 United Kingdom	33	49	44	78	..	..	..	..	8.4	9.1	8.3
17 Denmark	20	25	63	169	61	155	73	263	19.0	30.4	17.4
18 Germany	19	24	43	75	..	..	..	..	6.8	16.0	5.4
19 Ireland	17	21	48	92	52	107	52	106	11.1	18.2	8.5
20 Italy	38	60	46	86	..	..	..	..	9.6	3.4	11.8
21 Greece	12	14	44	79	44	79	44	77	6.3	0	10.4
24 Israel	19	23	54	118	55	121	57	135	9.8	13.0	9.0
27 Luxembourg	9	9	38	61	48	93	72	256	7.7	16.7	3.7
28 Malta	..	..	..	..	..	..	..	..	1.5	0	1.9
35 Portugal	37	58	52	110	48	91	66	190	17.5	9.1	19.1
37 Czech Rep.	..	..	..	..	..	..	..	..	1.2	0	1.6
41 Slovakia	..	..	..	..	..	..	..	..	12.8	13.6	12.5
46 Hungary	58	139	49	96	75	307	75	306	7.7	5.3	8.1
55 Latvia	..	..	..	..	..	..	..	..	15.5	5.6	17.3
56 Poland	16	18	60	152	..	..	..	..	8.0	6.3	8.8
57 Russian Federation	..	..	..	..	..	..	..	..	2.1	2.8	2.0
Medium human development	..	..	..	..	..	..	..	..	4.7	5.2	5.8
61 Belarus	..	..	..	..	..	..	..	..	4.4	8.1	3.1
62 Bulgaria	29	41	57	132	79	373	76	320	8.5	9.1	8.3
68 Estonia	..	..	..	..	..	..	..	..	10.4	6.3	11.8
72 Kazakhstan	..	..	..	..	..	..	..	..	1.1	2.7	0
74 Romania	..	..	..	..	..	..	..	..	3.3	0	4.0
80 Ukraine	..	..	..	..	..	..	..	..	1.0	0	1.3
81 Lithuania	..	..	..	..	..	..	..	..	8.6	0	11.8
90 Turkmenistan	..	..	..	..	..	..	..	..	3.9	4.3	3.6
93 Armenia	..	..	..	..	..	..	..	..	2.0	0	3.1
94 Uzbekistan	..	..	..	..	..	..	..	..	2.9	2.8	2.9
96 Azerbaijan	..	..	..	..	..	..	..	..	5.3	4.0	6.0
98 Moldova, Rep. of	..	..	..	..	..	..	..	..	3.5	0	5.3
99 Kyrgyzstan	..	..	..	..	..	..	..	..	8.0	4.3	11.1
101 Georgia	..	..	..	..	..	..	..	..	3.3	0	4.7
104 Albania	..	..	..	..	..	..	..	..	12.3	0	16.1
105 Tajikistan	..	..	..	..	..	..	..	..	4.0	6.9	2.9
All developing countries	10	12	36	65	..	..	..	..	7.6	7.7	8.5
Industrial countries	27	44	48	95	..	..	..	..	10.8	12.6	11.3
World	14	18	39	71	..	..	..	..	8.7	9.1	9.6
North America	42	72	53	113	67	202	60	148	25.9	20.0	26.5
Eastern Europe and CIS	..	..	..	..	..	..	..	..	5.4	5.6	6.2
Western and Southern Europe	21	29	46	88	54	136	64	199	13.1	20.1	11.8
OECD	26	41	46	88	54	141	55	139	15.2	16.9	15.0
European Union	23	32	46	87	53	134	63	194	12.2	18.3	11.1
Nordic countries	30	45	62	167	69	240	74	293	22.7	34.9	19.3

a. Including elected heads of state and governors of central banks. For countries for which the value is zero, no women ministers were reported by the United Nations Division for the Advancement of Women; this information could not be reconfirmed by the Human Development Report Office.

Source: Columns 1-8: UN 1994b; columns 9, 10 and 11: calculations by the United Nations Division for the Advancement of Women, based on data from Worldwide Government Directories 1995.

HDI rank	Real GDP per capita (PPP\$) 1993	GNP per capita (US\$) 1993	Share of total industrial country GNP (%) 1993	Income share		Social security benefits expenditure (as % of GDP) 1992	Public expenditure on education (as % of GNP) 1992	Public expenditure on health (as % of GDP) 1993
				Lowest 40% of households (%) 1981-93	Ratio of highest 20% to lowest 20% 1981-93			
High human development	17,182	18,874	98.7	..	..	14.3	5.3	6.1
1 Canada	20,950	19,970	2.9	17.5	7.1	21.7	7.6	7.4
2 USA	24,680	24,740	32.4	15.7	8.9	10.5	5.3	6.2
3 Japan	20,660	31,490	19.8	21.9	4.3	11.5	4.7	5.2
4 Netherlands	17,340	20,950	1.6	21.3	4.5	..	5.9	6.8
5 Norway	20,370	25,970	0.6	19.0	5.9	19.6	8.4	7.6
6 Finland	16,320	19,300	0.5	18.4	6.0	30.5	7.3	7.0
7 France	19,140	22,490	6.6	17.4	7.5	..	5.7	7.3
8 Iceland	18,640	24,950	..	..	..	..	5.8	6.9
9 Sweden	17,900	24,740	1.1	21.2	4.6	38.3	8.3	6.2
10 Spain	13,660	13,590	2.7	22.0	4.4	..	4.6	5.7
11 Australia	18,530	17,500	1.6	15.5	9.6	..	5.5	5.8
12 Belgium	19,540	21,650	1.1	21.6	4.6	..	5.2	7.3
13 Austria	19,115 ^a	23,510	0.9	..	..	24.5	5.8	6.0
14 New Zealand	16,720	12,600	0.2	15.9	8.8	20.2	7.1	5.9
15 Switzerland	22,720	35,760	1.3	16.9	8.6	14.0	5.2	6.8
16 United Kingdom	17,230	18,060	5.3	14.6	9.6	..	5.2	5.9
17 Denmark	20,200	26,730	0.7	17.4	7.1	29.5	7.4	5.5
18 Germany	18,840	23,560	9.6	18.8	5.8	24.7	..	6.0
19 Ireland	15,120	13,000	0.2	..	..	19.4	6.2	5.1
20 Italy	18,160	19,840	5.7	18.8	6.0	..	5.4	6.2
21 Greece	8,950	7,390	0.4	..	..	..	3.1	4.3
24 Israel	15,130	13,920	0.4	18.1	6.6	11.8	5.8	..
27 Luxembourg	25,390	37,320	0.1	..	..	..	4.1	6.3
28 Malta	11,570	7,970	(.)	..	..	..	4.6	..
35 Portugal	10,720	9,130	0.4	..	..	9.0	5.0	4.1
37 Czech Rep.	8,430 ^a	2,710	0.1	..	..	11.1	4.6	..
41 Slovakia	5,620 ^a	1,950	0.1	..	..	13.3	6.6	..
46 Hungary	6,059 ^a	3,350	0.2	25.7	3.2	17.3	7.0	..
55 Latvia	5,010	2,010	(.)	..	..	9.1	6.7	..
56 Poland	4,702 ^a	2,260	0.4	23.0	3.9	17.0	5.6	..
57 Russian Federation	4,760 ^a	2,340	1.8	14.0	11.4	..	4.0	..
Medium human development	3,150	1,511	1.3	..	..	..	6.7	..
61 Belarus	4,244 ^a	2,870	0.2	..	..	12.0	6.6	..
62 Bulgaria	4,320 ^a	1,140	0.1	21.4	4.7	19.8	5.9	..
68 Estonia	3,610 ^b	3,080	(.)	..	..	..	5.8	..
72 Kazakhstan	3,710	1,560	0.1	..	..	..	7.7	..
74 Romania	3,727 ^a	1,140	0.1	..	..	16.9	3.6	..
80 Ukraine	3,250 ^a	2,210	0.6	..	..	..	7.8	..
81 Lithuania	3,110	1,320	(.)	..	..	..	5.5	..
90 Turkmenistan	..	..	..	..	..	..	7.9	..
93 Armenia	2,040	660	(.)	..	..	..	7.3	..
94 Uzbekistan	2,510	970	0.1	..	..	..	..	..
96 Azerbaijan	2,190	730	(.)	..	..	3.1	7.7	..
98 Moldova, Rep. of	2,370 ^a	1,060	(.)	..	..	..	6.5	..
99 Kyrgyzstan	2,320	850	(.)	9.6	22.8	..	6.9	..
101 Georgia	1,750	580	(.)	..	..	5.5	..	..
104 Albania	..	340	(.)	..	..	..	..	..
105 Tajikistan	1,380	470	(.)	..	..	..	..	..
All developing countries	2,703	970	..	..	..	..	3.9	..
Industrial countries	15,211	16,394	100.0	..	..	..	5.4	..
World	5,545	4,570	..	..	..	..	5.1	..
North America	24,305	24,261	35.3	..	..	11.4	5.5	6.3
Eastern Europe and CIS	4,192	1,992	3.9	..	..	..	5.2	..
Western and Southern Europe	17,554	20,551	33.6	..	..	..	5.7	6.4
OECD	18,152	20,169	95.7	..	..	14.0	5.4	6.1
European Union	17,377	19,815	37.0	..	..	..	5.6	6.3
Nordic countries	18,526	24,233	2.9	..	..	30.8	7.9	6.5

a. Preliminary results of the European Comparison Programme, conducted by the United Nations Economic Commission for Europe, the OECD, Eurostat and the Austrian Statistical Office. See United Nations Economic Commission for Europe 1996.

b. Preliminary update of the Penn World Tables using an expanded set of international comparisons, as described in Summers and Heston 1991.

Source: Column 1: calculated on the basis of estimates from World Bank 1995h; column 2: World Bank 1995f; columns 3, 4 and 5: calculated on the basis of data from World Bank 1995f; column 6: ILO 1995c; column 7: UNESCO 1995c; column 8: OECD 1995e.

HDI rank	Net official development assistance (ODA) disbursed			ODA as % of central government budget 1992/93	ODA per capita of donor country (1993 dollars) 1993/94	Multilateral ODA as % of GNP 1993-94	Government subsidies to NGOs (US\$ millions; 1993-94 prices) 1993-94	Aid to least developed countries (as % of GNP) 1993-94
	US\$ millions 1994	As % of GNP						
		Average 1983/84	1994					
High human development	59,160T	0.34	0.30	..	77	0.10	..	0.10
1 Canada	2,250	0.48	0.43	1.63	82	0.15	207	0.01
2 USA	9,927	0.24	0.15	1.82	38	0.04	..	0.04
3 Japan	13,239	0.33	0.29	1.35	94	0.08	136	0.05
4 Netherlands	2,517	0.96	0.76	..	162	0.16	256	0.22
5 Norway	1,137	1.06	1.05	1.70	247	0.32	..	0.44
6 Finland	290	0.34	0.31	1.51	60	0.11	4	0.12
7 France	8,466	0.59	0.64	..	279	0.07	..	0.14
8 Iceland	..	..	..	..	..	..	..	..
9 Sweden	1,819	0.82	0.96	..	201	0.24	..	0.31
10 Spain	1,305	0.06	0.28	0.97	33	0.02	..	0.03
11 Australia	1,088	0.47	0.35	1.27	55	0.09	19	0.07
12 Belgium	728	0.58	0.32	..	75	0.07	2	0.12
13 Austria	655	0.26	0.33	0.73	73	0.07	3	0.06
14 New Zealand	110	0.26	0.24	0.36	28	0.06	1	0.05
15 Switzerland	982	0.31	0.36	3.13	121	0.08	120	0.11
16 United Kingdom	3,197	0.34	0.31	..	52	0.07	54	0.08
17 Denmark	1,446	0.79	1.03	2.51	260	0.39	6	0.36
18 Germany	6,818	0.47	0.34	..	166	0.07	98	0.09
19 Ireland	109	0.21	0.25	..	52	0.04	..	0.09
20 Italy	2,705	0.24	0.27	0.64	50	0.04	43	0.07
21 Greece	..	..	..	..	..	..	..	..
24 Israel	..	..	..	..	..	..	..	..
27 Luxembourg	59	0.12	0.40	..	..	0.06	..	0.06
28 Malta	..	..	..	..	..	..	..	..
35 Portugal	308	0.15	0.35	..	..	0.02	..	0.22
37 Czech Rep.	..	..	..	..	..	..	..	..
41 Slovakia	..	..	..	..	..	..	..	..
46 Hungary	..	..	..	..	..	..	..	..
55 Latvia	..	..	..	..	..	..	..	..
56 Poland	..	..	..	..	..	..	..	..
57 Russian Federation	..	..	..	..	..	..	..	..
Medium human development	..	..	..	..	..	..	..	..
61 Belarus	..	..	..	..	..	..	..	..
62 Bulgaria	..	..	..	..	..	..	..	..
68 Estonia	..	..	..	..	..	..	..	..
72 Kazakhstan	..	..	..	..	..	..	..	..
74 Romania	..	..	..	..	..	..	..	..
80 Ukraine	..	..	..	..	..	..	..	..
81 Lithuania	..	..	..	..	..	..	..	..
90 Turkmenistan	..	..	..	..	..	..	..	..
93 Armenia	..	..	..	..	..	..	..	..
94 Uzbekistan	..	..	..	..	..	..	..	..
96 Azerbaijan	..	..	..	..	..	..	..	..
98 Moldova, Rep. of	..	..	..	..	..	..	..	..
99 Kyrgyzstan	..	..	..	..	..	..	..	..
101 Georgia	..	..	..	..	..	..	..	..
104 Albania	..	..	..	..	..	..	..	..
105 Tajikistan	..	..	..	..	..	..	..	..
All developing countries	..	..	..	..	..	..	..	..
Industrial countries	59,160T	..	..	..	..	..	..	..
World	..	..	..	..	..	..	..	..
North America	12,180T	..	..	..	..	..	..	..
Eastern Europe and CIS	..	..	..	..	..	..	..	..
Western and Southern Europe	29,340T	..	..	..	..	..	..	..
OECD	59,160T	..	..	..	..	..	..	..
European Union	30,420T	0.44	0.42	..	..	..	..	..
Nordic countries	4,690T	..	..	..	..	..	..	..

Source: Columns 1, 2, 3 and 5-8: OECD 1996; column 4: OECD 1995a.

HDI rank	Export-import ratio (exports as % of imports) 1993	Export growth rate as % of import growth rate 1980-93	Trade dependency (exports plus imports as % of GDP) 1993	Terms of trade (1987=100) 1993	Net workers' remittances from abroad (US\$ millions) 1993	Gross international reserves (months of import coverage) 1993	Current account balance before official transfers (US\$ millions) 1993
High human development	105	89	29	104	..	2.1	62,260T
1 Canada	110	102	58	97	..	1.0	-23,506
2 USA	77	85	17	101	-7,660	2.3	-85,525
3 Japan	150	67	14	119	..	2.4	135,350
4 Netherlands	110	102	86	101	-353	2.4	13,243
5 Norway	133	218	54	97	-234	3.1	3,534
6 Finland	130	100	56	91	..	2.1	-527
7 France	102	94	33	103	-1,530	1.7	15,613
8 Iceland	..	..	..	..	..	..	..
9 Sweden	117	97	56	103	90	3.4	-244
10 Spain	80	71	30	114	1,495	4.5	-9,112
11 Australia	101	132	29	98	..	2.4	-9,955
12 Belgium	90	105	113	100	-365	..	14,574
13 Austria	83	112	49	93	44	2.8	-639
14 New Zealand	109	98	46	109	256	2.7	-885
15 Switzerland	108	..	51	..	-2,007	6.7	17,329
16 United Kingdom	88	77	47	106	..	1.4	-9,145
17 Denmark	122	138	56	104	..	2.1	5,086
18 Germany	109	72	38	100	-4,375	2.6	-1,222
19 Ireland	134	184	116	95	..	1.2	979
20 Italy	115	86	32	104	432	2.1	17,008
21 Greece	39	79	45	101	2,360	3.0	-4,832
24 Israel	65	123	54	99	..	2.2	-5,268
27 Luxembourg	..	..	..	..	..	..	..
28 Malta	..	..	..	..	..	..	..
35 Portugal	63	106	47	104	3,844	8.7	-1,926
37 Czech Rep.	96	..	84	..	..	..	369
41 Slovakia	86	..	107	..	..	..	-532
46 Hungary	71	288	56	..	..	3.7	-4,284
55 Latvia	136	..	17	..	..	..	..
56 Poland	74	100	38	95	..	2.2	-5,927
57 Russian Federation	133	..	23	..	..	..	2,700
Medium human development	116	..	23	..	..	..	-4,740T
61 Belarus	95	..	6	..	..	..	-404
62 Bulgaria	96	..	80	..	..	6.1	-523
68 Estonia	75	..	21	..	..	..	-60
72 Kazakhstan	120	..	11	..	..	..	-1,479
74 Romania	76	360	44	111	..	2.9	-1,281
80 Ukraine	134	..	10	..	..	..	-970
81 Lithuania	143	..	27	..	..	..	-81
90 Turkmenistan	154	..	37	..	..	..	927
93 Armenia	15	..	10	..	..	..	-184
94 Uzbekistan	115	..	13	..	..	..	-405
96 Azerbaijan	146	..	12	..	..	..	503
98 Moldova, Rep. of	83	..	9	..	..	..	-164
99 Kyrgyzstan	100	..	6	..	..	..	-123
101 Georgia	48	..	23	..	..	..	-191
104 Albania	..	..	..	..	278	..	-304
105 Tajikistan	70	..	25	..	..	..	..
All developing countries	91	..	47	96	..	3.1	-106,250T
Industrial countries	105	89	29	104	..	2.1	57,520T
World	..	..	32	..	..	2.4	-48,730T
North America	110	102	20	97	..	1.0	-109,030T
Eastern Europe and CIS	105	..	30	99	..	3.2	-12,410T
Western and Southern Europe	106	94	43	101	..	2.5	68,860T
OECD	105	88	29	104	..	2.1	44,690T
European Union	99	87	43	103	..	2.1	38,860T
Nordic countries	123	130	55	100	..	2.9	7,850T

Source: Columns 1, 2, 3 and 5: calculated on the basis of estimates from World Bank 1995f; columns 4, 6 and 7: World Bank 1995f.

HDI rank	Defence expenditure						Military expenditure (as % of combined education and health expenditure)		ODA disbursed (as % of defence expenditure) 1994	Exports of conventional weapons to developing countries (1990 prices) ^a		Total armed forces	
	US\$ millions (1993 prices)		As % of GDP		Per capita (US\$; 1993 prices)		1960	1990-91		US\$ millions 1994	Share ^b (%) 1994	Thou- sands 1994	Index (1985 =100) 1994
	1985	1994	1985	1994	1985	1994							
High human development	602,830T	634,060T	4.0	3.1	737	611	..	..	12	..	..	6,580T	81
1 Canada	10,284	9,242	2.2	1.7	405	329	66	15	24	135	1.0	78	94
2 USA	339,229	278,730	6.5	4.3	1,418	1,074	173	46	4	6,222	47.3	1,651	77
3 Japan	28,240	44,600	1.0	1.0	234	356	17	12	30	..	..	238	98
4 Netherlands	7,814	6,901	3.1	2.1	540	450	67	22	37	108	0.8	71	67
5 Norway	2,719	3,333	3.1	3.1	655	771	48	22	34	..	..	34	91
6 Finland	1,974	1,919	2.8	2.0	402	377	25	15	15	..	..	31	118
7 France	42,918	42,724	4.0	3.3	778	739	131	29	20	324	2.5	410	88
8 Iceland	..	..	..	..	..	..	(.)	(.)	..	..	..	..	..
9 Sweden	4,194	4,818	3.3	2.5	502	549	30	16	38	..	..	64	97
10 Spain	9,900	7,416	2.4	1.6	256	187	126	18	18	..	..	207	65
11 Australia	7,155	7,275	3.4	2.3	454	401	46	24	15	..	..	62	88
12 Belgium	5,409	3,843	3.0	1.7	549	382	49	20	19	..	..	63	69
13 Austria	1,696	1,818	1.2	0.9	225	228	20	9	36	..	..	51	94
14 New Zealand	849	529	2.9	1.1	261	151	29	16	21	..	..	10	81
15 Switzerland	2,536	4,082	2.1	1.6	393	579	45	14	24	..	..	30	149
16 United Kingdom	41,891	33,861	5.2	3.4	741	583	96	40	9	960	7.3	254	78
17 Denmark	2,747	2,667	2.2	1.9	537	513	37	18	54	..	..	27	91
18 Germany	46,330	34,848	3.2	2.0	610	428	67	29	20	462	3.5	367	77
19 Ireland	420	607	1.8	1.2	118	172	24	12	18	..	..	13	95
20 Italy	22,576	20,632	2.3	2.1	395	357	39	21	13	132	1.0	322	84
21 Greece	3,060	4,224	7.0	5.7	308	406	145	71	..	..	..	159	79
24 Israel	6,638	6,543	21.2	9.5	1,568	1,230	85	106	..	..	..	172	121
27 Luxembourg	84	120	0.9	1.2	229	301	19	10	49	..	..	1	114
28 Malta	21	27	1.4	1.0	59	73	..	10	..	..	..	2	238
35 Portugal	1,610	2,221	3.1	2.6	157	225	156	32	14	..	..	51	70
37 Czech Rep.	..	908	..	2.6	..	88	60	17	..	474	3.6	93	..
41 Slovakia	..	301	4.7	2.5	..	56	..	..	..	145	1.1	47	..
46 Hungary	4,970	645	7.2	1.6	467	63	31	18	..	..	..	75	70
55 Latvia	..	105	..	3.8	..	40	..	..	..	..	..	3	..
56 Poland	7,567	2,197	8.1	2.5	203	57	41	30	..	..	..	284	89
57 Russian Federation	..	106,927	..	9.6	..	718	134	132	..	2,306	17.5	1,714	..
Medium human development	..	4,010T	..	2.6	..	23	..	..	..	..	..	1,260T	..
61 Belarus	..	479	..	2.2	..	46	..	..	..	..	..	93	..
62 Bulgaria	7,632	274	14.1	2.5	852	33	70	29	..	..	..	102	69
68 Estonia	..	80	..	3.8	..	51	..	..	..	..	..	3	..
72 Kazakhstan	..	404	..	3.5	..	25	..	..	..	..	..	40	..
74 Romania	1,833	743	4.5	2.9	81	33	47	25	..	..	..	231	122
80 Ukraine	..	868	..	2.1	..	17	..	..	..	23	1.7	517	..
81 Lithuania	..	137	..	3.9	..	37	..	..	..	..	..	9	..
90 Turkmenistan	..	63	..	1.1	..	16	..	..	..	..	..	28	..
93 Armenia	..	69	..	3.1	..	18	..	..	..	..	..	33	..
94 Uzbekistan	..	317	..	2.4	..	14	..	..	..	..	..	45	..
96 Azerbaijan	..	245	..	8.7	..	33	..	..	..	..	..	56	..
98 Moldova, Rep. of	..	38	..	3.8	..	8	..	..	..	..	..	11	..
99 Kyrgyzstan	..	48	..	1.4	..	11	..	..	..	..	..	12	..
101 Georgia	..	133	..	2.4	..	23	..	..	..	..	..	10	..
104 Albania	248	41	5.3	2.7	84	12	..	51	..	..	..	73	181
105 Tajikistan	..	66	..	4.0	..	11	..	..	..	..	..	3	..
All developing countries	179,670T	140,030T	5.5	3.6	52	34	143	60	..	..	..	14,170T	97
Industrial countries	612,540T	638,070T	4.1	3.1	718	525	97	33	..	..	..	7,850T	83
World	792,220T	778,100T	4.3	3.2	171	141	104	37	..	..	..	22,020T	93
North America	349,510T	287,970T	6.1	4.1	1,316	999	163	43	4	..	..	1,730T	77
Eastern Europe and CIS	..	115,090T	8.5	8.0	..	292	103	96	..	..	..	3,480T	..
Western and Southern Europe	156,010T	142,200T	3.0	2.3	502	438	..	..	21	..	..	1,900T	80
OECD ^c	588,280T	523,350T	3.9	2.7	651	540	96	30	12	..	..	4,870T	81
European Union	192,620T	168,620T	3.4	2.4	540	454	83	28	19	..	..	2,090T	79
Nordic countries	11,630T	12,740T	2.8	2.4	516	545	33	17	37	..	..	160T	92

a. Figures are trend indicator values.

b. Share of country in total exports of conventional weapons that go to developing countries.

c. Excluding Mexico and Turkey.

Source: Columns 1-6 and 12: IISS 1995; columns 7 and 8: IISS 1993, UNDP 1994a and World Bank 1993c; column 9: calculated on the basis of estimates from IISS 1995 and OECD 1996; column 10: SIPRI 1995; column 11: calculated on the basis of estimates from SIPRI 1995; column 13: calculated on the basis of estimates from IISS 1995.

HDI rank	Urban population (as % of total)			Urban population annual growth rate (%)		Population in cities of more than 750,000		City	Largest city		
	1960	1993	2000	1960- 1993	1993- 2000	As % of total population 1990	As % of urban population 1990		Population (thousands) 1995	Growth rate (%)	
										1970-75	1990-95
High human development	64	76	78	1.3	0.7	31	41	..	..	..	..
1 Canada	69	77	77	1.8	1.2	36	48	Toronto	4,483	1.8	3.5
2 USA	70	76	78	1.3	1.2	41	55	New York	16,329	-0.4	0.3
3 Japan	63	77	78	1.5	0.4	37	48	Tokyo	25,013	3.7	1.4
4 Netherlands	85	89	90	1.0	0.7	14	16	Amsterdam	1,109	-1.0	1.0
5 Norway	50	73	74	1.7	0.7	..	..	..	..	..	..
6 Finland	38	63	65	1.9	1.0	18	28	Helsinki	1,059	2.2	3.9
7 France	62	73	73	1.2	0.5	23	31	Paris	9,469	0.9	0.3
8 Iceland	80	91	92	1.6	1.2	..	..	..	..	..	..
9 Sweden	73	83	83	0.9	0.5	17	21	Stockholm	1,545	2.2	0.7
10 Spain	57	76	78	1.7	0.4	18	24	Madrid	4,072	2.5	-0.5
11 Australia	81	85	85	1.8	1.2	59	69	Sydney	3,590	2.1	0.4
12 Belgium	93	97	97	0.4	0.4	12	12	Brussels	1,122	1.0	-0.5
13 Austria	50	55	56	0.6	0.8	27	48	Vienna	2,060	0.5	0.1
14 New Zealand	76	86	87	1.5	1.4	26	31	Auckland	945	2.8	1.5
15 Switzerland	51	60	62	1.3	1.4	12	20	Zurich	897	0.1	1.6
16 United Kingdom	86	89	90	0.4	0.4	23	26	London	7,335	..	..
17 Denmark	74	85	86	0.8	0.2	26	31	Copenhagen	1,326	0.0	-0.3
18 Germany	76	86	88	0.7	0.4	43	51	Essen	6,481	-0.4	0.4
19 Ireland	46	57	59	1.3	0.7	26	46	Dublin	911	1.6	-0.1
20 Italy	59	67	67	0.7	0.1	24	37	Naples	4,603	0.2	-1.3
21 Greece	43	64	68	1.9	1.1	43	68	Athens	3,693	1.7	1.1
24 Israel	77	91	91	3.3	2.1	38	43	Tel-Aviv	1,921	3.2	1.4
27 Luxembourg	62	88	91	1.8	1.5	..	..	..	..	..	..
28 Malta	70	89	91	1.2	0.9	..	..	..	..	..	..
35 Portugal	22	35	38	1.7	1.3	19	50	Lisbon	1,863	2.3	2.3
37 Czech Rep.	46	65	66	1.3	0.3	12	18	Prague	1,225	0.9	0.2
41 Slovakia	34	58	61	2.4	1.2	..	..	..	..	..	..
46 Hungary	43	64	67	1.3	0.4	20	31	Budapest	2,017	0.6	0.0
55 Latvia	57	72	75	1.4	-0.3	35	48	Riga	924	1.6	0.1
56 Poland	48	64	67	1.7	0.9	22	35	Katowice	3,552	1.8	0.6
57 Russian Federation	54	75	78	1.7	0.3	20	27	Moscow	9,233	1.4	0.4
Medium human development	41	58	61	2.2	1.1	15	25	..	..	..	..
61 Belarus	32	70	75	3.0	0.9	16	24	Minsk	1,788	3.7	1.4
62 Bulgaria	39	70	73	2.2	0.3	15	22	Sofia	1,384	1.7	1.1
68 Estonia	58	73	75	1.5	-0.2	..	..	..	..	..	..
72 Kazakhstan	45	59	62	2.5	1.4	7	12	Alma-Ata	1,262	2.5	1.7
74 Romania	34	55	58	2.1	0.6	9	17	Bucharest	2,090	2.3	0.4
80 Ukraine	47	69	73	1.8	0.6	18	27	Kiev	2,809	3.0	1.3
81 Lithuania	40	71	75	2.6	0.7	..	..	..	..	..	..
90 Turkmenistan	46	45	46	2.7	2.5	..	..	..	..	..	..
93 Armenia	51	68	70	2.8	1.7	36	54	Yerevan	1,305	3.2	1.5
94 Uzbekistan	34	41	43	3.4	2.8	10	25	Tashkent	2,288	2.8	1.6
96 Azerbaijan	48	55	58	2.4	1.7	25	45	Baku	1,853	2.3	1.1
98 Moldova, Rep. of	23	50	56	3.5	1.8	..	..	..	..	..	..
99 Kyrgyzstan	34	39	41	2.7	2.4	..	..	..	..	..	..
101 Georgia	43	58	61	1.7	1.1	24	42	Tbilisi	1,353	2.0	1.2
104 Albania	31	37	40	2.8	2.1	..	..	..	..	..	..
105 Tajikistan	33	32	33	3.0	3.2	..	..	..	..	..	..
All developing countries	22	36	40	3.8	3.5	14	39	..	..	..	..
Industrial countries	61	73	75	1.4	0.7	29	40	..	..	..	..
World	34	44	47	2.7	2.5	17	39	..	..	..	..
North America	70	76	77	1.4	1.2	41	54	..	..	..	..
Eastern Europe and CIS	47	66	68	1.9	0.7	18	27	..	..	..	..
Western and Southern Europe	64	75	76	1.0	0.5	27	36	..	..	..	..
OECD	65	76	78	1.5	1.1	33	44	..	..	..	..
European Union	68	78	79	0.9	0.4	27	35	..	..	..	..
Nordic countries	61	77	78	1.2	0.6	20	25	..	..	..	..

Source: Columns 1, 3, 10 and 11: UN 1995h; columns 2, 4-7 and 9: calculated on the basis of data from UN 1995h.

HDI rank	Estimated population (millions)			Annual population growth rate (%)		Total fertility rate 1992	Contraceptive prevalence rate, any method (%) 1986-93	Dependency ratio (%) 1993	Population aged 65 and above (as % of total population) 1993
	1960	1993	2000	1960-1993	1993-2000				
High human development	810T	1,030T	1,060T	0.7	0.4	1.7	..	49.5	13.2
1 Canada	17.9	28.8	31.0	1.5	1.1	1.9	..	48.0	11.6
2 USA	180.7	257.9	275.1	1.1	0.9	2.1	74	52.9	12.7
3 Japan	94.1	124.5	126.5	0.9	0.2	1.5	64	43.2	13.2
4 Netherlands	11.5	15.3	15.9	0.9	0.6	1.6	76	45.6	13.1
5 Norway	3.6	4.3	4.4	0.6	0.4	1.9	76	54.5	16.1
6 Finland	4.4	5.1	5.2	0.4	0.4	1.9	..	49.4	13.9
7 France	45.7	57.5	59.0	0.7	0.4	1.7	81	52.5	14.6
8 Iceland	0.2	0.3	0.3	1.2	1.0	2.2	..	54.4	10.6
9 Sweden	7.5	8.7	9.0	0.5	0.5	2.1	..	56.4	17.5
10 Spain	30.5	39.5	39.8	0.8	0.1	1.2	..	46.9	14.3
11 Australia	10.3	17.6	19.2	1.6	1.3	1.9	76	49.6	11.5
12 Belgium	9.2	10.0	10.2	0.3	0.3	1.6	79	50.4	15.6
13 Austria	7.0	7.9	8.1	0.3	0.5	1.5	..	48.5	15.0
14 New Zealand	2.4	3.5	3.8	1.2	1.1	2.2	..	53.0	11.3
15 Switzerland	5.4	7.1	7.5	0.8	0.9	1.6	..	46.2	14.3
16 United Kingdom	52.4	57.9	59.0	0.3	0.3	1.8	81	53.7	15.6
17 Denmark	4.6	5.2	5.2	0.4	0.1	1.7	78	47.9	15.4
18 Germany	72.7	80.9	81.7	0.3	0.1	1.3	75	45.5	15.1
19 Ireland	2.8	3.5	3.6	0.7	0.4	2.1	..	58.5	11.3
20 Italy	50.2	57.1	57.3	0.4	0.0	1.3	..	44.9	15.4
21 Greece	8.3	10.4	10.6	0.7	0.3	1.4	..	48.5	15.1
24 Israel	2.1	5.3	6.1	2.8	2.1	2.9	..	64.6	9.4
27 Luxembourg	0.3	0.4	0.4	0.7	1.1	1.7	..	44.2	13.7
28 Malta	0.3	0.4	0.4	0.4	0.6	2.1	..	49.6	10.8
35 Portugal	8.8	9.8	9.8	0.3	0.0	1.6	66 ^a	50.0	13.7
37 Czech Rep.	9.6	10.3	10.3	0.2	0.1	1.8	69	48.5	12.6
41 Slovakia	4.1	5.3	5.5	0.8	0.4	1.9	74	52.7	10.7
46 Hungary	10.0	10.2	9.9	0.1	-0.4	1.7	73	48.5	13.8
55 Latvia	2.1	2.6	2.5	0.6	-0.8	1.6	..	51.2	12.8
56 Poland	29.6	38.3	38.8	0.8	0.2	1.9	..	52.7	10.6
57 Russian Federation	120.1	147.8	145.6	0.6	-0.2	1.5	..	49.9	11.3
Medium human development	120T	180T	180T	1.2	0.5	2.3	..	58.1	9.7
61 Belarus	8.2	10.2	10.1	0.7	-0.2	1.7	..	51.9	11.8
62 Bulgaria	7.9	8.9	8.6	0.4	-0.5	1.5	..	49.6	14.0
68 Estonia	1.2	1.6	1.5	0.7	-0.5	1.6	..	50.7	12.3
72 Kazakhstan	10.0	17.0	17.7	1.6	0.6	2.5	..	59.2	6.6
74 Romania	18.4	23.0	22.6	0.7	-0.3	1.5	57	49.1	11.2
80 Ukraine	42.9	51.6	51.0	0.6	-0.2	1.6	..	51.7	13.3
81 Lithuania	2.8	3.7	3.7	0.9	-0.1	1.8	..	51.3	11.7
90 Turkmenistan	1.6	3.9	4.6	2.8	2.2	4.0	..	78.6	4.0
93 Armenia	1.9	3.5	3.8	1.9	1.3	2.6	..	58.3	6.7
94 Uzbekistan	8.6	21.9	25.4	2.9	2.2	3.9	..	81.0	4.3
96 Azerbaijan	3.9	7.4	8.0	2.0	1.1	2.5	..	61.1	5.4
98 Moldova, Rep. of	3.0	4.4	4.5	1.2	0.3	2.1	..	56.4	8.9
99 Kyrgyzstan	2.2	4.6	5.1	2.3	1.6	3.7	..	75.2	5.5
101 Georgia	4.2	5.4	5.5	0.8	0.2	2.1	..	53.2	10.6
104 Albania	1.6	3.4	3.6	2.3	1.0	2.9	..	59.7	5.4
105 Tajikistan	2.1	5.8	7.0	3.1	2.7	4.9	..	90.0	4.1
All developing countries	2,070T	4,300T	4,880T	2.2	1.8	3.5	55	..	..
Industrial countries	930T	1,210T	1,240T	0.8	0.4	1.8	..	50.7	12.7
World	3,000T	5,510T	6,120T	1.9	1.5	3.1	..	..	..
North America	200T	290T	310T	1.1	0.9	2.1	74	52.4	12.6
Eastern Europe and CIS	300T	390T	400T	0.8	0.2	1.9	..	53.7	10.6
Western and Southern Europe	270T	320T	330T	0.5	0.2	1.5	..	47.9	14.8
OECD	700T	960T	1,010T	1.0	0.7	2.0	71	51.6	12.3
European Union	320T	370T	380T	0.5	0.2	1.5	..	48.7	15.0
Nordic countries	20T	20T	20T	0.4	0.4	1.9	..	52.6	15.9

a. Data refer to 1979-80.

Source: Columns 1-5, 8 and 9: calculated on the basis of estimates from UN 1995e; column 6: UN 1995e; column 7: UN 1994c.

HDI rank	Land area (1,000 ha) 1993	Forest and woodland	Arable land	Irrigated land	Internal renewable water resources	Annual fresh water withdrawals	
		(as % of land area) 1993	(as % of land area) 1993	(as % of arable land area) 1993	per capita (1,000 m ³ per year) 1992	As % of water resources 1980-89	Per capita (m ³) 1980-89
High human development	4,951,710T	37.9	10.4	8.3	12.3	..	1,149
1 Canada	997,614	49.5	4.6	1.6	106.0	2	1,684
2 USA	980,943	29.2	18.9	11.1	9.7	19	1,952
3 Japan	37,780	66.4	10.7	69.1	4.4	16	733
4 Netherlands	3,733	9.4	24.3	61.8	0.7	16	993
5 Norway	32,390	25.7	2.7	10.9	94.5	..	490
6 Finland	33,813	68.6	7.6	2.5	22.0	3	605
7 France	55,150	27.1	33.1	8.1	3.0	24	783
8 Iceland	10,300	1.2	0.1	..	653.9	..	366
9 Sweden	44,996	62.2	6.2	4.1	20.3	2	356
10 Spain	50,478	32.0	29.7	23.0	2.8	41	1,184
11 Australia	771,336	18.8	6.0	4.6	19.5	5	1,280
12 Belgium	..	..	..	..	0.8	72	917
13 Austria	8,385	38.6	16.9	0.3	7.2	2	279
14 New Zealand	27,099	27.2	9.0	11.6	114.9	..	585
15 Switzerland	4,129	30.3	9.6	6.3	6.2	2	170
16 United Kingdom	24,488	10.0	24.8	1.8	2.1	12	253
17 Denmark	4,309	10.3	58.9	17.1	2.1	9	228
18 Germany	35,691	30.0	32.7	3.9	1.2	55	1,274
19 Ireland	7,028	4.6	13.1	..	14.3	2	235
20 Italy	30,127	22.5	30.0	30.0	3.1	30	984
21 Greece	13,199	19.8	18.3	54.4	4.4	12	720
24 Israel	2,106	6.0	16.6	51.4	0.3	88	441
27 Luxembourg	..	..	..	..	2.7	1	159
28 Malta	32	..	37.5	8.3	(.)	92	66
35 Portugal	9,239	35.7	25.5	26.7	3.5	16	1,075
37 Czech Rep.	7,886	33.3	40.2	0.8	..	6	379
41 Slovakia	4,901	40.6	30.3	5.4	..	..	..
46 Hungary	9,303	19.0	51.0	4.3	0.6	5	502
55 Latvia	6,450	44.0	26.2	..	5.7	..	..
56 Poland	31,268	28.1	45.7	0.7	1.3	30	472
57 Russian Federation	1,707,540	45.6	7.6	3.1	27.1	..	..
Medium human development	551,300T	9.7	18.8	18.4	2.4	..	..
61 Belarus	20,760	33.7	29.4	1.6	3.3	..	..
62 Bulgaria	11,091	35.0	36.6	30.4	2.0	7	1,600
68 Estonia	4,510	44.8	25.0	..	6.9	..	..
72 Kazakhstan	271,730	3.5	12.7	6.4	4.1	..	..
74 Romania	23,750	28.1	39.3	33.2	1.6	12	1,144
80 Ukraine	60,370	17.1	55.2	7.8	1.0	..	..
81 Lithuania	6,520	30.7	34.6	..	3.4	..	..
90 Turkmenistan	48,810	8.2	2.9	92.9	0.3	..	..
93 Armenia	2,980	14.1	16.2	59.4	1.8	..	..
94 Uzbekistan	44,740	2.9	9.2	97.6	0.4	..	..
96 Azerbaijan	8,660	11.0	18.5	62.5	1.1	..	..
98 Moldova, Rep. of	3,370	12.5	51.8	17.8	0.3	..	..
99 Kyrgyzstan	19,850	3.5	7.1	64.3	10.8	..	..
101 Georgia	6,970	38.7	10.0	57.1	9.8	..	..
104 Albania	2,875	36.5	20.1	59.1	3.0	1	94
105 Tajikistan	14,310	3.8	5.7	78.9	8.5	..	..
All developing countries	7,797,040T	28.7	9.2	26.2	6.5	..	520
Industrial countries	5,503,010T	35.1	11.3	9.9	10.9	..	1,150
World	13,300,050T	31.3	10.0	18.7	7.6	8 ^a	641
North America	1,978,560T	39.4	11.7	9.3	19.1	..	1,926
Eastern Europe and CIS	2,318,640T	36.7	11.1	9.0	12.1	..	727
Western and Southern Europe	343,000T	34.9	20.7	16.2	5.2	..	951
OECD	3,455,990T	33.2	11.8	11.7	9.4	..	1,134
European Union	320,640T	35.1	23.7	15.1	3.2	..	862
Nordic countries	125,810T	47.8	7.0	8.1	36.8	..	405

a. UN 1994a.

Source: Column 1: FAO 1994; columns 2, 3 and 4: calculated on the basis of estimates from FAO 1994; column 5: World Resources Institute 1994; columns 6 and 7: UN 1994a.

HDI rank	Production as % of national energy reserves			Commercial energy production average annual growth rate (%)		Commercial energy consumption average annual growth rate (%)		Commercial energy use (oil equivalent)				Commercial energy imports (as % of merchandise exports)	
	Coal 1991	Natural gas 1991	Crude oil 1991					Kilograms per capita		GDP output per kilogram (US\$)			
				1971-80	1980-93	1971-80	1980-93	1971	1993	1971	1993	1971	1993
High human development	..	..	..	..	..	..	..	4,305	4,908	0.8	5.2	12	11
1 Canada	0.8	3.4	11.0	3	4	4	2	6,233	7,821	0.7	2.4	5	4
2 USA	0.4	11.0	10.0	1	1	2	1	7,633	7,918	0.7	3.1	7	13
3 Japan	1.0	6.1	(.)	3	5	3	3	2,553	3,642	0.9	9.3	20	14
4 Netherlands	(.)	4.1	17.0	6	0	2	1	3,900	4,533	0.8	4.5	12	8
5 Norway	(.)	2.1	8.9	30	9	4	2	3,565	5,096	0.9	4.7	12	2
6 Finland	..	..	..	3	3	3	2	3,982	5,635	0.7	2.9	13	10
7 France	5.8	4.1	16.0	1	7	2	2	3,025	4,031	1.0	5.4	13	9
8 Iceland	..	..	..	..	..	..	..	..	..	..	..	..	..
9 Sweden	..	..	..	10	5	2	1	4,521	5,385	1.0	4.0	11	8
10 Spain	2.3	8.3	(.)	5	5	5	3	1,264	2,373	1.0	5.1	26	13
11 Australia	0.2	4.6	18.0	5	6	3	2	4,079	5,316	0.9	3.1	5	6
12 Belgium	0.2	(.)	(.)	3	3	1	2	4,127	4,989	0.7	4.2	..	..
13 Austria	..	..	..	0	1	2	1	2,557	3,277	0.9	7.1	10	6
14 New Zealand	2.3	4.3	8.2	5	8	3	5	2,434	4,299	1.1	2.9	7	6
15 Switzerland	..	..	..	9	3	2	2	2,742	3,491	1.5	9.4	7	4
16 United Kingdom	2.5	8.2	16.0	8	0	0	1	3,790	3,718	0.7	4.4	12	6
17 Denmark	(.)	3.4	6.7	14	24	1	1	3,866	3,861	0.9	6.8	14	5
18 Germany	0.6	3.0	5.5	1	-1	2	..	3,953	4,170	..	5.7	8	7
19 Ireland	(.)	12.0	(.)	2	3	2	2	2,357	3,016	0.7	4.5	12	4
20 Italy	2.9	6.4	6.5	-1	2	2	2	2,141	2,697	1.0	6.4	16	9
21 Greece	1.8	(.)	(.)	8	6	6	3	1,034	2,160	1.2	3.3	21	24
24 Israel	..	..	..	-46	-10	3	4	2,073	2,607	1.0	5.1	9	11
27 Luxembourg	..	..	..	..	..	..	..	..	..	..	..	..	..
28 Malta	..	..	..	..	..	..	..	..	..	..	..	..	..
35 Portugal	..	..	..	2	2	5	5	721	1,781	1.2	4.9	15	13
37 Czech Rep.	..	..	..	..	..	..	..	..	..	..	..	..	..
41 Slovakia	..	..	..	..	..	..	..	..	..	..	..	..	..
46 Hungary	0.4	4.1	8.2	2	0	5	-1	1,872	2,385	0.3	1.6	10	19
55 Latvia	..	..	..	..	..	..	..	..	1,717	..	1.0	..	..
56 Poland	0.5	1.9	(.)	4	-2	5	-2	2,493	2,390	..	0.9	..	20
57 Russian Federation	..	..	..	..	..	..	..	..	4,438	..	0.5	..	..
Medium human development	..	..	..	..	..	..	..	..	2,734	..	0.5	..	..
61 Belarus	..	..	..	..	..	..	..	..	3,427	..	0.8	..	11
62 Bulgaria	0.8	(.)	(.)	4	0	5	-3	2,223	1,954	..	0.6	..	..
68 Estonia	..	..	..	..	..	..	..	..	..	..	..	..	..
72 Kazakhstan	..	..	..	..	..	..	..	..	4,435	..	0.3	..	..
74 Romania	1.0	14.0	4.3	3	-5	6	-3	1,955	1,765	..	0.6	..	34
80 Ukraine	..	..	..	..	..	..	..	..	3,960	..	0.5	..	..
81 Lithuania	..	..	..	..	..	..	..	..	2,596	..	0.4	..	43
90 Turkmenistan	..	..	..	..	..	..	..	..	2,268	..	..	..	..
93 Armenia	..	..	..	..	..	..	..	..	958	..	0.7	..	..
94 Uzbekistan	..	..	..	..	..	..	..	..	2,033	..	0.5	..	30
96 Azerbaijan	..	..	..	..	..	..	..	..	2,470	..	0.3	..	3
98 Moldova, Rep. of	..	..	..	..	..	..	..	..	1,345	..	0.7	..	..
99 Kyrgyzstan	..	..	..	..	..	..	..	..	965	..	0.9	..	41
101 Georgia	..	..	..	..	..	..	..	..	891	..	0.6	..	..
104 Albania	3.6	6.2	8.7	5	-5	10	-3	604	455	..	..	..	..
105 Tajikistan	..	..	..	..	..	..	..	..	634	..	0.7	..	31
All developing countries	..	..	..	..	..	..	..	255	536	1.2	2.8	10	14
Industrial countries	..	..	..	..	..	..	..	4,211	4,589	..	5.1	..	11
World	0.4 ^a	1.6 ^a	2.2 ^a	..	..	..	..	..	1,421 ^b	..	3.1	..	11
North America	..	..	..	..	..	..	..	7,501	7,908	0.7	3.0	7	12
Eastern Europe and CIS	..	..	..	..	..	..	..	..	3,356	..	0.6	..	..
Western and Southern Europe	..	..	..	..	..	..	..	2,904	3,583	1.0	5.6	13	8
OECD	..	..	..	..	..	..	..	4,008	4,560	0.8	5.2	12	11
European Union	..	..	..	..	..	..	..	3,044	3,588	0.9	5.4	13	8
Nordic countries	..	..	..	..	..	..	..	4,082	5,047	0.9	4.6	12	6

a. UN 1994a.

b. World Bank 1995f.

Source: Columns 1, 2 and 3: UN 1994a; columns 4-11: World Bank 1995f; columns 12 and 13: calculated on the basis of estimates from World Bank 1995f.

HDI rank	Greenhouse gas emissions (CO ₂ emissions)		Major protected areas (as % of national territory) 1993 ^b	Spent fuel produced (metric tons of heavy metal) 1993	Hazardous waste production (1,000 metric tons) 1991-94	Municipal waste generated (kg per person) 1992	Population served by municipal waste services (%) 1993 ^a	Waste recycling (as % of apparent consumption)	
	Thousands of tons 1993 ^a	Share of world total 1993 ^a						Paper and cardboard 1990-93	Glass 1990-93
High human development	10,852,280T	49.70	..	8,424T	337,780T	540	97	42	43
1 Canada	459,390	2.10	8.9	1,690	7,786	660	100	32	75
2 USA	5,128,734	23.50	10.6	2,400	276,000	730	100	34	22
3 Japan	1,146,360	5.25	7.3	876	..	410	100	51	56
4 Netherlands	178,950	0.82	10.2	15	1,430	500	100	53	76
5 Norway	38,490	0.18	17.1	..	151	510	97	32	67
6 Finland	56,330	0.26	8.1	68	560	620 ^c	75	45	46
7 France	416,140	1.91	9.7	1,250	4,000	470	100	42	46
8 Iceland	2,763	(.)	8.8	..	6	560	95	30	75
9 Sweden	55,440	0.25	6.6	230	..	370 ^c	100	50	59
10 Spain	258,034	1.18	8.4	156	..	360	90	78	29
11 Australia	286,283	1.30	7.7	..	426	690	..	50	36
12 Belgium	116,782	0.54	2.5	84	27,529	400	100	11	55
13 Austria	62,580	0.29	23.9	..	668	430 ^c	99	78	68
14 New Zealand	30,220	0.14	22.8	..	110	..	..	..	..
15 Switzerland	49,295	0.23	17.7	85	837	400	99	54	78
16 United Kingdom	564,354	2.59	20.3	1,080	1,957	..	100	32	29
17 Denmark	61,190	0.28	32.2	..	91	460	100	36	62
18 Germany	921,740	4.22	25.8	490 ^d	6,633 ^d	360 ^c	100	46	70
19 Ireland	34,360	0.16	0.7	..	66	..	..	3	29
20 Italy	435,281	1.99	7.6	..	3,387	350	..	47	52
21 Greece	80,320	0.37	1.7	..	450	310	100	30	20
24 Israel	..	..	..	..	..	..	..	..	..
27 Luxembourg	11,815	0.05	13.9	..	86	490	100	..	..
28 Malta	..	..	..	..	..	..	..	..	..
35 Portugal	49,900	0.23	6.3	..	1,365	330	89	41	29
37 Czech Rep.	..	..	13.5	..	..	..	..	..	..
41 Slovakia	..	..	20.7	..	..	..	..	..	..
46 Hungary	64,325	0.29	6.2	..	795	390	63	..	..
55 Latvia	..	..	..	..	..	..	..	..	..
56 Poland	343,210	1.57	9.8	..	3,444	340	55	..	..
57 Russian Federation	..	..	..	..	..	..	..	..	..
Medium human development	..	..	..	..	..	..	..	..	..
61 Belarus	..	..	..	..	..	..	..	..	..
62 Bulgaria	..	..	..	..	..	..	..	..	..
68 Estonia	..	..	..	..	..	..	..	..	..
72 Kazakhstan	..	..	..	..	..	..	..	..	..
74 Romania	..	..	..	..	..	..	..	..	..
80 Ukraine	..	..	..	..	..	..	..	..	..
81 Lithuania	..	..	..	..	..	..	..	..	..
90 Turkmenistan	..	..	..	..	..	..	..	..	..
93 Armenia	..	..	..	..	..	..	..	..	..
94 Uzbekistan	..	..	..	..	..	..	..	..	..
96 Azerbaijan	..	..	..	..	..	..	..	..	..
98 Moldova, Rep. of	..	..	..	..	..	..	..	..	..
99 Kyrgyzstan	..	..	..	..	..	..	..	..	..
101 Georgia	..	..	..	..	..	..	..	..	..
104 Albania	..	..	..	..	..	..	..	..	..
105 Tajikistan	..	..	..	..	..	..	..	..	..
All developing countries	..	..	..	..	..	..	..	..	..
Industrial countries	..	..	..	..	337,780T	..	..	..	..
World	21,825,770T	..	..	..	..	..	..	..	..
North America	5,924,840T	25.60	..	4,090T	283,790T	630	100	34	26
Eastern Europe and CIS	..	..	..	..	..	..	..	..	..
Western and Southern Europe	2,829,410T	13.00	..	2,378T	47,260T	400	98	47	57
OECD	10,943,510T	50.14	..	8,424T	333,540T	500	99	42	43
European Union	3,303,230T	15.13	..	3,373T	48,220T	399	98	45	52
Nordic countries	214,210T	1.00	..	298T	810T	485	99	42	59

a. 1993 or latest year available from 1990 on.

b. National classifications may differ. Includes only areas greater than 10 square kilometers except for islands.

c. 1990.

d. Former territory of the Federal Republic of Germany.

Source: Columns 1, 2, 3 and 6-9: OECD 1995g, columns 4 and 5: calculated on the basis of data from OECD 1995g.

HDI rank	GDP (US\$ billions) 1993	Agriculture (as % of GDP) 1993	Industry (as % of GDP) 1993	Services (as % of GDP) 1993	Consumption		Gross domestic investment (as % of GDP) ^a 1993	Gross domestic savings (as % of GDP) 1993	Tax revenue (as % of GNP) 1993	Central government expenditure (as % of GNP) 1993	Exports (as % of GDP) 1993	Imports (as % of GDP) 1993
					Private (as % of GDP) 1993	Government (as % of GDP) 1993						
High human development	18,900T	3	37	61	62	17	21	21	26	33	14	14
1 Canada	477.5	..	..	..	61	22	18	18	20	26	30	28
2 USA	6,259.9	..	..	..	68	17	16	15	18	24	7	10
3 Japan	4,214.2	2	41	57	58	10	30	33	..	..	9	6
4 Netherlands	309.2	4	28	68	61	15	19	24	46	54	45	41
5 Norway	103.4	3	35	62	52	22	20	26	..	..	31	23
6 Finland	74.1	5	31	64	57	23	14	20	31	45	32	24
7 France	1,251.7	3	29	69	61	19	18	20	38	46	16	16
8 Iceland	..	..	..	..	..	..	..	..	..	..	..	..
9 Sweden	166.7	2	31	67	55	28	13	17	33	54	30	26
10 Spain	478.6	..	..	..	63	18	20	19	29	35	13	16
11 Australia	289.4	3	29	67	63	18	20	19	22	28	15	15
12 Belgium	210.6	..	..	..	62	15	18	23	42	51	53	59
13 Austria	182.1	2	35	62	55	19	25	26	33	40	22	27
14 New Zealand	43.7	..	..	..	60	15	21	24	31	37	24	22
15 Switzerland	232.2	..	..	..	59	14	22	27	..	..	26	24
16 United Kingdom	819.0	2	33	65	64	22	15	14	33	43	22	25
17 Denmark	117.6	4	27	69	52	26	14	21	35	46	31	25
18 Germany	1,910.8	1	38	61	58	20	22	22	30	34	20	18
19 Ireland	43.0	8	10	82	56	16	14	28	39	47	67	50
20 Italy	991.4	3	32	65	62	18	17	20	41	53	17	15
21 Greece	63.2	18	32	50	71	19	20	10	23	43	13	32
24 Israel	69.7	..	..	..	59	27	22	14	32	44	21	32
27 Luxembourg	..	..	..	..	..	..	..	..	..	..	..	..
28 Malta	..	..	..	..	..	..	..	..	..	..	..	..
35 Portugal	85.7	..	..	..	65	17	27	18	30	42	18	29
37 Czech Rep.	31.6	6	40	54	54	26	17	20	39	42	41	43
41 Slovakia	11.1	7	44	49	54	23	25	22	..	..	49	57
46 Hungary	38.1	6	28	66	62	27	20	11	..	..	23	33
55 Latvia	4.6	15	32	53	57	19	11	24	..	..	10	7
56 Poland	85.9	6	39	55	65	22	16	13	..	..	16	22
57 Russian Federation	329.4	9	51	39	52	15	26	32	..	..	13	10
Medium human development	250T	29	44	28	69	17	19	15	..	..	9	9
61 Belarus	27.5	17	54	29	51	22	35	27	29	33	3	3
62 Bulgaria	10.4	13	38	49	66	17	20	17	27	48	39	41
68 Estonia	5.1	8	29	63	57	19	26	23	26	27	9	12
72 Kazakhstan	24.7	29	42	30	62	28	31	10	..	..	6	5
74 Romania	26.0	21	40	40	66	12	27	22	33	40	19	25
80 Ukraine	109.1	35	47	18	80	13	8	7	..	..	6	4
81 Lithuania	4.3	21	41	38	76	13	18	11	19	20	16	11
90 Turkmenistan	5.2	32	31	37	44	23	46	33	..	..	22	15
93 Armenia	2.2	48	30	22	91	22	14	-14	..	..	1	9
94 Uzbekistan	20.4	23	36	41	44	22	29	34	..	..	7	6
96 Azerbaijan	5.0	22	52	26	54	20	14	26	..	..	7	5
98 Moldova, Rep. of	4.3	35	48	18	104	..	7	-4	..	..	4	5
99 Kyrgyzstan	3.9	43	35	22	52	16	25	32	..	..	3	3
101 Georgia	3.0	58	22	20	89	9	32	2	..	..	7	15
104 Albania	0.7	40	13	47	170	..	10	-70	..	..	..	..
105 Tajikistan	2.5	33	35	32	..	..	..	..	..	..	10	15
All developing countries	3,780T	15	35	50	65	13	26	26	14	21	23	25
Industrial countries	19,150T	3	37	60	62	17	21	21	26	34	14	14
World	22,930T	6	36	58	63	16	21	22	24	31	16	16
North America	6,740T	..	..	..	68	17	16	15	18	24	9	11
Eastern Europe and CIS	760T	15	45	39	60	18	22	22	..	..	14	14
Western and Southern Europe	6,220T	3	33	65	60	19	20	21	35	43	22	21
OECD	18,820T	3	36	62	63	16	21	21	26	33	14	14
European Union	6,700T	3	33	65	60	19	19	20	35	43	22	21
Nordic countries	460T	3	31	66	54	25	15	21	33	50	31	25

Note: Percentage shares of agriculture, industry and services do not necessarily add to 100 because of rounding.

a. Includes private and public investment.

Source: Columns 1 and 9-12: calculated on the basis of estimates from World Bank 1995f; columns 2-8: World Bank 1995f.

HDI rank	GNP (US\$ billions) 1993	GNP annual growth rate (%) 1980-93	GNP per capita annual growth rate (%)		Average annual rate of inflation (%)		Exports as % of GDP (% annual growth rate) 1980-93	Tax revenue as % of GNP (% annual growth rate) 1980-92	Overall budget surplus/deficit (as % of GNP)	
			1965-80	1980-93	1980-93	1993			1980	1993
High human development	19,490T	2.4	3.1	1.6	5.7	33.6	2.2	1.4	-4.4	-4.4
1 Canada	575	2.2	3.3	1.4	3.9	1.2	3.2	1.2	-3.6	-3.8
2 USA	6,388	2.4	1.8	1.7	3.8	2.0	2.8	(.)	-2.8	-4.0
3 Japan	3,903	3.6	5.1	3.4	1.5	0.8	1.6	2.0	-7.0	..
4 Netherlands	320	1.9	2.7	1.7	1.7	1.6	2.2	0.3	-4.5	-0.9
5 Norway	112	2.6	3.6	2.2	4.6	1.0	2.9	-0.5	-2.0	..
6 Finland	98	1.1	3.6	1.5	5.8	2.3	1.7	0.9	-2.2	-15.4
7 France	1,293	1.8	3.7	1.6	5.1	2.2	1.9	0.4	-0.1	-3.8
8 Iceland	7	2.0	..	1.2	25.4	2.9	-0.2	..	..	..
9 Sweden	215	0.9	2.0	1.3	6.9	2.6	2.5	2.0	-8.1	-12.2
10 Spain	536	2.4	4.1	2.7	8.4	4.4	3.6	2.9	-4.2	-3.7
11 Australia	308	2.7	2.2	1.6	6.1	1.1	3.9	2.1	-1.5	-2.3
12 Belgium	218	1.7	3.6	1.9	4.0	4.4	2.4	0.2	-8.2	-7.0
13 Austria	185	2.0	4.0	2.0	3.6	3.6	2.4	0.1	-3.4	-3.9
14 New Zealand	44	1.8	1.7	0.7	8.5	0.9	2.3	0.9	-6.8	0.1
15 Switzerland	252	1.5	1.5	1.1	3.8	2.1	1.3	..	-0.2	..
16 United Kingdom	1,046	2.0	2.0	2.3	5.6	3.4	1.1	1.0	-4.6	-5.1
17 Denmark	137	1.8	2.2	2.0	4.6	1.2	2.4	0.7	-2.7	-2.4
18 Germany	1,903	2.8	3.0	2.1	2.8	3.9	-0.1	0.4	..	-2.4
19 Ireland	46	3.1	2.8	3.6	4.8	3.6	4.7	1.6	-12.9	-2.3
20 Italy	1,133	1.7	3.2	2.1	8.8	4.4	2.8	2.8	-10.7	-10.1
21 Greece	78	1.3	4.8	0.9	17.3	12.6	4.8	0.8	-4.8	-15.6
24 Israel	73	4.4	3.7	2.0	70.4	11.0	1.1	-5.4	-16.1	-1.7
27 Luxembourg	15	3.2	..	2.8	5.0	6.2	1.0	..	..	..
28 Malta	3	3.8	..	3.2	2.3	3.3	-0.3	..	..	..
35 Portugal	88	2.6	4.6	3.3	16.4	7.4	3.7	1.4	-8.7	-2.2
37 Czech Rep.	28	..	..	..	..	15.6	..	..	..	2.6
41 Slovakia	11	..	..	..	..	15.2	..	..	..	..
46 Hungary	36	0.4	5.1	1.2	12.8	21.5	-0.3	0.1	-2.9	..
55 Latvia	6	-2.7	..	-0.6	23.8	74.2	..	..	..	..
56 Poland	86	0.7	..	0.4	69.3	31.1	3.2	..	..	..
57 Russian Federation	346	-1.8	..	-1.0	35.4	873.5	..	..	..	..
Medium human development	260T	-0.9	..	-1.0	30.5	1,824.0	..	..	..	..
61 Belarus	29	1.8	..	2.4	30.9	1,428.7	..	..	..	-2.9
62 Bulgaria	10	0.2	..	0.5	15.9	57.5	-11.0	..	..	-12.9
68 Estonia	4	-3.9	..	-2.2	29.8	81.2	..	..	..	-2.0
72 Kazakhstan	24	-2.0	..	-1.6	35.2	1,255.5	..	..	..	..
74 Romania	26	-2.3	..	-2.4	22.4	225.9	-1.2	..	..	-4.7
80 Ukraine	114	-0.5	..	0.2	37.2	3,691.2	..	..	..	..
81 Lithuania	5	-3.9	..	-2.8	35.2	342.7	..	..	..	0.6
90 Turkmenistan	..	..	..	..	16.5	..	..	..	..	..
93 Armenia	3	-14.8	..	-4.2	26.9	1,480.7	..	..	..	..
94 Uzbekistan	22	1.7	..	-0.2	24.5	914.5	..	..	..	..
96 Azerbaijan	5	-4.5	..	-3.5	28.2	714.5	..	..	..	..
98 Moldova, Rep. of	5	..	..	-2.0	32.4	..	..	..	..	..
99 Kyrgyzstan	4	0.2	..	0.1	28.6	792.2	..	..	..	..
101 Georgia	3	-9.4	..	-6.6	40.7	..	..	..	..	..
104 Albania	1	-1.5	..	-3.2	5.6	105.7	-2.7	..	..	..
105 Tajikistan	2	-4.0	..	-3.6	26.0	1,251.7	..	..	..	..
All developing countries	3,840T	4.6	2.9	3.9	86.0	289.3	3.3	..	..	..
Industrial countries	19,740T	2.4	3.1	1.2	6.3	70.6	2.1	1.4	..	-4.4
World	23,580T	2.8	3.0	3.3	18.5	103.3	2.3	1.1	..	..
North America	6,960T	2.4	1.9	1.7	3.8	1.9	2.8	1.2	-2.9	-4.0
Eastern Europe and CIS	770T	-1.1	5.1	-0.8	35.5	1,025.4	..	0.1	..	..
Western and Southern Europe	6,640T	2.1	3.4	2.0	5.4	3.4	1.8	1.1	-4.8	-5.0
OECD	19,410T	2.5	3.1	1.9	5.0	2.8	2.2	1.3	-4.3	-4.5
European Union	7,310T	2.1	3.2	2.1	5.5	3.5	1.7	1.1	-5.0	-5.0
Nordic countries	570T	1.5	2.7	1.7	5.9	1.9	2.4	1.0	-4.6	-9.9

Source: Column 1: World Bank 1995d; columns 2-5, 9 and 10: World Bank 1995f; column 6: calculated on the basis of data from World Bank 1995e; columns 7 and 8: calculated on the basis of estimates from World Bank 1995f.

	Sub-Saharan Africa	Arab States	South Asia	East Asia	East Asia excl. China	South-East Asia and Pacific	Latin America and the Caribbean	Least developed countries	All developing countries	Eastern Europe and CIS	Industrial countries ^a	World
Table 1: Human development index^b												
Life expectancy	50.9	62.1	60.3	68.8	71.3	63.7	68.5	51.0	61.5	69.2	74.3	63.0
Adult literacy rate	55.0	53.0	48.8	81.0	95.9	86.0	85.9	46.5	68.8	97.6	98.3	76.3
Combined 1st, 2nd and 3rd level enrolment	42	56	52	58	78	59	69	34	55	74	82	60
Real GDP per capita (PPP\$)	1,288	4,513	1,564	2,686	8,336	3,216	5,756	898	2,696	4,164	15,136	5,428
Human development index	0.379	0.633	0.444	0.633	0.877	0.646	0.824	0.331	0.563	0.773	0.909	0.746
Table 2: Gender-related development index												
Life expectancy												
Female	52.5	64.1	60.5	70.8	74.8	66.0	71.2	52.1	62.9	74.2	78.6	64.6
Male	49.3	61.5	60.1	66.8	67.8	62.2	65.9	50.0	60.3	64.2	71.2	61.4
Adult literacy rate												
Female	45.4	40.4	35.0	71.9	94.3	82.6	84.2	36.1	59.8	98.7	98.5	69.6
Male	64.7	65.6	61.7	89.1	98.3	91.4	87.0	57.5	77.6	98.9	98.7	82.5
Combined primary, secondary and tertiary enrolment												
Female	37.2	51.0	43.2	55.0	75.5	58.1	68.2	29.5	50.6	76.5	84.3	55.6
Male	45.9	63.4	59.6	61.0	82.1	60.9	68.9	40.1	59.7	72.4	81.8	63.0
Share of earned income												
Female	35.6	20.0	23.9	37.5	27.3	35.0	26.1	32.8	31.0	40.2	37.0	32.4
Male	64.4	80.0	76.1	62.5	72.7	65.0	73.9	67.2	69.0	59.8	63.0	67.6
Gender-related development index	0.366	0.513	0.410	0.610	0.808	0.621	0.722	0.318	0.530	..	0.868	0.600
Table 3: Gender empowerment measure (% women)												
Seats in parliament	9.9	5.2	6.5	19.3	2.0	8.2	11.6	7.7	10.8	12.5	14.5	12.2
Administrators and managers	10.2	13.0	3.0	11.3	..	14.7	20.4	8.5	10.0	..	27.4	14.0
Professional and technical workers	27.9	30.0	21.3	45.1	..	46.6	49.4	23.6	36.3	..	47.8	38.9
Earned income share	35.6	20.0	23.9	37.4	27.3	35.1	26.0	32.9	31.0	40.2	37.0	32.5
Gender empowerment measure	0.279	0.290	0.234	0.471	0.282	0.386	0.416	0.269	0.351	0.453	0.569	0.391
Table 4: Profile of human development												
Life expectancy	51.4	62.9	60.5	68.8	71.0	64.1	68.8	51.5	63.3	69.0	74.5	64.8
Access to health services	57	85	77	92	100	80	73	50	80	..	..	..
Access to safe water	45	72	81	68	93	62	80	52	70	..	..	..
Access to sanitation	37	59	32	27	98	51	68	31	39	..	..	..
Daily calorie supply per capita	2,096	2,820	2,356	2,751	3,102	2,541	2,757	2,027	2,546	..	..	..
Adult literacy rate	56.0	53.2	49.6	80.7	96.1	86.4	86.8	47.3	70.6	95.5	..	..
Combined 1st, 2nd and 3rd level enrolment	42	57	52	58	79	60	69	35	55	74	82	60
Daily newspapers	2	4	3	37	37	3	9	1	5	21	29	11
Televisions	3	11	4	4	16	7	17	3	6	33	53	16
Real GDP per capita (PPP\$)	1,385	4,645	1,575	2,680	10,689	3,249	5,822	894	2,703	4,192	15,211	5,545
GNP per capita (US\$)	555	1,725	309	825	8,494	1,089	2,966	210	970	1,992	16,394	4,570
Table 5: Profile of human deprivation (millions unless otherwise stated)												
Refugees (thousands; total)	5,439	1,230	4,558	290	2	122	125	5,220	11,787	656	3,793	15,580
No health services (total)	205	36	286	96	0	91	74	262	788	..	..	..
No safe water (total)	285	67	248	398	4	180	92	265	1,282	..	..	..
No sanitation (total)	293	98	850	911	1	229	147	359	2,527	..	..	..
Illiterate adults (total)	121	59	416	167	1	38	42	152	851	2	..	..
Illiterate females (total)	75	37	257	121	1	26	23	92	544	1	..	..
Children not in primary school (thousands)	..	..	..	..	..	..	..	..	..	..	..	..
Malnourished children under five (thousands; total)	22,464	3,138	84,603	19,355	38	20,795	5,805	26,736	156,935	475	..	..
Children dying before age five (thousands; total)	4,115	617	4,783	954	29	1,048	557	4,080	12,162	196	284	12,446
Table 6: Trends in human development												
Life expectancy												
1960	40.1	45.2	43.6	47.5	54.5	45.4	55.4	38.8	46.0	66.8	68.7	49.9
1993	51.0	62.1	60.3	68.8	71.3	63.7	68.5	51.1	61.5	69.2	74.3	63.0
Infant mortality rate												
1960	167	167	164	146	83	127	107	173	150	..	..	..
1993	97	66	84	42	18	53	45	110	70	..	..	..
Access to safe water												
1975-80	25	69	27	70	70	15	60	21	40	..	..	..
1990-95	43	76	71	94	94	63	81	38	68	..	..	..
Underweight children (under five)												
1975	31	20	69	26	..	46	16	51	40	..	..	..
1985-95	31	11	51	17	..	37	10	45	30	..	..	..
Adult literacy rate												
1970	27	29	31	88	88	65	71	28	43	..	..	..
1993	55	55	48	98	98	86	85	47	61	..	..	..
Enrolment ratio, all levels (% age 6-23)												
1980	39	48	37	51	65	51	59	31	46	..	..	..
1990	36	55	45	44	73	54	62	31	47	..	..	..
Real GDP per capita (PPP\$)												
1960	990	931	698	729	869	732	2,138	561	915
1993	1,379	4,263	1,576	2,681	11,088	3,680	5,816	887	2,709

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	Sub-Saharan Africa	Arab States	South Asia	East Asia	East Asia excl. China	South-East Asia and Pacific	Latin America and the Caribbean	Least developed countries	All developing countries	Eastern Europe and CIS	Industrial countries ^a	World
Table 7: South-North gaps (expressed as % of average for North)												
Life expectancy												
1960	58	65	63	69	78	66	80	56	65	..	100	..
1993	68	83	81	92	96	86	92	68	82	..	100	..
Adult literacy												
1970	30	31	35	..	..	70	78	32	48	..	100	..
1993	57	57	51	..	..	90	90	50	66	..	100	..
Daily calorie supply per capita												
1965	75	71	71	70	78	70	82	72	72	..	100	..
1992	67	89	76	88	96	81	88	65	81	..	100	..
Access to safe water												
1975-80	..	..	29	..	..	..	..	..	..	..	..	..
1990-95	..	..	73	..	..	..	..	..	..	..	..	..
Under-five mortality												
1960	17	17	17	21	35	24	30	15	20	..	100	..
1994	12	32	17	44	80	30	49	12	28	..	100	..
Table 8: Rural-urban gaps												
Rural population (% of total)	70	50	73	69	26	68	27	79	64	34	27	56
Access to health services												
Rural	50	70	73	89	..	..	..	..	76	..	..	..
Urban	81	94	99	100	..	..	..	..	96	..	..	..
Access to safe water												
Rural	35	51	78	56	75	55	51	48	60	..	85	61
Urban	63	95	87	97	100	79	87	65	87	..	..	..
Access to sanitation												
Rural	30	33	18	8	94	41	36	24	20	..	..	..
Urban	56	85	71	77	99	70	71	61	72	..	..	..
Rural-urban disparity												
Health services	63	81	72	90	..	..	..	..	78	..	..	..
Safe water	56	54	90	58	75	70	59	74	69	..	85	69
Sanitation	55	45	26	18	92	63	44	38	35	..	..	..
Table 9: Women and capabilities												
Female net enrolment												
Primary												
1992	54	78	71	95	100	94	86	50	84	93	97	87
Index (1980=100)	113	119	137	100	100	114	105	122	118	96	101	112
Secondary												
1992	18	44	12	85	85	34	44	10	33	76	87	52
Index (1980=100)	51	155	176	131	131	0	53	116	86	116	50	72
Female tertiary students												
1992	236	925	326	234	2,866	733	321	70	365	2,594	3,515	1,139
Index (1980=100)	228	222	207	240	324	271	137	214	227	92	133	208
Female life expectancy												
1993	52.5	63.5	60.5	70.8	74.5	65.6	71.2	52.1	62.8	73.8	77.9	64.6
Index (1970=100)	116	124	126	114	120	126	116	120	121	104	106	119
Total fertility rate												
1992	6.3	4.9	4.2	2.0	1.9	3.3	3.1	5.8	3.5	1.9	1.8	3.1
Index (1970=100)	95	70	71	37	39	59	59	88	60	75	76	63
Maternal mortality rate	929	392	576	95	100	412	180	1,015	384	62	28	307
Table 10: Women and political and economic participation												
Administrators and managers												
% female	10	13	3	11	..	15	20	9	10	..	27	14
female as % of male	12	15	3	13	6	19	26	..	12	..	44	18
Professional and technical workers												
% female	28	30	21	45	..	47	49	24	36	..	48	39
female as % of male	42	45	29	81	65	92	106	..	65	..	95	71
Clerical and sales workers												
% female	..	..	5	40	..	..	48	..	..	..	..	..
female as % of male	..	..	5	66	..	..	110	..	..	..	..	..
Service workers												
% female	..	..	26	52	..	57	56	..	..	..	..	..
female as % of male	..	..	48	108	..	..	153	..	..	..	..	..
Share of women												
in government	7.7	2.6	4.7	2.4	1.4	7.1	13.6	7.0	7.6	5.4	10.8	8.7
at ministerial level	7.9	4.4	6.5	3.2	1.8	6.5	10.7	8.6	7.7	5.6	12.6	9.1
at sub-ministerial level	9.0	3.1	4.7	2.3	1.4	8.1	15.5	7.7	8.5	6.2	11.3	9.6
Table 11: Child survival and development												
Pregnant women with anaemia	..	..	..	..	..	62	..	..	..	..	..	..
Births attended by trained health personnel	39	46	33	94	93	56	83	29	63	100	99	69
Low-birth-weight infants	16	12	32	9	9	15	11	23	19	7	6	18
Maternal mortality rate	929	392	576	95	100	442	180	1,015	384	62	28	307
Infant mortality rate	97	66	84	42	18	53	45	110	70	25	13	63
Under-five mortality rate	174	73	119	42	21	81	46	171	97	36	18	86
Mothers breast-feeding at 6 months	94	..	80	60	..	91	51	..	76	..	..	..
Oral rehydration therapy use rate	49	49	47	84	83	64	64	57	63	..	..	..
Underweight children under five	31	12	50	17	12	37	11	43	32	4	4	31

	Sub-Saharan Africa	Arab States	South Asia	East Asia	East Asia excl. China	South-East Asia and Pacific	Latin America and the Caribbean	Least developed countries	All developing countries	Eastern Europe and CIS	Industrial countries ^a	World
Table 12: Health profile												
One-year-olds fully immunized against tuberculosis	64	86	92	93	85	94	93	71	86	88	87	86
One-year-olds fully immunized against measles	51	79	83	89	94	87	83	60	78	89	83	79
AIDS cases	12.4	0.5	0.5	0.6	0.6	3.8	5.0	8.3	6.7	0.6	9.2	7.7
Malaria cases	..	..	..	..	..	..	..	..	..	..	..	..
Population per doctor	18,488	1,509	3,767	1,169	1,169	6,210	1,039	18,496	5,767	378	344	4,968
Population per nurse	6,504	991	5,548	1,479	1,479	2,153	3,500	13,790	4,715	..	..	..
People with disabilities	..	..	..	..	..	..	..	..	..	..	..	..
Public expenditure on health as % of GNP	0.7	0.9	0.6	0.9	0.2	0.5	1.2	0.8	0.9	..	..	..
Public expenditure on health as % of GDP	2.4	2.9	1.4	2.2	2.3	1.0	2.4	1.8	2.0	..	..	..
Table 13: Food security												
Food production per capita index	97	118	119	142	87	128	103	92	122	93	96	117
Agricultural production	19	12	30	14	7	23	9	48	15	15	3	6
Food consumption	..	..	..	..	..	..	..	..	..	..	..	..
Daily calorie supply per capita	2,096	2,820	2,356	2,751	3,102	2,541	2,757	2,027	2,546	..	..	..
Food imports as % of merchandise imports	..	..	..	..	..	..	..	..	..	..	..	..
1970	7	22	20	13	19	14	10	8	13	4	17	16
1993	7	15	8	5	6	7	9	15	7	10	11	10
Cereal imports (total)	11,137	27,552	10,778	19,425	12,093	10,389	25,326	6,639	106,714	28,671	99,367	206,081
Food aid in cereals (total)	4,464	1,783	1,654	116	9	332	1,564	4,675	9,915	4,053	..	13,968
Table 14: Education imbalances												
Pupil-teacher ratio	..	..	..	..	..	..	..	..	..	..	..	..
Primary	39	24	47	22	32	27	26	45	33	19	18	30
Secondary	25	18	31	15	24	19	15	26	22	14	14	20
Secondary technical enrolment	6.6	9.9	1.7	9.5	17.8	10	18.1	5.1	7.3	..	..	..
Tertiary natural and applied science enrolment	30	26	26	44	40	23	28	23	30	38	21	25
Tertiary students abroad	13	6	2	5	4	2	1	9	3	2	1	2
R & D scientists and technicians	..	..	0.3	1.6	..	..	..	..	0.8	..	4.6	..
Public expenditure on education as % of GNP	..	..	..	..	..	..	..	..	..	..	..	..
1980	5.1	4.1	4.3	2.9	3.7	2.8	3.7	3.2	3.8	3.9	5.4	5.0
1992	5.7	6.4	3.8	2.8	4.3	3.4	4.2	3.0	3.9	5.2	5.4	5.1
as % of total government expenditure	19.9	20.5	16.9	13.1	14.8	14.1	16.0	12.1	15.7	15.5	13.7	14.0
Public expenditure on primary and secondary education	79	74	69	73	79	76	64	78	71	73	72	72
Public expenditure on higher education	15	25	15	16	12	16	23	14	18	14	22	21
Table 15: Communication profile												
Radios	144	255	87	212	680	153	345	94	176	..	1,048	349
Televisions	23	107	33	38	156	60	162	9	56	..	533	151
Registered public library users (thousands; total)	355	14	7,160	28,595	28,595	2,681	733	53	40,258	41,992	84,163	124,421
Book titles published	..	..	2	8	..	5	..	..	5	18	43	13
Printing and writing paper consumed	1.5	2.8	1.2	5.7	22.4	3.3	5.9	..	3.5	..	61.9	14.1
Post offices	..	..	16.9	..	..	6	..	..	..	..	..	..
Main telephone lines	1	3.7	0.8	2.1	24.2	1.5	6.5	0.3	2.3	13.2	37.2	9.9
International telephone calls	..	..	..	..	..	..	..	..	..	..	..	..
Fax machines	..	..	..	..	..	..	0.1	..	..	..	1.7	..
Mobile cellular telephone subscribers	..	..	..	..	..	..	..	..	..	..	2.5	..
Table 16: Employment												
Labour force	44	33	42	59	47	47	40	47	47	49	49	47
Women's share of labour force	42	25	31	45	41	42	33	43	39	47	44	40
Labour force in agriculture	..	..	..	..	..	..	..	..	..	..	..	..
1960	81	65	74	82	58	77	49	87	76	41	26	61
1990	66	39	63	70	23	59	27	76	61	20	10	49
Labour force in industry	..	..	..	..	..	..	..	..	..	..	..	..
1960	7	12	11	7	17	7	20	4	9	30	35	17
1990	9	21	16	16	34	14	23	9	16	39	33	20
Labour force in services	..	..	..	..	..	..	..	..	..	..	..	..
1960	11	23	15	11	25	16	30	9	15	28	38	22
1990	25	40	21	14	43	27	50	15	23	42	57	31
Real earnings growth rate
1970-80	0.5
1980-92	-0.6

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	Sub-Saharan Africa	Arab States	South Asia	East Asia	East Asia excl. China	South-East Asia and Pacific	Latin America and the Caribbean	Least developed countries	All developing countries	Eastern Europe and CIS	Industrial countries ^a	World
Table 17: Wealth, poverty and social investment												
Real GDP per capita (PPP\$)	1,385	4,645	1,575	2,680	10,689	3,249	5,822	894	2,703	4,192	15,211	5,545
GNP per capita (US\$)	555	1,725	309	825	8,494	1,089	2,966	210	970	1,992	16,394	4,570
Income share												
Lowest 40% of households	..	..	..	..	..	..	..	..	..	..	..	..
Ratio of highest 20% to lowest 20%	..	..	..	..	..	..	..	..	..	..	..	..
Urban people in poverty	..	..	36	..	..	..	..	..	..	..	..	..
Rural people in poverty	..	..	47	..	..	..	..	..	..	..	..	..
Social security benefits expenditure (as % of GDP)	..	..	..	..	..	..	..	..	..	..	..	..
Public expenditure on education as % of GNP	5.7	6.4	3.8	2.8	4.3	3.4	4.2	3.0	3.9	5.2	5.4	5.1
Public expenditure on health as % of GDP	2.4	2.9	1.4	2.2	2.3	1.0	2.4	1.8	2.0	..	..	..
Table 18: Resource flow imbalances												
Total external debt												
US\$ billions (total)	200 ^c	112	161	131	48	229	489	83	1,332	192	..	..
as % of GNP	73 ^c	..	38	15	..	52	41	78	40	27	..	..
Debt service ratio												
1980	10 ^c	21	12	12	20	15	39	18	23	13	..	..
1993	15 ^c	37	25	10	9	19	29	17	21	6	..	..
Total net ODA received												
US\$ millions (total)	18,890 ^d	6,877	7,196	3,335	103	5,485	5,785	16,240	60,930	..	..	..
as % of GNP	10.5	3.5	1.5	0.6	19.5	1.3	0.4	13.4	1.4	1.6	..	..
per capita (US\$)	32	29	6	3	1	12	13	28	11	..	..	..
Export-import ratio	86	98	72	95	98	98	83	60	91	105	105	..
Terms of trade	90	98	96	95	92	100	99	81	96	99	104	..
Current account balance (US\$ millions; total)	-8,022	-10,937	-9,477	-11,412	486	-13,551	-45,737	-9,120	-106,249	-12,413	57,517	-48,732
Table 19: Military expenditure and resource use imbalances												
Defence expenditure (US\$ millions, 1993 prices)												
1985 (total)	9,536	63,663	30,700	39,857	13,774	14,240	18,545	5,588	179,671	22,250	612,544	792,220
1994 (total)	7,787	34,176	13,992	46,262	18,582	13,793	18,423	3,514	140,034	115,088	638,068	778,102
as % of GDP												
1985	2.1	12.5	7.6	7.7	7.4	4.7	1.8	4.0	5.5	..	4.1	4.3
1994	2.9	7.6	3.4	5.3	4.8	2.6	1.6	2.9	3.6	8.0	3.1	3.2
per capita												
1985	21	357	33	36	217	36	47	14	52	..	718	171
1994	14	170	11	36	264	28	39	7	34	292	525	141
as % of education and health expenditure												
1960	27	129	113	343	273	110	55	..	143	..	97	104
1990-91	43	91	72	85	49	61	25	..	60	..	33	37
Imports of conventional weapons												
US\$ millions (total)	..	3,844	2,447	628	626	318	627	323	9,999	59	7,837	17,836
Index (1990=100)	..	72	75	43	47	53	124	90	83	5	97	89
Total armed forces (thousands)												
Thousands (total)	810	2,286	2,642	4,712	1,782	1,803	1,407	1,272	14,173	3,479	7,845	22,018
Index (1985=100)	95	107	121	88	121	86	105	121	97	95	83	93
Table 20: Growing urbanization												
Urban population (% of total)												
1960	15	30	17	20	36	18	50	9	22	47	61	34
1993	30	50	27	31	74	32	73	22	36	66	73	44
2000	34	54	30	37	79	37	77	26	40	68	75	47
Urban population growth rate												
1960-93	5.0	4.4	3.7	3.2	4.2	4.1	3.6	5.2	3.8	1.9	1.4	2.7
1993-2000	4.9	3.5	3.5	3.5	2.1	3.9	2.4	5.3	3.5	0.7	0.7	2.5
Population in cities of more than 750,000												
as % of total population	10	20	10	12	40	11	31	8	14	18	29	17
as % of urban population	34	40	39	41	56	36	42	41	39	27	40	39
Population of largest city as % of urban population	28	31	11	9	36	26	24	37	18	13	15	17
Table 21: Demographic profile												
Population (millions)												
1960 (total)	209	96	596	697	40	227	214	241	2,068	296	929	2,996
1993 (total)	522	241	1,272	1,272	75	472	460	552	4,299	391	1,209	5,508
2000 (total)	637	286	1,466	1,366	82	533	519	671	4,876	395	1,244	6,120
Population growth rate												
1960-93	2.8	2.8	2.3	1.8	1.9	2.2	2.3	2.5	2.2	0.8	0.8	1.9
1993-2000	2.9	2.5	2.0	1.0	1.2	1.7	1.7	2.8	1.8	0.2	0.4	1.5
Population doubling date	2017	2021	2027	2061	2052	2033	2034	2018	2032	2411	2163	2039
Crude birth rate	44.8	34.2	31.4	18.0	18.7	27.0	25.8	42.9	28.1	13.7	13.2	24.8
Crude death rate	15.1	8.5	9.9	7.2	6.0	8.0	6.7	14.9	9.1	11.3	10.0	9.3
Total fertility rate	6.3	4.9	4.2	2.0	1.9	3.3	3.1	5.8	3.5	1.9	1.8	3.1
Contraceptive prevalence rate	15	34	41	83	79	51	58	19	55	65	73	58

	Sub-Saharan Africa	Arab States	South Asia	East Asia	East Asia excl. China	South-East Asia and Pacific	Latin America and the Caribbean	Least developed countries	All developing countries	Eastern Europe and CIS	Industrial countries ^a	World
Table 22: Natural resources balance sheet												
Land area (millions of hectares; total)	2,098	1,265	678	1,135	179	500	2,042	2,044	7,797	2,319	5,503	13,300
Forest and woodland	32.6	6.4	14.5	13.8	15.4	54.8	44.8	30.7	28.7	36.7	35.1	31.3
Arable land	6.2	4.3	33.1	8.5	2.8	12.3	6.0	5.6	9.2	11.1	11.3	10.0
Irrigated land	3.8	23.3	36.6	53.9	57.7	22.9	13.8	11.6	26.2	9.0	9.9	18.7
Deforestation per year	162	224	814	..	..	534	1,967	214	866	..	..	15,517
Deforestation rate	0.9	1.4	1.6	..	..	1.2	0.9	0.9	1.1	..	..	0.4
Reforestation per year	11	25	103	4,453	140	72	207	6	797	..	..	14,713
Production of fuel wood and charcoal (millions of cubic metres)												
1979-81 (total)	307	30	271	166	12	227	238	256	1,254	12	132	1,386
1993 (total)	453	42	358	209	9	294	304	369	1,670	63	205	1,874
Internal renewable water resources per capita (thousands of cubic metres)	7.3	0.7	3.2	2.4	2.3	13.0	23.5	10.8	6.5	12.1	10.9	7.6
Annual fresh water withdrawals as % of water resources per capita	122	1,008	753	460	421	264	518	242	520	727	1,150	641
Table 23: Energy consumption												
Production as % of national energy reserves												
Coal	..	..	..	..	..	..	..	..	..	..	..	0.4 ^e
Natural gas	..	..	..	..	..	..	..	..	..	..	..	1.6 ^e
Crude oil	..	..	..	..	..	..	..	..	..	..	..	2.2 ^e
Commercial energy production annual growth rate												
1971-80	..	..	..	..	..	..	..	..	..	..	..	..
1980-93	..	..	..	..	..	..	..	..	..	..	..	..
Commercial energy consumption annual growth rate												
1971-80	..	..	..	..	..	..	..	..	..	..	..	..
1980-93	..	..	..	..	..	..	..	..	..	..	..	..
Commercial energy use per capita												
1971	251	328	123	290	548	142	592	42	255	..	4,211	1,185
1993	288	1,227	267	711	2,719	380	918	50	536	3,356	4,589	1,421
GDP output per kg												
1971	2.3	..	1.4	0.6	..	1.0	1.2	..	1.2	..	..	..
1993	3.7	..	1.5	1.9	3.9	2.7	4.0	6.4	2.8	0.6	5.1	3.1
Commercial energy imports as % of merchandise exports												
1971	7	..	8	..	..	19	9	..	10	..	..	..
1993	..	..	34	9	..	9	8	..	14	..	11	11
Table 24: National income accounts^f												
GDP (US\$ billions; total)	236	323	415	848	422	462	1,338	83	3,778	755	19,149	22,927
Agriculture as % of GDP	19	12	30	14	7	23	9	48	15	15	3	6
Industry as % of GDP	33	40	26	43	37	34	33	15	35	45	37	36
Services as % of GDP	48	49	43	46	58	46	57	37	50	39	60	58
Private consumption	67	51	65	53	55	57	77	81	65	60	62	63
Government consumption	18	25	12	10	11	10	10	15	13	18	17	16
Gross domestic investment	16	24	24	37	32	33	20	17	26	22	21	21
Gross domestic savings	15	23	23	37	34	34	19	5	26	22	21	22
Tax revenue as % of GNP	24	17	10	9	17	17	18	13	14	..	26	24
Central government expenditure as % of GNP	31	39	19	13	17	20	24	36	21	..	34	31
Exports as % of GDP	23.8	30.8	12.1	36.5	51.7	45.5	9.7	10.8	23.0	14.3	14.1	15.5
Imports as % of GDP	22.5	29.1	17.3	38.5	52.9	50.1	11.4	23.0	25.3	14.2	14.0	15.8
Table 25: Trends in economic performance												
GNP (US\$ billions; total)	254	233	358	1,026	449	454	1,325	82	3,835	768	19,743	23,578
GNP annual growth rate	1.5	2.3	4.6	9.3	8.6	6.0	1.7	2.7	4.6	-1.1	2.4	2.8
GNP per capita annual growth rate												
1965-80	1.5	2.6	1.4	4.2	5.1	3.6	3.9	0.4	2.9	5.1	3.1	3.0
1980-93	-0.6	0.8	2.9	8.2	7.5	3.6	-0.1	0.5	3.9	-0.8	1.2	3.3
Average annual rate of inflation												
1980-93	13.9	8.6	11.2	6.9	6.9	7.1	251.7	19.8	86.0	35.5	6.3	18.5
1993	15.1	9.2	16.7	12.0	11.6	11.1	872.1	18.8	289.3	1,025.4	70.6	..
Exports as % of GNP, growth rate	0.3	..	3.9	3.1	3.4	2.0	3.9	1.4	3.3	..	2.1	2.3
Tax revenue as % of GNP, growth rate	..	..	0.9	..	..	-0.1	-1.3	..	..	..	..	..
Overall budget surplus/deficit												
1980	..	..	-8.8	..	..	-2.6	-2.5	..	..	..	..	..
1993	..	..	-4.0	-1.3	..	1.9	..	..	..	..	-4.4	..

Note: Columns 1-9 are for developing countries only.

a. Includes Eastern Europe and the CIS countries.

b. Aggregates for table 1 differ from those for other tables because table 1 includes a number of Human Development Report Office estimates that are presented and used only in the calculation of the human development index. These estimates are not used in other indicator tables.

c. World Bank 1994b.

d. OECD 1996.

e. UN 1994a.

f. The percentage shares of agriculture, industry and services do not necessarily add to 100 due to rounding.

48 Status of selected international human rights instruments

	International covenant on economic, social and cultural rights 1966	International covenant on civil and political rights 1966	International convention on the elimination of all forms of racial discrimination 1969	Convention on the prevention and punishment of the crime of genocide 1948	Convention on the rights of the child 1989	Convention on the elimination of all forms of discrimination against women 1979	Convention against torture and other cruel, inhuman or degrading treatment or punishment 1984	Convention relating to the status of refugees 1954
Afghanistan	●	●	●	●	●	○	●	●
Albania	●	●	●	●	●	●	●	●
Algeria	●	● ^a	● ^b	●	●	●	● ^c	●
Andorra					●			
Angola	●	●			●	●		●
Antigua and Barbuda			●	●	●	●	●	●
Argentina	●	● ^a	●	●	●	●	●	●
Armenia	●	●	●	●	●	●	●	●
Australia	●	● ^a	● ^b	●	●	●	● ^c	●
Austria	●	● ^a	●	●	●	●	● ^c	●
Azerbaijan	●	●			●	●		●
Bahamas			●	●	●	●		●
Bahrain			●	●	●	●		●
Bangladesh			●		●	●		●
Barbados	●	●	●	●	●	●		●
Belarus	●	● ^a	●	●	●	●	●	●
Belgium	●	● ^a	●	●	●	●	○	●
Belize					●	●	●	●
Benin	●	●	○		●	●	●	●
Bhutan			○		●	●		
Bolivia	●	●	●	○	●	●	○	●
Bosnia Herzegovina	●	● ^a	●	●	●	●	●	●
Botswana			●		●	●		●
Brazil	●	●	●	●	●	●	●	●
Brunei Darussalam					●			
Bulgaria	●	● ^a	● ^b	●	●	●	● ^c	●
Burkina Faso			●	●	●	●		●
Burundi	●	●	●	●	●	●	●	●
Cambodia	●	●	●	●	●	●	●	●
Cameroon	●	●	●		●	●	●	●
Canada	●	● ^a	●	●	●	●	● ^c	●
Cape Verde	●	●	●		●	●	●	●
Central African Rep.	●	●	●		●	●	●	●
Chad	●	●	●		●	●	●	●
Chile	●	● ^a	● ^b	●	●	●	●	●
China			●	●	●	●	●	●
Colombia	●	●	●	●	●	●	●	●
Comoros					●	●		
Congo	●	● ^a	●		●	●		●
Costa Rica	●	●	● ^b	●	●	●	●	●
Côte d'Ivoire	●	●	●	●	●	●	●	●
Croatia	●	● ^a	●	●	●	●	● ^c	●
Cuba			●	●	●	●	●	●
Cyprus	●	●	● ^b	●	●	●	● ^c	●
Czech Rep.	●	● ^a	●	●	●	●	●	●
Denmark	●	● ^a	● ^b	●	●	●	● ^c	●
Djibouti					●	●		●
Dominica	●	●	●		●	●		●
Dominican Rep.	●	●	●	○	●	●	○	●
Ecuador	●	● ^a	● ^b	●	●	●	●	●
Egypt	●	●	●	●	●	●	●	●
El Salvador	●	●	●	●	●	●	●	●
Equatorial Guinea	●	●			●	●		●
Eritrea					●	●		
Estonia	●	●	●	●	●	●	●	
Ethiopia	●	●	●	●	●	●	●	●
Fiji			●	●	●	●		●
Finland	●	● ^a	● ^b	●	●	●	● ^c	●
France	●	●	● ^b	●	●	●	● ^c	●
Gabon	●	●	●	●	●	●	○	●
Gambia	●	● ^a	●	●	●	●	○	●
Georgia	●	●			●	●	●	
Germany	●	● ^a	●	●	●	●	●	●
Ghana			●	●	●	●		●
Greece	●	●	●	●	●	●	● ^c	●
Grenada	●	●	○		●	●		
Guatemala	●	●	●	●	●	●	●	●
Guinea	●	●	●		●	●	●	●
Guinea-Bissau	●				●	●		●
Guyana	●	● ^a	●		●	●	●	

	International covenant on economic, social and cultural rights 1966	International covenant on civil and political rights 1966	International convention on the elimination of all forms of racial discrimination 1969	Convention on the prevention and punishment of the crime of genocide 1948	Convention on the rights of the child 1989	Convention on the elimination of all forms of discrimination against women 1979	Convention against torture and other cruel, inhuman or degrading treatment or punishment 1984	Convention relating to the status of refugees 1954
Haiti		●	●	●	●	●		●
Holy See			●		●			●
Honduras	●	○		●	●	●		●
Hungary	●	● ^a	● ^b	●	●		● ^c	●
Iceland	●	● ^a	● ^b	●	●	●	○	●
India	●	●	●	●	●	●		
Indonesia					●	●	○	
Iran, Islamic Rep. of	●	●	●	●	●			●
Iraq	●	●	●	●	●	●		
Ireland	●	● ^d	○	●	●	●	○	●
Israel	●	●	●	●	●	●	●	●
Italy	●	● ^a	● ^b	●	●	●	● ^c	●
Jamaica	●	●	●	●	●	●		●
Japan	●	●	●		●	●		●
Jordan	●	●	●	●	●	●	●	
Kazakhstan					●			
Kenya	●	●			●	●		●
Kiribati					●			
Korea, Dem. People's Rep. of	●	●		●	●			
Korea, Rep. of	●	● ^a	●	●	●	●	●	●
Kuwait			●	●	●	●		
Kyrgyzstan	●	●			●			
Lao People's Dem. Rep.			●	●	●	●		
Latvia	●	●	●	●	●	●	●	
Lebanon	●	●	●	●	●			
Lesotho	●	●	●	●	●	●		●
Liberia	○	○	●	●	●	●		●
Libyan Arab Jamahiriya	●	●	●	●	●	●	●	
Liechtenstein				●	●	●	● ^c	●
Lithuania	●	●			●	●		
Luxembourg	●	● ^a	●	●	●	●	● ^c	
Macedonia FYR	●	●	●		●	●	●	
Madagascar	●	●	●		●	●		●
Malawi	●	●			●	●		●
Malaysia				●	●	●		
Maldives			●	●	●	●		
Mali	●	●	●	●	●	●		●
Malta	●	● ^a	●		●	●	● ^c	●
Marshall Islands					●			
Mauritania			●		●			●
Mauritius	●	●	●		●	●	●	
Mexico	●	●	●	●	●	●	●	
Moldova, Rep. of	●	●	●	●	●	●	●	
Monaco			●	●	●	●	● ^c	●
Mongolia	●	●	●	●	●	●		
Morocco	●	●	●	●	●	●	●	●
Mozambique		●	●	●	●	●		●
Myanmar				●	●	●		
Namibia	●	●	●	●	●	●	●	
Nauru					●			
Nepal	●	●	●	●	●	●	●	
Netherlands	●	● ^a	● ^b	●	●	●	● ^c	●
New Zealand	●	● ^a	●	●	●	●	● ^c	●
Nicaragua	●	●	●	●	●	●	○	●
Niger	●	●	●		●			●
Nigeria	●	●	●		●	●	○	●
Niue					●			
Norway	●	● ^a	● ^b	●	●	●	● ^c	●
Oman				●				
Pakistan			●	●	●			
Palau					●			
Panama	●	●	●	●	●	●	●	●
Papua New Guinea			●	●	●	●		●
Paraguay	●	●		○	●	●	●	●
Peru	●	● ^a	● ^b	●	●	●	●	●
Philippines	●	● ^a	●	●	●	●	● ^c	●
Poland	●	● ^a	●	●	●	●	● ^c	●
Portugal	●	●	●		●	●	● ^c	●
Qatar			●		●			
Romania	●	●	●	●	●	●	●	●

48 Status of selected international human rights instruments (continued)

	International covenant on economic, social and cultural rights 1966	International covenant on civil and political rights 1966	International convention on the elimination of all forms of racial discrimination 1969	Convention on the prevention and punishment of the crime of genocide 1948	Convention on the rights of the child 1989	Convention on the elimination of all forms of discrimination against women 1979	Convention against torture and other cruel, inhuman or degrading treatment or punishment 1984	Convention relating to the status of refugees 1954
Russian Federation	●	● ^a	● ^b	●	●	●	● ^c	●
Rwanda	●	●	●	●	●	●		●
Saint Kitts and Nevis					●	●		
Saint Lucia			●		●	●		
Saint Vincent	●	●	●	●	●	●		●
Samoa (Western)					●	●		●
San Marino	●	●			●			
São Tomé and Príncipe	○	○			●	○		●
Saudi Arabia				●				
Senegal	●	● ^a	● ^b	●	●	●	●	●
Seychelles	●	●	●	●	●	●	●	●
Sierra Leone			●	●	●	●	○	●
Singapore				●	●	●	●	●
Slovakia	●	● ^a	● ^b	●	●	●	● ^c	●
Slovenia	●	● ^a	●	●	●	●	● ^c	●
Solomon Islands	●		●		●			●
Somalia	●	●	●				●	●
South Africa	○	○	○		●	●	○	
Spain	●	● ^a	●	●	●	●	● ^c	●
Sri Lanka	●	● ^a	●	●	●	●	● ^c	
Sudan	●	●	●		●		○	●
Suriname	●	●	●		●	●		●
Swaziland			●		●			
Sweden	●	● ^a	● ^b	●	●	●	● ^c	●
Switzerland	●	● ^a	●		○	○	● ^c	●
Syrian Arab Rep.	●	●	●	●	●			
Tajikistan			●		●	●	●	●
Tanzania, U. Rep. of	●	●	●	●	●	●		●
Thailand					●	●		
Togo	●	●	●	●	●	●	● ^c	●
Tonga			●	●	●			
Trinidad and Tobago	●	●	●		●	●		
Tunisia	●	● ^a	●	●	●	●	● ^c	●
Turkey			○	●	●	●	● ^c	●
Turkmenistan			●		●			
Tuvalu					●			●
Uganda	●	●	●	●	●	●	●	●
Ukraine	●	● ^a	● ^b	●	●	●	●	
United Arab Emirates			●					
United Kingdom	●	● ^a	●	●	●	●	● ^d	●
USA	○	● ^a	●	●	○	○	●	
Uruguay	●	●	● ^b	●	●	●	● ^c	●
Uzbekistan	●	●	●		●	●	●	
Vanuatu					●	●		
Venezuela	●	●	●	●	●	●	● ^c	
Viet Nam	●	●	●	●	●	●		
Yemen	●	●	●	●	●	●	●	● ^e
Yugoslavia	●	●	●	●	●	●	● ^c	●
Zaire	●	●	●	●	●	●		●
Zambia	●	●	●	●	●	●		●
Zimbabwe	●	● ^a	●	●	●	●		●
Total states parties	133	132	145	117	187	149	93	124
Signatures not followed by ratification	4	4	6	3	2	5	13	0

● Ratification, accession, approval, notification or succession, acceptance or definitive signature.

○ Signature not yet followed by ratification.

a. Declaration recognizing the competence of the Human Rights Committee under Article 41 of the International Covenant on Civil and Political Rights.

b. Declaration recognizing the competence of the Committee on the Elimination of Racial Discrimination under Article 14 of the International Convention on the Elimination of All Forms of Racial Discrimination.

c. Declaration recognizing the competence of the Committee against Torture under Articles 21 and 22 of the Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment.

d. Declaration under Article 21 only.

e. Ratification, accession, approval, notification or succession, acceptance or definitive signature only by the former Republic of Yemen.

Source: United Nations Centre for Human Rights 1995.

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1. Computing the human development index

The HDI is based on three indicators: longevity, as measured by life expectancy at birth; educational attainment, as measured by a combination of adult literacy (two-thirds weight) and combined primary, secondary and tertiary enrolment ratios (one-third weight); and standard of living, as measured by real GDP per capita (PPP\$).

For the construction of the index, fixed minimum and maximum values have been established for each of these indicators:

- Life expectancy at birth: 25 years and 85 years
- Adult literacy: 0% and 100%
- Combined enrolment ratio: 0% and 100%
- Real GDP per capita (PPP\$): PPP\$100 and PPP\$40,000.

For any component of the HDI, individual indices can be computed according to the general formula:

$$\text{Index} = \frac{\text{Actual } x_i \text{ value} - \text{minimum } x_i \text{ value}}{\text{Maximum } x_i \text{ value} - \text{minimum } x_i \text{ value}}$$

If, for example, the life expectancy at birth in a country is 65 years, the index of life expectancy for this country would be:

$$\text{Life expectancy index} = \frac{65 - 25}{85 - 25} = \frac{40}{60} = 0.667$$

The construction of the income index is a little more complex. The average world income of PPP\$5,711 is taken as the threshold level (y^*), and any income above this level is discounted using the following formulation based on Atkinson's formula for the utility of income:

$$\begin{aligned} W(y) &= y^* \text{ for } 0 < y < y^* \\ &= y^* + 2[(y - y^*)^{1/2}] \text{ for } y^* \leq y \leq 2y^* \\ &= y^* + 2(y^{*1/2}) + 3[(y - 2y^*)^{1/3}] \text{ for } 2y^* \leq y \leq 3y^* \end{aligned}$$

To calculate the discounted value of the maximum income of PPP\$40,000, the following form of Atkinson's formula is used:

$$\begin{aligned} W(y) &= y^* + 2(y^{*1/2}) + 3(y^{*1/3}) + 4(y^{*1/4}) + 5(y^{*1/5}) \\ &\quad + 6(y^{*1/6}) + 7(y^{*1/7}) + 8[(40,000 - 7y^*)^{1/8}] \end{aligned}$$

This is because PPP\$40,000 is between $7y^*$ and $8y^*$. With the above formulation, the discounted value of the maximum income of PPP\$40,000 is PPP\$6,040.

The construction of the HDI is illustrated with two examples—Greece, an industrial country, and Gabon, a developing country.

Country	Life expectancy (years)	Adult literacy (%)	Combined enrolment ratio (%)	Real GDP per capita (PPP\$)
Greece	77.7	93.8	78	8,950
Gabon	53.7	60.3	47	3,861

Life expectancy index

$$\text{Greece} = \frac{77.7 - 25}{85 - 25} = \frac{52.7}{60} = 0.878$$

$$\text{Gabon} = \frac{53.7 - 25}{85 - 25} = \frac{28.7}{60} = 0.478$$

Adult literacy index

$$\text{Greece} = \frac{93.8 - 0}{100 - 0} = \frac{93.8}{100} = 0.938$$

$$\text{Gabon} = \frac{60.3 - 0}{100 - 0} = \frac{60.3}{100} = 0.603$$

Combined primary, secondary and tertiary enrolment ratio index

$$\text{Greece} = \frac{78 - 0}{100 - 0} = 0.780$$

$$\text{Gabon} = \frac{47 - 0}{100 - 0} = 0.470$$

Educational attainment index

$$\text{Greece} = [2(0.938) + 1(0.780)] \div 3 = 0.885$$

$$\text{Gabon} = [2(0.603) + 1(0.470)] \div 3 = 0.558$$

Adjusted real GDP per capita (PPP\$) index

Greece's real GDP per capita, at PPP\$8,950, is above—but less than twice—the threshold. Thus, the adjusted real GDP per capita for Greece would be PPP\$5,825 because $5,825 = [5,711 + 2(8,950 - 5,711)]/2$.

Gabon's real GDP per capita, at PPP\$3,861, is less than the threshold, so it needs no adjustment.

The adjusted real GDP per capita (PPP\$) index for Greece and Gabon would be:

$$\text{Greece} = \frac{5,825 - 100}{6,040 - 100} = \frac{5,725}{5,940} = 0.964$$

$$\text{Gabon} = \frac{3,861 - 100}{6,040 - 100} = \frac{3,761}{5,940} = 0.633$$

Human development index

The HDI is a simple average of the life expectancy index, educational attainment index and the adjusted real GDP per capita (PPP\$) index. It is calculated by dividing the sum of these three indices by 3. The HDI values for Greece and Gabon are calculated using this formula:

Country	Life expectancy index	Educational attainment index	Adjusted real GDP per capita (PPP\$) index	Σ	HDI
Greece	0.878	0.885	0.964	2.727	0.909
Gabon	0.478	0.558	0.633	1.669	0.557

2. Computing the GDI and the GEM

For comparisons among countries, the gender-related development index (GDI) and the gender empowerment measure (GEM) are limited to data widely available in international data sets. Data disaggregated by gender are scarce, however, and for some indicators we have used the latest available estimate. In addition, for some indicators there are variations in how broadly categories are defined.

For this year's Report we have endeavoured to use the most recent, reliable and internally consistent data. As a result, there have been significant changes in ranking for a few countries compared with last year's Report, most stemming from new estimates of real GDP per capita, wages, labour force participation rates, men's and women's shares of administrative and managerial positions or their shares of professional and technical positions.

Collecting more extensive and more reliable gender-disaggregated data is a challenge that the international community should squarely face. We continue to publish results on the GDI and the GEM—based on the best available estimates—in expectation that it will help increase the demand for such data.

The gender-related development index

The GDI uses the same variables as the HDI. The difference is that the GDI adjusts the average achievement of each country in life expectancy, educational attainment and income in accordance with the disparity in achievement between women and men. For this gender-sensitive adjustment we use a weighting formula that expresses a moderate aversion to inequality, setting the weighting parameter, ϵ , equal to 2. This is the harmonic mean of the male and female values.

The GDI also adjusts the maximum and minimum values for life expectancy, to account for the fact that women tend to live longer than men. For women the maximum value is 87.5 years and the minimum value 27.5 years; for men the corresponding values are 82.5 and 22.5 years.

Calculating the index for income is fairly complex. Female and male shares of earned income are derived from data on the ratio of the average female wage to the average male wage and the female and male percentage shares of the economically active population aged 15 and above. Where data on the wage ratio are not available, we use a value of 75%, the weighted mean of the wage ratio for all countries with wage data. Before income is indexed, the average adjusted real GDP per capita of each country is discounted on the basis of the disparity in the female and male shares of earned income in proportion to the female and male population shares.

The indices for life expectancy, educational attainment and income are added together with equal weight to derive the final GDI value.

Illustration of the GDI methodology

We choose Paraguay to illustrate the steps for calculating the gender-related development index. The parameter of inequality aversion, ϵ , equals 2. (Any discrepancies in results are due to numbers' being rounded up.)

Life expectancy

Females	72.0 years
Males	68.2 years

Adult literacy

Females	89.9%
Males	93.1%

Combined enrolment

Females	61.1%
Males	61.9%

STEP ONE

Computing indices for life expectancy and education

Life expectancy

Females	$(72.0 - 27.5)/60 = 0.7417$
Males	$(68.2 - 22.5)/60 = 0.7617$

Adult literacy

Females	$(89.9 - 0)/100 = 0.899$
Males	$(93.1 - 0)/100 = 0.931$

Combined enrolment

Females	$(61.1 - 0)/100 = 0.611$
Males	$(61.9 - 0)/100 = 0.619$

Educational attainment

Females	$1/3(0.611) + 2/3(0.899) = 0.803$
Males	$1/3(0.619) + 2/3(0.931) = 0.827$

STEP TWO

Computing proportional income shares

Percentage share of economically active population

Females	27.6
Males	72.4

Percentage share of total population

Females	48.9
Males	51.1

Ratio of female non-agricultural wage to male non-agricultural wage: 75.5%

Adjusted real GDP per capita: PPP\$3,340

Ratio of female wage to average wage (W) and of male wage to average wage (W):

$$W = 0.276(0.755) + 0.724(1) = 0.9324$$

$$\text{Female wage to average wage: } 0.755/0.9324 = 0.8098$$

$$\text{Male wage to average wage: } 1.000/0.9324 = 1.0725$$

Share of earned income

Note: $[(\text{female wage/average wage}) \times \text{female share of economically active population}] + [(\text{male wage/average wage}) \times \text{male share of economically active population}] = 1.$

Females	$0.8098 \times 0.276 = 0.2235$
Males	$1.0725 \times 0.724 = 0.7765$

Female and male proportional income shares

Females	$0.2235/0.489 = 0.45705$
Males	$0.7765/0.511 = 1.51957$

STEP THREE

Applying weighting parameter ($\epsilon = 2$)

The equally distributed income index

$$[0.489(0.45705)^{-1} + 0.511(1.51957)^{-1}]^{-1} = 0.7066$$

$$0.7066 \times 3,340 = 2,360$$

$$(2,360 - 100)/(6,040 - 100) = 0.380$$

The equally distributed educational index
 $[0.489(0.803)^{-1} + 0.511(0.827)^{-1}]^{-1} = 0.815$

The equally distributed life expectancy index
 $[0.489(0.7417)^{-1} + 0.511(0.7617)^{-1}]^{-1} = 0.752$

STEP FOUR

Computing the gender-related development index
 $1/3(0.380 + 0.815 + 0.752) = 0.649$

The gender empowerment measure

The GEM uses variables constructed explicitly to measure the relative empowerment of men and women in political and economic spheres of activity.

The first two variables are chosen to reflect economic participation and decision-making power: women's and men's percentage shares of administrative and managerial positions and their percentage shares of professional and technical jobs. These are broad, loosely defined occupational categories. Because the relevant population for each is different, we calculate a separate index for each and then add the two together. The third variable, women's and men's percentage shares of parliamentary seats, is chosen to reflect political participation and decision-making power.

For all three of these variables we use the methodology of population-weighted $(1-\epsilon)$ averaging to derive an "equally distributed equivalent percentage" (EDEP) for both sexes taken together. Each variable is indexed by dividing the EDEP by 50%.

An income variable is used to reflect power over economic resources. It is calculated in the same manner as for the GDI except that unadjusted real GDP per capita is used, rather than adjusted real GDP per capita. The maximum value for income is thus PPP\$40,000 and the minimum PPP\$100.

The three indices—for economic participation and decision-making, political participation and decision-making, and power over economic resources—are added together with equal weight to derive the final GEM value.

Illustration of the GEM methodology

We choose Mexico to illustrate the steps in calculating the gender empowerment measure. The parameter of inequality aversion, ϵ , equals 2. (Any discrepancies in results are due to numbers' being rounded up.)

STEP ONE

Calculating indices for parliamentary representation and administrative and managerial, and professional and technical, positions

Percentage share of parliamentary representation

Females 13.9
 Males 86.1

Percentage share of administrative and managerial positions

Females 20.0
 Males 80.0

Percentage share of professional and technical positions

Females 43.6
 Males 56.4

Percentage share of population

Females 50.1
 Males 49.9

Calculating the EDEP for parliamentary representation

$[0.499(86.1)^{-1} + 0.501(13.9)^{-1}]^{-1} = 23.90$

Calculating the EDEP for administrative and managerial positions

$[0.499(80.0)^{-1} + 0.501(20.0)^{-1}]^{-1} = 31.96$

Calculating the EDEP for professional and technical positions

$[0.499(56.4)^{-1} + 0.501(43.6)^{-1}]^{-1} = 49.168$

Indexing parliamentary representation

$23.90/50 = 0.4780$

Indexing administrative and managerial positions

$31.96/50 = 0.6392$

Indexing professional and technical positions

$49.168/50 = 0.9834$

Combining the indices for administrative and managerial, and professional and technical, positions

$(0.6392 + 0.9834)/2 = 0.8113$

STEP TWO

Calculating the index for share of earned income

Percentage share of economically active population

Females 29.4
 Males 70.6

Ratio of female non-agricultural wage to male non-agricultural wage: 75%

Unadjusted real GDP per capita: PPP\$7,010

Ratio of female wage to average wage (W)

and of male wage to average wage (W):

$W = 0.294(0.75) + 0.706(1) = 0.9265$

Female wage to average wage: $0.75/0.9265 = 0.8095$

Male wage to average wage: $1.00/0.9265 = 1.0793$

Share of earned income

Note: [(female wage/average wage) x female share of economically active population] + [(male wage/average wage) x male share of economically active population] = 1.

Females $0.8095 \times 0.294 = 0.2380$

Males $1.0793 \times 0.706 = 0.7620$

Female and male proportional income shares

Females $0.2380/0.501 = 0.4750$

Males $0.7620/0.499 = 1.5271$

Calculating the equally distributed income index

$[0.499(1.5271)^{-1} + 0.501(0.4750)^{-1}]^{-1} = 0.7239$

$0.7239 \times 7,010 = 5,074$

$(5,074 - 100)/(40,000 - 100) = 0.1247$

STEP THREE

Computing the gender empowerment measure

$1/3(0.4780 + 0.8113 + 0.1247) = 0.471$

3. The capability poverty measure

A person's material standard of living is generally assumed to determine his or her well-being. Consistent with this, poverty is conventionally defined as an unacceptably low material standard of living, either relative to the standard of others in a society or on the basis of some absolute minimum. The standard of living is usually measured using current expenditure or income, and a cut-off line is selected below which people are considered poor.

Since both expenditure and income are measured in money, the choice of the cut-off, or poverty, line is always somewhat arbitrary. There is no clear-cut reason for choosing one value over another. And opinions invariably differ on how much money is necessary to escape poverty. One reason is that money is merely an approximate way to measure the value of goods and services, which are no more than means to human well-being.

What is needed is a more people-centred measure of poverty that recognizes that human deprivation occurs in a number of critical dimensions. Lack of income is just one dimension, and it is focused on means rather than ends. The capability poverty measure (CPM) is a multi-dimensional index of poverty focused on capabilities.

Basic capabilities

Human development is defined by the expansion of capabilities. Unlike income, capabilities are ends, and they are reflected not in inputs, but in human outcomes—in the quality of people's lives. Deprivation is reflected in a lack of basic capabilities—when people are unable to reach a certain level of essential human achievement or functioning.

Leading a life free of avoidable morbidity is one such capability, being informed and educated another, and being well nourished a third. Signalling failures in these capabilities are ill health, illiteracy and very low weight. Another basic capability, one all too often ignored, is healthy reproduction.

Ideally, in measuring deprivation in capabilities, indicators should be used that directly reflect capability shortfalls. But these are often unavailable, and substitute indicators must be used that reflect the means to form or use capabilities. The availability of trained health personnel to attend births is one such indicator. Others are access to health services, to potable water and to adequate sanitation. Another is potential access to food across a population, as reflected in the average per capita calorie supply.

But indicators of actual access are more useful than those of potential access. To monitor the effectiveness of the public health system, for example, rates of immunization or use of oral rehydration therapy are preferable to data showing whether a primary health care centre is within an hour's travel time.

Deprivation in capabilities is the result of lack of opportunity—signifying that society has not provided people with access to the means to develop or maintain essential human capabilities. For example, adequate health services might not be available to ensure that people are protected against avoidable morbidity, or schooling might not be available to ensure literacy and

numeracy. Removing barriers to access or ensuring that access is not merely potential or formal is the responsibility of society.

If indicators of the full range of essential capabilities were available, there would be little need to use an indirect monetary indicator such as income or expenditure to monitor deprivation. These indirect monetary measures are useful for indicating a person's command over the direct means to ensure a decent material standard of living, such as basic food, clothing and shelter and essential energy and transport. Because indicators for these direct means to material welfare are not widely available, income is used as a proxy for these means—as in the human development index.

What is the capability poverty measure?

The capability poverty measure is a simple index composed of three indicators that reflect the percentage of the population with capability shortfalls in three basic dimensions of human development: living a healthy, well-nourished life, having the capability of safe and healthy reproduction and being literate and knowledgeable. The three corresponding indicators are the percentage of children under five who are underweight, the percentage of births unattended by trained health personnel and the percentage of women aged 15 years and above who are illiterate. Technical note table 3.1 presents the CPM and its three components for 101 developing countries. It also compares each country's rank by the CPM with its rank by GDP per capita.

The CPM differs from the HDI in that it focuses on people's lack of capabilities rather than on the average level of capabilities in a country. In addition, the HDI uses income, but the CPM does not. Comparing results of the CPM with those of the HDI would show that some countries have done relatively better in raising average capabilities than in reducing capability poverty—and others have done relatively better in reducing capability poverty than in raising average capabilities.

In the CPM the problem of aggregation across the three variables is solved by choosing variables expressed in terms of the percentage of the relevant population that is poor. The threshold for defining poverty is based on the standard international definition for each variable. Standard definitions for underweight, for trained health personnel and for literacy are already in common use. Other variables with standard definitions, such as the percentage of low-birth-weight babies or the percentage of one-year-olds immunized, could also be used in a capability poverty measure.

The CPM's three variables are given equal weight in the composite index. This assumes that one basic capability is not a substitute for another that is lacking. For such "foundational" capabilities, this is a reasonable assumption, and it implies that policy should not seek to trade one off against another. If flexibility in weights is desired, respondents to household surveys could be asked to assign weights to each capability by allocating a fixed total.

When the percentages for the CPM's three variables are added together, an estimate is derived of the average

capability poverty in a country. In Viet Nam, for example, about 20% of the people are capability poor, on average, in all three dimensions. For some dimensions the percentage may be lower, such as unattended births (5%), and for others it may be higher, such as underweight children (45%). But added together, Viet Nam's record in each dimension is equivalent to a situation in which 20% of the people are deprived in all three dimensions.

A multidimensional measure such as the CPM is a useful tool for analyzing poverty at the household level. By noting the number of households that are poor in a particular dimension, say, in education or nutrition, policy-makers can more effectively target their interventions. In addition, the seriousness of poverty in each household can be assessed by the number of dimensions in which household members are deprived. Households poor in a number of different dimensions should receive priority from policy-makers.

The three variables

The three variables in the CPM cover substantial ground—indications of nutrition and health for the population as a whole (underweight children), access to reproductive health services and a concrete test of access to health services in general (unattended births), and basic educational attainment plus information on gender inequality (female adult illiteracy). Through female illiteracy, for example, countries are evaluated by their treatment of the most deprived group. Rather than trying to be comprehensive by reflecting deprivation in all human priority areas, the index emphasizes critical areas where progress is needed most.

Female literacy signifies the percentage of women aged 15 and above who can, with understanding, read and write a short, simple statement on their everyday life.

The rate of illiteracy among women is an informative variable for assessing the general poverty situation in a country. As is now well known, educating women has a powerful multiplier effect on the well-being of families and on a society's general level of human development. As women become literate, fertility rates fall, infant and child health improves, children's educational level increases and household nutritional and sanitary conditions improve.

The threshold for underweight children is weight that is lower than two standard deviations from the median weight-for-age of an international reference group. This is a powerful variable reflecting lack of opportunity in a number of areas, most important among them health services, safe water, sanitation and adequate food. As an outcome variable, it registers the effect of many input variables.

The percentage of births unattended by trained health personnel is an input variable, but one that is a reliable predictor of such important outcome variables as the maternal mortality rate. The index uses it as a proxy for the capability of safe and healthy reproduction. The definition of trained personnel is broad: it includes physicians, nurses, midwives, trained primary health care workers and trained traditional birth attendants. Despite the broad definition, many countries still record very high percentages of unattended births.

For a few countries estimates had to be generated for the percentage of underweight children or the percentage of unattended births. To estimate the percentage of underweight children, a regression model was used that includes as explanatory variables the percentage of low-birth-weight babies and the under-five mortality rate. For unattended births the explanatory variables are the maternal mortality rate and the infant mortality rate.

TECHNICAL NOTE TABLE 3.1

Capability poverty measure

CPM rank	Capability poverty measure (CPM) value	Births unattended by trained health personnel (%) 1983-94	Underweight children under age five (%) 1985-95	Female illiteracy rate (%) 1993	Real GDP per capita (PPP\$) 1993	Real GDP per capita (PPP\$) rank minus CPM rank ^a	
1	Chile	2.8	2	1	5.5	8,900	8
2	Trinidad and Tobago	4.1	2	7	3.4	8,670	8
3	Uruguay	4.7	4	7	2.6	6,550	12
4	Costa Rica	6.1	7	6	5.4	5,680	16
5	Argentina	6.3	13	2	4.1	8,350	8
6	Barbados	6.5	10 ^b	6	3.6	10,570	1
7	Panama	7.2	4	7	10.5	5,890	11
8	Hong Kong	7.3	0	9 ^b	12.9	21,560	-6
9	Singapore	7.7	0	8 ^b	15.0	19,350	-5
10	Cuba	7.8	10	8	5.4	3,000	32
11	Korea, Rep. of	8.6	11	11 ^b	3.9	9,710	-3
12	United Arab Emirates	9.9	1	7	21.8	20,940	-9
13	Brazil	10.0	5	7	18.0	5,500	9
14	Kuwait	10.8	1	5	26.4	21,630	-13
15	Jamaica	12.3	18	7	11.7	3,180	24
16	Dominican Rep.	12.4	8	10	18.8	3,690	16
17	Mongolia	12.6	1	12	24.4	2,090	41
18	Colombia	13.4	19	12	9.4	5,790	1
19	Jordan	14.2	13	6	23.3	4,380	8
20	Ecuador	15.0	16	17	12.5	4,400	6
21	Venezuela	15.2	31	5	10.1	8,360	-10
22	Paraguay	15.9	34	4	10.1	3,340	13
23	Mexico	16.9	23	14	13.6	7,010	-9
24	China	17.5	6	17	29.1	2,330	26
25	Guyana	18.4	30 ^b	22	3.0	2,140	30
26	Sri Lanka	19.3	6	38	13.8	3,030	15
27	Viet Nam	20.1	5	45	10.5	1,040	50
28	Mauritius	20.6	15	24	22.8	12,510	-22
29	Malaysia	20.6	13	25	23.7	8,360	-17
30	Thailand	21.1	29	26	8.6	6,350	-14
31	Turkey	21.2	24	10	29.1	4,210	-3
32	Zimbabwe	22.3	30	16	21.4	2,100	24
33	Honduras	22.4	19	19	28.8	2,100	24
34	Libyan Arab Jamahiriya	22.9	24	4	40.7	6,125	-17
35	Nicaragua	24.3	27	12	34.1	2,280	16
36	Lebanon	24.9	55	9	10.6	2,500	12
37	Swaziland	25.1	39 ^b	10	26.4	2,940	6
38	Saudi Arabia	25.1	10	13	52.4	12,600	-33
39	El Salvador	25.6	34	11	31.5	2,360	10
40	Peru	25.7	48	11	18.4	3,320	-4
41	Gabon	28.4	20	15	50.1	3,861	-11
42	Philippines	28.8	47	33	6.1	2,590	3
43	Iran, Islamic Rep. of	29.8	30	16	43.6	5,380	-20
44	Tunisia	29.9	31	10	48.4	4,950	-19
45	Botswana	30.4	22	27	42.2	5,220	-21
46	South Africa	30.4	29 ^b	43	19.2	3,127	-6
47	Bolivia	31.6	53	16	26.1	2,510	0
48	Syrian Arab Rep.	32.7	39	12	47.0	4,196	-19
49	Cameroon	33.5	36	14	51.0	2,220	3
50	Kenya	33.8	46	22	33.2	1,400	18
51	Myanmar	34.4	43	37	23.4	650	45
52	Zambia	35.1	49	25	31.3	1,110	22
53	Maldives	35.5	43 ^b	56	7.4	2,200	0
54	Madagascar	36.7	44	39	27.0	700	38
55	Gambia	38.0	20	17	76.9	1,190	18
56	Lesotho	38.6	60	16	40.0	980	24
57	Ghana	39.3	41	27	49.5	2,000	2
58	Tanzania, U. Rep. of	39.4	47	25	46.1	630	40
59	Iraq	39.9	50	12	57.7	3,413	-26
60	Congo	41.7	65 ^b	24	36.2	2,750	-16
61	Cambodia	42.0	53	38	35.0	1,250	10
62	Indonesia	42.3	64	40	23.1	3,270	-25
63	Egypt	43.7	59	9	63.0	3,800	-32
64	Malawi	44.1	45	27	60.2	710	27
65	Sudan	44.3	31	34	68.0	1,350	4

TECHNICAL NOTE TABLE 3.1

Capability poverty measure (continued)

CPM rank	Capability poverty measure (CPM) value	Births unattended by trained health personnel (%) 1983-94	Underweight children under age five (%) 1985-95	Female illiteracy rate (%) 1993	Real GDP per capita (PPP\$) 1993	Real GDP per capita (PPP\$) rank minus CPM rank ^a	
66	Zaire	44.7	66 ^b	33	35.1	300	35
67	Guatemala	45.0	49	34	52.4	3,400	-33
68	Togo	45.4	46	24	65.7	1,020	10
69	Uganda	45.9	62	23	52.3	910	12
70	Central African Rep.	46.0	54	32	52.1	1,050	5
71	Côte d'Ivoire	46.7	55	12	72.6	1,620	-8
72	Liberia	47.1	42	20	79.3	843	12
73	Algeria	49.5	85	9	54.2	5,570	-52
74	Morocco	49.7	69	9	71.2	3,270	-36
75	Papua New Guinea	49.8	80	30	39.4	2,530	-29
76	Senegal	50.9	54	20	78.5	1,710	-15
77	Rwanda	51.5	74	29	51.4	740	12
78	Nigeria	51.6	63	36	56.2	1,540	-12
79	Benin	51.9	55	24	76.8	1,650	-17
80	Lao People's Dem. Rep.	54.6	52 ^b	54	57.9	1,458	-13
81	Guinea	56.0	64	24	79.9	1,800	-21
82	Guinea-Bissau	56.6	73	37 ^b	59.9	860	1
83	Haiti	57.8	80	34	59.5	1,050	-7
84	Mali	59.4	68	31	79.2	530	15
85	Burkina Faso	59.7	58	30	91.6	780	3
86	Mauritania	60.8	60	48	74.7	1,610	-22
87	Pakistan	60.8	65	40	77.0	2,160	-33
88	Chad	61.2	85	31	67.6	690	5
89	India	61.5	67	53	64.0	1,240	-17
90	Sierra Leone	62.3	75	29	83.3	860	-8
91	Yemen	62.7	84	30	74.0	1,600	-26
92	Somalia	63.7	98	39	54.0	712	-2
93	Angola	64.0	85	35	72.0	674	1
94	Burundi	66.1	81	38	79.1	670	1
95	Mozambique	66.9	75	47	78.6	640	2
96	Bhutan	68.2	93	38	73.8	790	-9
97	Ethiopia	70.1	86	48	76.5	420	3
98	Niger	71.7	85	36	93.9	790	-12
99	Afghanistan	72.5	91	40	86.5	819	-14
100	Bangladesh	76.9	90	66	75.0	1,290	-30
101	Nepal	77.3	94	51	87.0	1,000	-22

a. A positive figure indicates that the CPM rank is better than the real GDP per capita (PPP\$) rank, a negative the opposite.

b. Human Development Report Office estimate.

Source: Column 2: UNICEF 1996; column 3: WHO 1995a and UN 1992; column 4: UNESCO 1995b; column 5: calculated on the basis of estimates from World Bank 1995h.

4. Links between economic growth and human development

A cross-country econometric exercise was carried out to examine the strength of the link between human development and economic growth. The first part of the exercise examined the effect of economic growth, social expenditure and income distribution on the levels of and changes in two human development indicators—life expectancy and child mortality. The second examined the inverse links, by looking at the effect of life expectancy, gross domestic investment and income distribution on growth. The results confirm the positive, two-way relationship between human development and economic growth. They also show the importance of other factors, such as social expenditure and income distribution, in determining the levels of and the rates of improvement in human development indicators.

The analysis used lags of the original variables as instruments to remove the bias that would result from applying the ordinary least squares technique to the system of equations, which have a clear, two-way flow of influence. Lag values are reasonable candidates as instruments because the correlation between the two periods analysed in the residuals in the human development and growth regressions is never substantial.

Equation 1 regresses the percentage reduction in life expectancy shortfall (from a maximum of 85 years) between 1970 and 1992 on the average real GDP per capita growth rate in 1960–70, average social expenditure in the 1970s (defined as the percentage of GDP invested in health and education) and the average income share of the poorest 20% of the population in 1960–70. Equation 2 regresses the percentage reduction in the child mortality rate between 1980 and 1993 on the log of the child mortality rate in 1980 and the real GDP per capita growth rate, average social expenditure and average income share of the poorest quintile in 1970–80.

Equations 3 and 4 regress the logs of life expectancy in 1992 and child mortality in 1993 on the log of GDP per capita in 1980 and average social expenditure and average income share of the poorest quintile in 1970–90. Equation 5 regresses the average real GDP per capita growth rate for 1970–92 on the log of GDP per capita in 1960, the log of life expectancy in 1967, average gross domestic investment in 1970–75 and the average income share of the poorest 20% of the population in 1960–70. The data used in the analysis are from the World Bank (1994a) and UNICEF (1995).

From economic growth to human development

(ordinary least squares; t-statistics are given in parentheses)

1. Percentage reduction in life expectancy shortfall
 $= 0.21 + 2.22 \text{ GDP}/n \text{ growth rate}$
 (3.7) (3.4)
 $+ 0.95 \text{ social expenditure}$
 (2.0)
 $- 0.97 \text{ income share of poorest 20\%}$
 (-1.3)
 Adj. $R^2 = 0.24$ $n = 58$

2. Percentage reduction in child mortality
 $= -5.38 + 0.62 \log (\text{child mortality rate})$
 (-4.1) (3.5)
 $+ 16.51 \text{ GDP}/n \text{ growth rate}$
 (2.7)
 $+ 23.99 \text{ social expenditure}$
 (3.7)
 $+ 13.2 \text{ income share of poorest 20\%}$
 (1.93)
 Adj. $R^2 = 0.25$ $n = 54$

3. $\log (\text{life expectancy})$
 $= 3.14 + 0.13 \log (\text{GDP}/n)$
 (39.5) (11.1)
 $+ 0.03 \text{ social expenditure}$
 (0.1)
 $- 0.31 \text{ income share of poorest 20\%}$
 (-0.7)
 Adj. $R^2 = 0.77$ $n = 66$

4. $\log (\text{child mortality})$
 $= 12.21 - 0.99 \log (\text{GDP}/n)$
 (22.2) (-13.8)
 $- 3.53 \text{ social expenditure}$
 (-1.98)
 $- 7.04 \text{ income share of poorest 20\%}$
 (-2.5)
 Adj. $R^2 = 0.794$ $n = 81$

From human development to economic growth

5. Average GDP/ n annual growth rate
 $= -0.30 - 0.02 \log (\text{GDP}/n)$
 (-4.2) (-3.3)
 $+ 0.11 \log (\text{life expectancy})$
 (4.5)
 $- 0.01 \text{ gross domestic investment}$
 (-0.4)
 $+ 0.16 \text{ income share of poorest 20\%}$
 (1.0)
 Adj. $R^2 = 0.371$ $n = 38$

Equations 1 and 2 show that a 1 percentage point increase in the average growth rate of GDP per capita is estimated to reduce the life expectancy shortfall by 2.2 percentage points and the child mortality rate by 16 percentage points. This means, for example, that a 2 percentage point increase in the GDP per capita growth rate of a country with an average life expectancy in 1970 of 57 years would increase its life expectancy by an additional 1.5 years. And a 1 percentage point increase in the GDP per capita growth rate of a country with a child mortality rate of 115 per thousand live births in 1980 would reduce child mortality by an additional 18 deaths per thousand live births.

The share of GDP invested in health and education also has a significant and positive effect on the rates of improvement in human development indicators. A 1 percentage point increase in the average share of GDP invested in health and education is estimated to reduce the life expectancy shortfall by 1 percentage point and the child mortality rate by 24 percentage points. Thus, if a

country with the average life expectancy and child mortality rate in 1970 increases social expenditure by 3 percentage points, its life expectancy would increase by one additional year and its child mortality rate would decrease by 83 deaths per thousand live births.

A more equal income distribution was also shown to have a positive and significant effect on the rate of improvement in the child mortality rate. A 1 percentage point increase in the income share of the poorest quintile is associated with a 13 percentage point reduction in the child mortality rate.

Income per capita, social expenditure and income distribution are also significantly correlated with the levels of these indicators. A 1% increase in GDP per capita is associated with a 0.13% increase in the 1992 life expectancy and a 1% reduction in the 1993 child mortality rate. A 1 percentage point increase in social expenditure is associated with a 3% reduction in the child mortality rate, and a 1 percentage point increase in the income share of the poorest quintile with a 7% reduction.

The analysis also tested the links from human development to economic growth. The results show that the effect of human development on economic growth is also positive and significant. A 10% increase in life expectancy, equal to 5.7 years in 1970, is estimated to raise the average GDP per capita growth rate by 1.1 percentage points a year. Results for other human development indicators

also show a positive and significant effect on the income per capita growth rate. The results are consistent with many other cross-country studies on the determinants of income growth.

These empirical results show that growth in income, increases in social expenditure and a more equal income distribution are all important determinants of human development. The higher the growth rate of income and the share of GDP invested in health and education, and the more equal the distribution of income, the higher the rate of improvement in human development indicators is expected to be. The higher the GDP per capita, the lower the child mortality rate and the higher the life expectancy at birth. And the higher the social expenditure and the more equal the distribution of income, the lower the child mortality rate.

In turn, human development was found to be an important determinant of the rate of income growth—the higher the life expectancy, the higher the per capita income growth rate. The importance of analysing the determinants of income growth lies, of course, in the fact that many human capabilities are crucially dependent on people's economic circumstances. Thus, although certain basic human capabilities, such as life expectancy, enter as inputs into the growth equation, they are primarily ends in themselves, while economic growth is the means for further expanding capabilities.

Selected definitions

Administrators and managers Includes legislators, senior government administrators, traditional chiefs and heads of villages and administrators of special interest organizations. It also includes corporate managers such as chief executives and general managers as well as specialized managers and managing supervisors, according to the International Standard Classification of Occupations (ISCO-1968).

Alcohol consumption per capita Derived from sales data for beer, wine and spirits, each of which is converted to absolute alcohol based on its alcohol content. The total absolute alcohol is then divided by the population to get per capita consumption.

Births attended The percentage of births attended by physicians, nurses, midwives, trained primary health care workers or trained traditional birth attendants.

Budget surplus/deficit (overall surplus/deficit) Central government current and capital revenue and official grants received, less expenditure and net government lending.

Central government expenditures Expenditures, both current and capital, by all government offices, departments, establishments and other bodies that are agencies or instruments of the central authority of a country.

Cereal imports All cereals in the Standard International Trade Classification (SITC), Revision 2, Groups 041–046. This includes wheat and flour in wheat equivalent, rice, maize, sorghum, barley, oats, rye, millet and other minor grains. Grain trade data include both commercial and food aid shipments but exclude trade between the member states of the European Union and within the Commonwealth of Independent States. Cereal imports are based on calendar-year data reported by recipient countries.

CO₂ emissions by source Anthropogenic (human-originated) carbon dioxide (CO₂) emissions from energy use only. It includes oil held in international marine bunkers, with quantities assigned to the countries in which bunker deliveries were made. It also includes peat, but

it excludes oil and gas for non-energy purposes, and the use of biomass fuels.

Commercial energy Commercial forms of primary energy—petroleum (crude oil, natural gas liquids, and oil from nonconventional sources), natural gas, solid fuels (coal, lignite and other derived fuels) and primary electricity (nuclear, hydroelectric, geothermal and other)—all converted into oil equivalents.

Commercial energy consumption Refers to domestic primary commercial energy supply before transformation to other end-use fuels (such as electricity and refined petroleum product) and is calculated as indigenous production plus imports and stock changes, minus exports and international marine bunkers. Energy consumption also includes products consumed for non-energy uses, mainly derived from petroleum. The use of firewood, dried animal manure and other traditional fuels, although substantial in some developing countries, is not taken into account because reliable and comprehensive data are not available.

Commercial energy production Refers to the first stage of commercial production. Thus, for hard coal, the data refer to mine production; for briquettes, to the output of briquetting plants; for crude petroleum and natural gas, to production at oil and gas wells; for natural gas liquids, to production at wells and processing plants; for refined petroleum products, to gross refinery output; for cokes and coke-oven gas, to the output of ovens; for other manufactured gas, to production at gas works, blast furnaces or refineries; and for electricity, to the gross production of generating plants.

Contraceptive prevalence rate The percentage of married women of child-bearing age who are using, or whose husbands are using, any form of contraception, whether modern or traditional.

Crude birth rate Annual number of births per thousand population.

Crude death rate Annual number of deaths per thousand population.

Current account balance The difference between (a) exports of goods and services (factor and non-factor) as well as inflows of unrequited transfers but exclusive of foreign aid and (b) imports of goods and services as well as all unrequited transfers to the rest of the world.

Daily calorie supply per capita The calorie equivalent of the net food supplies in a country, divided by the population, per day.

Debt service The sum of principal repayments and interest payments on total external debt.

Defence expenditure All expenditure, whether by defence or other departments, on the maintenance of military forces, including for the purchase of military supplies and equipment, construction, recruitment, training and military aid programmes.

Deforestation The permanent clearing of forest lands for shifting cultivation, permanent agriculture or settlements; it does not include other alterations such as selective logging.

Dependency ratio The ratio of the population defined as dependent—those under 15 and those over 64—to the working-age population, aged 15–64.

Disbursement The release of funds to, or the purchase of goods or services for, a recipient; by extension, the amount thus spent. Disbursements record the actual international transfer of financial resources, or of goods or services valued at the cost to the donor. For activities carried out in donor countries, such as training, administration or public awareness programmes, disbursement is taken to have occurred when the funds have been transferred to the service provider or the recipient. They may be recorded gross (the total amount disbursed over a given accounting period) or net (less any repayments of loan principal during the same period).

Discouraged workers Individuals who would like to work and who are available for work, but are not actively seeking work because of a stated belief that no suitable job is available or because they do not know where to get work. The number of discouraged workers is used as an additional measure of labour market slack by the OECD.

Doctors Refers to physicians and includes all graduates of any faculty or school of medicine in any medical field (including practice, teaching, administration and research).

Earnings per employee All remuneration to employees expressed in constant prices derived by deflating nominal earnings per employee by the country's consumer price index.

Economically active population All persons

of either sex who supply labour for the production of economic goods and services as defined by the UN System of National Accounts, during a specified time-reference period. According to this system, the production of economic goods and services should include all production and processing of primary products, whether for the market, for barter or for own-consumption, the production of all other goods and services for the market and, in the case of households that produce such goods and services for the market, the corresponding production for own-consumption.

Education expenditures Expenditures on the provision, management, inspection and support of pre-primary, primary and secondary schools; universities and colleges; vocational, technical and other training institutions; and general administration and subsidiary services.

Employees Regular employees, working proprietors, active business partners and unpaid family workers, but excluding homemakers.

Enrolment ratio (gross and net) The gross enrolment ratio is the number of students enrolled in a level of education, whether or not they belong in the relevant age group for that level, as a percentage of the population in the relevant age group for that level. The net enrolment ratio is the number of students enrolled in a level of education who belong in the relevant age group, as a percentage of the population in that age group.

Exports of goods and services The value of all goods and non-factor services provided to the rest of the world, including merchandise, freight, insurance, travel and other non-factor services.

Female-male gap A set of national, regional and other estimates in which all the figures for females are expressed in relation to the corresponding figures for males, which are indexed to equal 100.

Fertility rate (total) The average number of children that would be born alive to a woman during her lifetime, if she were to bear children at each age in accord with prevailing age-specific fertility rates.

Food aid in cereals Cereals provided by donor countries and international organizations, including the World Food Programme and the International Wheat Council, as reported for that particular crop year. Cereals include wheat, flour, bulgur, rice, coarse grain and the cereal components of blended foods.

Food consumption as a percentage of total household consumption Computed from details of GDP (expenditure at national market prices) defined in the UN System of National

Accounts, mostly as collected from the International Comparison Programme phases IV (1980) and V (1985).

Food production per capita index The average annual quantity of food produced per capita in relation to that produced in the indexed year. Food is defined as comprising nuts, pulses, fruit, cereals, vegetables, sugar cane, sugar beets, starchy roots, edible oils, livestock and livestock products.

Future labour force replacement ratio The population under 15 divided by one-third of the population aged 15–59.

Government consumption Includes all current expenditure for purchases of goods and services by all levels of government. Capital expenditure on national defence and security is regarded as consumption expenditure.

Greenhouse index Net emissions of three major greenhouse gases (carbon dioxide, methane and chlorofluorocarbons), with each gas weighted according to its heat-trapping quality, in carbon dioxide equivalents and expressed in metric tons of carbon per capita.

Gross domestic investment Outlays on additions to the fixed assets of the economy plus net changes in the level of inventories.

Gross domestic product (GDP) The total output of goods and services for final use produced by an economy, by both residents and non-residents, regardless of the allocation to domestic and foreign claims. It does not include deductions for depreciation of physical capital or depletion and degradation of natural resources.

Gross national product (GNP) Comprises GDP plus net factor income from abroad, which is the income residents receive from abroad for factor services (labour and capital), less similar payments made to non-residents who contribute to the domestic economy.

Gross national product (GNP) per capita growth rates Annual GNP per capita is expressed in current US dollars, and GNP per capita growth rates are average annual growth rates computed by fitting trend lines to the logarithmic values of GNP per capita at constant market prices for each year in the period.

Health expenditure Public expenditure on health comprises the expenditure, both current and capital, by all government offices, departments, establishments and other bodies that are agencies or instruments of the central authority of a country on hospitals, maternity and dental centers, and clinics with a major medical component; on national health and medical insurance schemes; and on family planning and preventive care. The data on health expenditure

are not comparable across countries. In many economies private health services are substantial; in others public services represent the major component of total expenditure but may be financed by lower levels of government. Caution should therefore be exercised in using the data for cross-country comparisons.

Health services access The percentage of the population that can reach appropriate local health services on foot or by local means of transport in no more than one hour.

Homicides Includes intentional deaths (purposely inflicted by another person, including infanticide), non-intentional deaths (not purposely inflicted by another person) and manslaughter but excludes traffic accidents resulting in death.

Human priority areas Basic education, primary health care, safe drinking water, adequate sanitation, family planning and nutrition.

Immunized The average vaccination coverage of children under one year of age for the antigens used in the Universal Child Immunization (UCI) Programme.

Income share The distribution of income or expenditure (or share of expenditure) accruing to percentile groups of households ranked by total household income, by per capita income or by expenditure. Shares of population quintiles and the top decile in total income or consumption expenditure are used in calculating income shares. The data sets for these countries are drawn mostly from nationally representative household surveys conducted in different years during 1978–92. Data for the high-income OECD economies are based on information from the Statistical Office of the European Union (Eurostat), the Luxembourg Income Study and the OECD. Data should be interpreted with caution owing to differences between income studies in the use of income and consumption expenditure to estimate living standards.

Infant mortality rate The annual number of deaths of infants under one year of age per thousand live births. More specifically, the probability of dying between birth and exactly one year of age times 1,000.

Inflation rate Measured by the growth rate of the GDP implicit deflator for each of the periods shown. The GDP deflator is first calculated by dividing, for each year of the period, the value of GDP at current values by the value of GDP at constant values, both in national currency. This measure of inflation, like others, has limitations, but it is used because it shows annual price movements for all goods and services produced in an economy.

International reserves (gross) Holdings of monetary gold, Special Drawing Rights (SDRs), the reserve positions of members in the IMF and holdings of foreign exchange under the control of monetary authorities expressed in terms of the number of months of imports of goods and services these could pay for at the current level of imports.

Involuntary part-time workers Refers directly to the ILO concept of visible underemployment and includes three groups of workers: those who usually work full-time but are working part-time because of economic slack; those who usually work part-time but are working fewer hours in their part-time job because of economic slack; and those working part-time because full-time work could not be found. The number of involuntary part-time workers is used as an additional measure of labour market slack by the OECD.

Labour force See *Economically active population*.

Least developed countries The least developed countries are those recognized by the United Nations as low-income countries encountering long-term impediments to economic growth, particularly, low levels of human resource development and severe structural weaknesses. The main purpose of constructing a list of such countries is to give guidance to donor agencies and countries for allocation of foreign assistance.

Life expectancy at birth The number of years a newborn infant would live if prevailing patterns of mortality at the time of birth were to stay the same throughout the child's life.

Literacy rate (adult) The percentage of people aged 15 and above who can, with understanding, both read and write a short, simple statement on their everyday life.

Low-birth-weight infants The percentage of babies born weighing less than 2,500 grams.

Maternal mortality rate The annual number of deaths of women from pregnancy-related causes per 100,000 live births.

Military expenditure See *Defence expenditure*.

Multilateral ODA Funds contributed in the form of ODA to an international institution with governmental membership that conducts all or a significant part of its activities in favour of development and aid recipient countries. A contribution by a donor to such an agency is deemed to be multilateral if it is pooled with other contributions and disbursed at the discretion of the agency. ODA received by aid recipient countries is considered multilateral if it comes from multilateral agencies such as multilateral development banks (the World Bank,

regional development banks), UN agencies and regional groupings (certain European Union and Arab agencies).

Municipal waste Waste collected by municipalities or by their order, including waste originating from households, commercial activities, office buildings, such institutions as schools and government buildings, and small businesses that dispose of waste at the same facilities used for waste collected by municipalities.

Nurses All persons who have completed a programme of basic nursing education and are qualified and registered or authorized by the country to provide responsible and competent service for the promotion of health, prevention of illness, care of the sick and rehabilitation.

Occupation The classification of occupations brings together individuals doing similar work, irrespective of where the work is performed. Most countries have supplied data on the basis of the International Standard Classification of Occupations (ISCO). The actual content of occupational groups may differ from one country to another owing to variations in definitions and methods of data collection.

Official development assistance (ODA) Grants or loans to countries and territories on Part I of the DAC List of Aid Recipients (developing countries) that are undertaken by the official sector, with promotion of economic development and welfare as the main objective—and at concessional financial terms (if a loan, at least 25% grant element). Figures for total net ODA disbursed are based on OECD data for DAC countries, multilateral organizations and Arab states.

Oral rehydration therapy use rate Percentage of all cases of diarrhoea in children under age five treated with oral rehydration salts or an appropriate household solution.

Population density The total number of inhabitants divided by the surface area.

Population served by waste water treatment plants National population connected to public sewage networks with treatment.

Poverty line Based on the concept of an "absolute" poverty line, expressed in monetary terms: the income or expenditure level below which a minimum, nutritionally adequate diet plus essential non-food requirements are not affordable. National estimates that rely on a relative poverty line (such as share of food in total expenditures) are excluded, as are those that rely on a poverty line defined exclusively in relation to another variable (such as the minimum wage) rather than the satisfaction of the food and non-food needs at a minimally acceptable level. Poverty estimates are based on data from

an actual household budget, income or expenditure survey. Exceptions include some African and small island countries or territories for which otherwise virtually no observations would have been available.

Primary education Education at the first level (International Standard Classification of Education—ISCED—level I), the main function of which is to provide the basic elements of education, such as elementary schools.

Primary intake rate Number of new entrants into first grade, regardless of age, expressed as a percentage of the population of official admission age for the first level of education.

Primary school completion rate The proportion of the children entering the first grade of primary school who successfully complete that level in due course.

Private consumption The market value of all goods and services, including durable products (such as cars, washing machines and home computers), purchased or received as income in kind by households and non-profit institutions. It excludes purchases of dwellings but includes imputed rent for owner-occupied dwellings.

Production as a percentage of national energy reserves The data on production of energy refer to the first stage of production; thus, for hard coal and lignite, the data refer to mine production, and for crude oil and natural gas, to production at oil and gas wells. The data for reserves refer to proved recoverable reserves of coal, crude oil and natural gas—that is, the tonnage of the proved amount in place that can be recovered (extracted from the earth in raw form) in the future under present and expected economic conditions and existing technological limits. The ratio of production to reserves is the annual production of energy commodities as a percentage of the total proved recoverable reserves.

Professional and technical workers Physical scientists and related technicians; architects, engineers and related technicians; aircraft and ships' officers; life scientists and related technicians; medical, dental, veterinary and related workers; statisticians, mathematicians, systems analysts and related technicians; economists; accountants; jurists; teachers; workers in religion; authors, journalists and related writers; sculptors, painters, photographers and related creative artists; composers and performing artists; athletes, sportsmen and related workers; and professional, technical and related workers not elsewhere classified, according to the International Standard Classification of Occupations (ISCO-1968).

Purchasing power parity (PPP\$) The purchasing power of a country's currency: the number of units of that currency required to purchase the same representative basket of goods and services that a US dollar (the reference currency) would buy in the United States (or a similar basket of goods and services). Purchasing power parity could also be expressed in other national currencies or in Special Drawing Rights (SDRs).

Real GDP per capita (PPP\$) The GDP per capita of a country converted into US dollars on the basis of the purchasing power parity of the country's currency. The system of purchasing power parities has been developed by the United Nations International Comparison Programme (ICP) to make more accurate international comparisons of GDP and its components than those based on official exchange rates, which can be subject to considerable fluctuation.

Reforestation The establishment of plantations for industrial and non-industrial uses; it does not, in general, include regeneration of old tree crops, although some countries may report regeneration as reforestation.

Refugees According to the United Nations Convention Relating to the Status of Refugees and its 1967 Protocol, refugees are persons who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion", are outside the country of nationality, and are unable or, owing to such fear, unwilling to avail themselves of the protection of that country; or who, not having a nationality and being outside the country of their former habitual residence, are unable or, owing to such fear, unwilling to return to it. According to UNHCR, refugees also include selected groups of internally displaced persons, returnees and others of concern to or assisted by UNHCR.

Rural-urban disparity A set of national, regional and other estimates in which all the rural figures are expressed in relation to the corresponding urban figures, which are indexed to equal 100.

Safe water access The percentage of the population with reasonable access to safe water supply, including treated surface water, or untreated but uncontaminated water such as that from springs, sanitary wells and protected boreholes.

Sanitation access The percentage of the population with reasonable access to sanitary means of excreta and waste disposal, including outdoor latrines and composting.

Science graduates Tertiary education grad-

uates in the natural and applied sciences, including medicine.

Scientists and technicians *Scientists* refers to scientists and engineers with scientific or technological training (usually completion of third-level education) in any field of science who are engaged in professional work in research and development activities, including administrators and other high-level personnel who direct the execution of R & D activities. *Technicians* refers to persons engaged in scientific research and development activities who have received vocational or technical training for at least three years after the first stage of second-level education.

Secondary education Education at the second level (ISCED levels 2 and 3), based on at least four years' previous instruction at the first level, and providing general or specialized instruction or both, such as middle school, secondary schools, high schools, teacher training schools at this level and vocational or technical schools.

Secondary technical education Education provided in second-level schools aimed at preparing the pupils directly for a trade or occupation other than teaching.

Social protection Refers to OECD member countries' provision of social welfare in the areas of health, pensions, unemployment benefits and other income support schemes. This provision is intended not just to assist those in need, but also to meet economic goals by covering the social costs of economic restructuring.

Social security benefits expenditure Compensation for loss of income for persons who are ill and temporarily disabled; payments to the elderly, persons with permanent disability and the unemployed; family, maternity and child allowances; and the cost of welfare services.

South-North gap A set of national, regional and other estimates in which all figures for developing countries are expressed in relation to the corresponding average figures for all the industrial countries, indexed to equal 100.

Sulfur and nitrogen emissions Emissions of sulfur in the form of sulfur oxides and of nitrogen in the form of its various oxides, which together contribute to acid rain and adversely affect agriculture, forests, aquatic habitats and the weathering of building materials.

Tax revenue Compulsory, unrequited, non-repayable receipts for public purposes—including interest collected on tax arrears and penalties collected for non-payment or late payment of taxes—shown net of refunds and other corrective transactions.

Terms of trade The ratio of a country's index of average export prices to its index of average import prices.

Tertiary education Education at the third level (ISCED levels 5, 6 and 7), such as universities, teachers colleges and higher professional schools—requiring as a minimum condition of admission the successful completion of education at the second level or evidence of the attainment of an equivalent level of knowledge.

Total external debt Total external debt is defined as the sum of public, publicly guaranteed and private non-guaranteed long-term external obligations, short-term debt and use of IMF credit. The data on debt are from the World Bank Debtor Reporting System, supplemented by World Bank estimates. The system is concerned solely with developing economies and does not collect data on external debt for other groups of borrowers or from economies that are not members of the World Bank. Dollar figures for debt are in US dollars converted at official exchange rates.

Transition from first- to second-level education Number of new entrants into secondary general education, expressed as a percentage of the total number of pupils in the last grade of primary education in the previous year.

Under-five mortality rate The annual number of deaths of children under age five per thousand live births averaged over the previous five years. More specifically, the probability of dying between birth and exactly five years of age.

Underweight (moderate and severe child malnutrition) The percentage of children under age five who are below minus two standard deviations from the median birth-weight-for-age of the reference population.

Unemployment The unemployed comprise all persons above a specified age who are not in paid employment or self-employed, but are available and have taken specific steps to seek paid employment or self-employment.

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

Waste recycling The reuse of material that diverts it from the waste stream, except for recycling within industrial plants and the reuse of material as fuel. The recycling rate is the ratio of the quantity recycled to the apparent consumption.

Water resources, internal renewable The average annual flow of rivers and aquifers generated from endogenous precipitation.

Water withdrawals Includes those from non-renewable aquifers and desalting plants but does not include losses from evaporation.

Classification of countries

Countries in the human development aggregates

<i>High human development (HDI 0.800 and above)</i>		<i>Medium human development (HDI 0.500 to 0.799)</i>		<i>Low human development (HDI below 0.500)</i>
Antigua and Barbuda	Spain	Albania	Saint Vincent	Afghanistan
Argentina	Sweden	Algeria	Samoa (Western)	Angola
Australia	Switzerland	Armenia	Saudi Arabia	Bangladesh
Austria	Thailand	Azerbaijan	Seychelles	Benin
Bahamas	Trinidad and Tobago	Belarus	Solomon Islands	Bhutan
Bahrain	United Arab Emirates	Belize	South Africa	Burkina Faso
Barbados	United Kingdom	Bolivia	Sri Lanka	Burundi
Belgium	Uruguay	Botswana	Suriname	Cambodia
Brunei Darussalam	USA	Brazil	Swaziland	Cameroon
Canada	Venezuela	Bulgaria	Syrian Arab Rep.	Central African Rep.
Chile		Cape Verde	Tajikistan	Chad
Colombia		China	Tunisia	Comoros
Costa Rica		Congo	Turkey	Côte d'Ivoire
Cyprus		Cuba	Turkmenistan	Djibouti
Czech Rep.		Dominica	Ukraine	Equatorial Guinea
Denmark		Dominican Rep.	Uzbekistan	Ethiopia
Fiji		Ecuador	Vanuatu	Gambia
Finland		Egypt	Viet Nam	Ghana
France		El Salvador	Zimbabwe	Guinea
Germany		Estonia		Guinea-Bissau
Greece		Gabon		Haiti
Hong Kong		Georgia		India
Hungary		Grenada		Kenya
Iceland		Guatemala		Lao People's Dem. Rep.
Ireland		Guyana		Lesotho
Israel		Honduras		Liberia
Italy		Indonesia		Madagascar
Japan		Iran, Islamic Rep. of		Malawi
Korea, Rep. of		Iraq		Mali
Kuwait		Jamaica		Mauritania
Latvia		Jordan		Mozambique
Luxembourg		Kazakhstan		Myanmar
Malaysia		Korea, Dem. People's Rep. of		Nepal
Malta		Kyrgyzstan		Niger
Mauritius		Lebanon		Nigeria
Mexico		Libyan Arab Jamahiriya		Pakistan
Netherlands		Lithuania		Rwanda
New Zealand		Maldives		São Tomé and Príncipe
Norway		Moldova, Rep. of		Senegal
Panama		Mongolia		Sierra Leone
Poland		Morocco		Somalia
Portugal		Namibia		Sudan
Qatar		Nicaragua		Tanzania, U. Rep. of
Russian Federation		Oman		Togo
Saint Kitts and Nevis		Papua New Guinea		Uganda
Singapore		Paraguay		Yemen
Slovakia		Peru		Zaire
		Philippines		Zambia
		Romania		
		Saint Lucia		

Countries in the income aggregates

<i>High-income</i> (GNP per capita above \$8,625 in 1993)	<i>Middle-income</i> (GNP per capita \$696 to \$8,625 in 1993)	<i>Low-income</i> (GNP per capita \$695 and below in 1993)	
Australia	Algeria	Moldova, Rep. of	Afghanistan
Austria	Angola	Morocco	Albania
Bahamas	Antigua and Barbuda	Namibia	Bangladesh
Belgium	Argentina	Oman	Benin
Brunei Darussalam	Armenia	Panama	Bhutan
Canada	Azerbaijan	Papua New Guinea	Burkina Faso
Cyprus	Bahrain	Paraguay	Burundi
Denmark	Barbados	Peru	Cambodia
Finland	Belarus	Philippines	Central African Rep.
France	Belize	Poland	Chad
Germany	Bolivia	Portugal	China
Hong Kong	Botswana	Romania	Comoros
Iceland	Brazil	Russian Federation	Côte d'Ivoire
Ireland	Bulgaria	Saint Kitts and Nevis	Egypt
Israel	Cameroon	Saint Lucia	Equatorial Guinea
Italy	Cape Verde	Saint Vincent	Ethiopia
Japan	Chile	Samoa (Western)	Gambia
Kuwait	Colombia	Saudi Arabia	Ghana
Luxembourg	Congo	Senegal	Guinea
Netherlands	Costa Rica	Seychelles	Guinea-Bissau
New Zealand	Cuba	Slovakia	Guyana
Norway	Czech Rep.	Solomon Islands	Haiti
Qatar	Djibouti	South Africa	Honduras
Singapore	Dominica	Suriname	India
Spain	Dominican Rep.	Swaziland	Indonesia
Sweden	Ecuador	Syrian Arab Rep.	Kenya
Switzerland	El Salvador	Thailand	Lao People's Dem. Rep.
United Arab Emirates	Estonia	Trinidad and Tobago	Lesotho
United Kingdom	Fiji	Tunisia	Liberia
USA	Gabon	Turkey	Madagascar
	Georgia	Turkmenistan	Malawi
	Greece	Ukraine	Mali
	Grenada	Uruguay	Mauritania
	Guatemala	Uzbekistan	Mongolia
	Hungary	Vanuatu	Mozambique
	Iran, Islamic Rep. of	Venezuela	Myanmar
	Iraq		Nepal
	Jamaica		Nicaragua
	Jordan		Niger
	Kazakhstan		Nigeria
	Korea, Dem. People's Rep. of		Pakistan
	Korea, Rep. of		Rwanda
	Kyrgyzstan		São Tomé and Príncipe
	Latvia		Sierra Leone
	Lebanon		Somalia
	Libyan Arab Jamahiriya		Sri Lanka
	Lithuania		Sudan
	Malaysia		Tajikistan
	Maldives		Tanzania, U. Rep. of
	Malta		Togo
	Mauritius		Uganda
	Mexico		Viet Nam
			Yemen
			Zaire
			Zambia
			Zimbabwe

Countries in the major world aggregates

Least developed countries

Afghanistan
Angola
Bangladesh
Benin
Bhutan
Burkina Faso
Burundi
Cambodia
Cape Verde
Central African Rep.
Chad
Comoros
Djibouti
Equatorial Guinea
Ethiopia
Gambia
Guinea
Guinea-Bissau
Haiti
Lao People's Dem. Rep.
Lesotho
Liberia
Madagascar
Malawi
Maldives
Mali
Mauritania
Mozambique
Myanmar
Nepal
Niger
Rwanda
Samoa (Western)
São Tomé and Príncipe
Sierra Leone
Solomon Islands
Somalia
Sudan
Tanzania, U. Rep. of
Togo
Uganda
Vanuatu
Yemen
Zaire
Zambia

All developing countries

Afghanistan
Algeria
Angola
Antigua and Barbuda
Argentina
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
Costa Rica
Côte d'Ivoire
Cuba
Cyprus
Djibouti
Dominica
Dominican Rep.
Ecuador
Egypt
El Salvador
Equatorial Guinea
Ethiopia
Fiji
Gabon
Gambia
Ghana

Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
Hong Kong
India
Indonesia
Iran, Islamic Rep. of
Iraq
Jamaica
Jordan
Kenya
Korea, Dem. People's Rep. of
Korea, Rep. of
Kuwait
Lao People's Dem. Rep.
Lebanon
Lesotho
Liberia
Libyan Arab Jamahiriya
Madagascar
Malawi
Malaysia
Maldives
Mali
Mauritania
Mauritius
Mexico
Mongolia
Morocco
Mozambique
Myanmar
Namibia
Nepal
Nicaragua
Niger
Nigeria
Oman
Pakistan

Panama
Papua New Guinea
Paraguay
Peru
Philippines
Qatar
Rwanda
Saint Kitts and Nevis
Saint Lucia
Saint Vincent
Samoa (Western)
São Tomé and Príncipe
Saudi Arabia
Senegal
Seychelles
Sierra Leone
Singapore
Solomon Islands
Somalia
South Africa
Sri Lanka
Sudan
Suriname
Swaziland
Syrian Arab Rep.
Tanzania, U. Rep. of
Thailand
Togo
Trinidad and Tobago
Tunisia
Turkey
Uganda
United Arab Emirates
Uruguay
Vanuatu
Venezuela
Viet Nam
Yemen
Zaire
Zambia
Zimbabwe

Industrial countries

Albania
Armenia
Australia
Austria
Azerbaijan
Belarus
Belgium
Bulgaria
Canada
Czech Rep.
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Japan
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Moldova, Rep. of
Netherlands
New Zealand
Norway
Poland
Portugal
Romania
Russian Federation
Slovakia
Spain
Sweden
Switzerland
Tajikistan
Turkmenistan
Ukraine
United Kingdom
USA
Uzbekistan

Countries in the regional aggregates

<i>Sub-Saharan Africa</i>	<i>Arab States</i>	<i>Asia and the Pacific and Oceania</i>	<i>Latin America, the Caribbean and North America</i>	<i>Europe</i>
DEVELOPING COUNTRIES				
Angola	Algeria	East Asia	Latin America and the Caribbean	Southern Europe
Benin	Bahrain	China	Antigua and Barbuda	Cyprus
Botswana	Djibouti	Hong Kong	Argentina	Turkey
Burkina Faso	Egypt	Korea, Dem. People's Rep. of	Bahamas	INDUSTRIAL COUNTRIES
Burundi	Iraq	Korea, Rep. of	Barbados	
Cameroon	Jordan	Mongolia	Belize	
Cape Verde	Kuwait		Bolivia	Eastern Europe and the Commonwealth of Independent States
Central Africa Rep.	Lebanon	South-East Asia and the Pacific	Brazil	Albania
Chad	Libyan Arab Jamahiriya	Brunei Darussalam	Chile	Armenia
Comoros	Morocco	Cambodia	Colombia	Azerbaijan
Congo	Oman	Fiji	Costa Rica	Belarus
Côte d'Ivoire	Qatar	Indonesia	Cuba	Bulgaria
Equatorial Guinea	Saudi Arabia	Indonesia	Dominica	Czech Rep.
Ethiopia	Somalia	Lao People's Dem. Rep.	Dominican Rep.	Estonia
Gabon	Sudan	Malaysia	Ecuador	Georgia
Gambia	Syrian Arab Rep.	Myanmar	El Salvador	Hungary
Ghana	Tunisia	Papua New Guinea	Grenada	Kazakhstan
Guinea	United Arab Emirates	Philippines	Guatemala	Kyrgyzstan
Guinea-Bissau	Yemen	Samoa (Western)	Guyana	Latvia
Kenya		Singapore	Haiti	Lithuania
Lesotho		Solomon Islands	Honduras	Moldova, Rep. of
Liberia		Thailand	Jamaica	Poland
Madagascar		Vanuatu	Mexico	Romania
Malawi		Viet Nam	Nicaragua	Russian Federation
Mali			Panama	Slovakia
Mauritania		South Asia	Paraguay	Tajikistan
Mauritius		Afghanistan	Peru	Turkmenistan
Mozambique		Bangladesh	Saint Kitts and Nevis	Ukraine
Namibia		Bhutan	Saint Lucia	Uzbekistan
Niger		India	Saint Vincent	
Nigeria		Iran, Islamic Rep. of	Suriname	
Rwanda		Maldives	Trinidad and Tobago	
São Tomé and Príncipe		Nepal	Uruguay	Western and Southern Europe
Senegal		Pakistan	Venezuela	Austria
Seychelles		Sri Lanka		Belgium
Sierra Leone			INDUSTRIAL COUNTRIES	Denmark
South Africa			North America	Finland
Swaziland		Australia	Canada	France
Tanzania, U. Rep. of		Israel	USA	Germany
Togo		Japan		Greece
Uganda		New Zealand		Iceland
Zaire				Ireland
Zambia				Italy
Zimbabwe				Luxembourg
				Malta
				Netherlands
				Norway
				Portugal
				Spain
				Sweden
				Switzerland

Other aggregates

European Union

Austria
Belgium
Denmark
Finland
France
Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
Portugal
Spain
Sweden
United Kingdom

OECD

Australia
Austria
Belgium
Canada
Denmark
Finland
France
Germany
Greece
Iceland
Ireland
Italy
Japan
Luxembourg
Mexico
Netherlands
New Zealand
Norway
Portugal
Spain
Sweden
Switzerland
Turkey
United Kingdom
USA

Nordic countries

Denmark
Finland
Iceland
Norway
Sweden